Why do some communities relate to nature in ways that are more lasting, satisfying and inspiring than others? Why do some territories conserve their integrity and nourish the wellbeing of their residents while others become degraded and fail? This work finds answers in a journey across lived experiences and examples of conserved and protected areas on all continents, integrating insights from political economy and human ecology.

The answers emerge in five features of their governance institutions that appear associated with *vitality*. The same features characterise communities that bond with their territories via a powerful combination of ties— livelihoods, symbolic meanings, emotions— and who become *custodians* of their land and nature. Yet, custodianship does not secure survival, as shown by the clashes that communities governing their territories have experienced against the *hubris* of modernity in the last centuries. This work describes some such clashes while tracing the surprisingly recent— and uneven— history of community conservation as a policy approach. Even the current recognition crescendo of the benefits of community conservation may provide welcome support to communities caring for their *territories of life*, but may also introduce disruptions and conflicts… a sort of kiss of death.

Responding to the calls from Indigenous and non-Indigenous voices for decolonisation, resurgence, resistance to the commercialisation of nature and community self-strengthening, this work offers tools to self-assess governance vitality (after all, awareness of one's vitality affects vitality itself…). It also offers specific suggestions to design policies in support of custodianship, to secure the long-term collective governance of territories, protect them from unbridled commercialisation and degradation, and allow them to sustain bio-cultural diversity and the life-supporting functions of nature.

The recognition of the multiple values embedded in communities bonding with their territories, finding place-based and culture-based solutions to problems, and engaging in territorial governance and *self-determination* offers a cornerstone for a different worldview, where the quality of the *relations* that keep communities together as custodians of their territories is as important as other dimensions of social and environmental justice.

Custodianship by self-determined communities can complement other types of territorial governance, integrate the achievements of modernity and globalisation, and enhance the chance of conserving the diversity of nature and cultures. It may seem a novel perspective to some but, arguably, custodianship has been the kernel of life as humans evolved on Earth. It may return to being so in a more conscious, peaceful, sustainable and vital future.

Territories of life

Exploring vitality of governance for conserved and protected areas

Territories of life

Exploring vitality of governance
for conserved and protected areas

Grazia Borrini-Feyerabend
with Tilman Jaeger

Territories
of life

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Cover picture: Laas Geel is a complex of caves and rock shelters in the Horn of Africa that contains some of the earliest known rock art in the African continent. The prehistoric cave paintings are estimated to be between 20,000 and 18,000 years old. They show aurochs (an extinct species of large wild cattle) in ceremonial robes accompanied by humans, other cattle, domesticated dogs and a giraffe. The cave paintings are excellently preserved and retain their clear outlines and strong colours. (Courtesy Abdullah Geelah, Wikimedia Commons)

To Mohammad Taghi Farvar,
who knew well the joy of traditional living in nature.

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Abbreviations and acronyms

Abbreviations and acronyms utilised only within the example boxes are defined there and not repeated here.

BCE	Before the Common Era (equivalent to BC, Before Christ, in the Gregorian calendar)
CBD	Convention on Biological Diversity
CE	Common Era (equivalent to AD, Anno Domini, in the Gregorian calendar)
CEESP	Commission on Environmental, Economic and Social Policy (of IUCN)
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
COP	Conference of the Parties
CPA	Community Protected Area
FAO	Food and Agriculture Organization (of the United Nations)
FPIC	Free, Prior and Informed Consent
GATC	Global Alliance of Territorial Communities
GDP	Gross Domestic Product
GEF	Global Environment Facility
GSI	Global ICCA Support Initiative (delivered by GEF SGP)

ICCA	Since the early 2010s this is an abbreviation (not an acronym) standing for 'territory or area governed, managed and conserved by an Indigenous people or a local community'. In this work we hardly use the abbreviation and prefer instead, as applicable, the term 'territory of life'.
ICDP	Integrated Conservation and Development Project
IEG	Intrinsic Exchange Group
IIFB	International Indigenous Forum on Biodiversity
ILO	International Labour Organization
IP	Indigenous people
IPA	Indigenous Protected Area (term utilised in Australia)
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCA	Indigenous Protected and Conserved Area (term utilised in Canada)
IPCC	Intergovernmental Panel on Climate Change
IPLC	Indigenous Peoples and Local Communities (instead of this acronym we mostly use the term 'communities' or, as applicable, 'custodians')
IUCN	International Union for Conservation of Nature
IWGIA	International Work Group for Indigenous Affairs
LC	Local Community
LMMA	Locally Managed Marine Area
NGO	Non-governmental Organisation
OECD	Organisation for Economic Cooperation and Development
OECM	Other Effective Area-based Conservation Measures
PES	Payment for Ecosystem Services
PoWPA	Programme of Work on Protected Areas (of CBD)
REDD	Reducing Emissions from Deforestation and Forest Degradation
SCBD	Secretariat of the Convention on Biological Diversity
SDGs	Sustainable Development Goals
SGP	Small Grants Programme (of GEF)
TILCEPA	Theme on Indigenous and Local Communities, Equity and Protected Areas (IUCN Inter-commission Working Group)
UK	United Kingdom
UNDP	United Nations Development Programme
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children's Fund
UNPFII	United Nations Permanent Forum on Indigenous Issues
UNPO	Unrepresented Nations and Peoples Organization
USA	United States of America
WCMC	World Conservation Monitoring Centre (of UN Environment Programme)
WCPA	World Commission on Protected Areas (of IUCN)
WDPA	World Database on Protected Areas
WHO	World Health Organization
WRI	World Resources Institute
WWF	World Wide Fund for Nature/World Wildlife Fund

Foreword

Conserving nature, whether purposefully or unconsciously, has likely occurred throughout the evolution of human beings and their communities, reflecting the inextricable and vital relationship between people and nature. Societies worldwide show this, as people strive to produce, live, make their lives meaningful and determine their futures. In this volume, Grazia Borrini-Feyerabend draws on the diverse experiences of communities, thinkers and organisations to elevate the notion of institutional vitality for conservation. She identifies five fundamentals for vitality within a suite of situations and offers common ground and approaches to assist communities and others to understand, pursue and perpetuate their own pathways to vitality. Offering practical tools and policy advice, she invites governance institutions to embrace age-old wisdom, avoid the pitfalls of contemporary expedient decision-making, and cope with the challenges of a world that is changing rapidly and unpredictably before us.

This work has been inspired by a community of practitioners actively seeking a deeper understanding of effective and equitable conservation. The 'new millennium' provided a turning point for thinking, starting from the adoption of the first multilateral agreement on protected areas at the 2004 *Conference of the Parties of the Convention on Biological Diversity* (CBD), which followed the 2003 *IUCN World Parks Congress* in Durban, South Africa. The seeds of this volume were sown then, as the *CBD Programme of Work on Protected Areas* (PoWPA) embraced a new element for *Governance, Participation, Equity and Benefit Sharing*— a result born of inquiries and struggles where Grazia played a leading role. While its scope included protected areas under all forms of governance, the IUCN Inter-Commission *Theme on Indigenous and local communities, equity and protected areas* (TILCEPA) deepened that work with a focus on conserved territories, ultimately leading to the establishment of the *ICCA Consortium*. The work of TILCEPA first and the ICCA Consortium later brought greater awareness to the distinction between efforts to expand systems of conserved and protected areas to include all areas of importance for biodiversity— often expressed as quantitative goals— and efforts to ensure that such areas are capable of maintaining their biodiversity and cultural values over time in ways that are effective, equitable and 'inspiring'— qualitative goals. Among the latter, this volume sheds light on the quintessential qualitative goal: *vitality of governance.*

From 2006 on, the members of TILCEPA had also been collaborating with the UNDP-implemented GEF Small Grants Programme (SGP). By 2014, support from the Government of Germany made it possible for GEF-SGP to launch the ICCA Global Support Initiative (ICCA-GSI)— a partnership with the ICCA Consortium, IUCN and the UNEP World Conservation Monitoring Centre. The partnership emerged from the 'Governance Stream' of the IUCN World Parks Congress 2014 in Sydney, Australia, allowing a global suite of countries and actors to reflect together and shape ideas and practices. The Promise of Sydney embraced fully the diversity of governance in conserved and protected areas, and for the first time, applied the notion of vitality to their governance processes. In the years that followed, the ICCA-GSI collaboration expanded further, engaging many local actors in all world regions.

Through this process, it became increasingly clear that place-based conservation is deeply rooted in a symbiotic and reciprocal relationship between custodian communities and their territories of life. The diversity of the ecological processes they adapt to is reflected in the variety of culture-based livelihoods, sustainable uses of the gifts of nature, and cultural and spiritual connections to the land and among people. Surprisingly, this awareness of the profound conservation value of the bonds between communities and their territories of life has neither come easily nor early in the international conservation movement. Among the merits of this work is to trace the emergence of that understanding and its evolution in international policy.

Despite this growing understanding, community custodians and territories of life are still profoundly at risk. The ravages of colonisation, imperialism and militarism, the adoption of Western legal and property regimes, the widespread commercialisation of nature and cultures, and the social and economic marginalisation of peoples continue to challenge the vitality of even the strongest traditional governance institutions. This volume warns us that the unique and precious bonds between communities and their environments are weakening and may be lost altogether. This is a tragedy for nature and its custodian communities, but also for the international conservation movement, which has not yet properly recognised them nor taken full advantage of their capacity to govern nature sustainably and equitably.

Emphasising the journey, experiences and processes of learning that brought us to the understandings of today, Grazia Borrini-Feyerabend delves into the motivations that sustain and inspire the institutions that govern our natural environments. The exploration is beyond academic, as it deals with the essence and meaning of the bonds between nature and communities, and within the communities themselves. Thus, the volume traverses a landscape of experiences and highlights how governance— in particular governance by Indigenous peoples and local communities— can sustain and enhance the vitality of both *conserved* and *protected* areas. Readers will explore case examples of governing territories in *excellent and inspiring ways through time*, but also theoretical discussions that seek *vitality* among insights from political economy, human ecology, anthropology, history and poetry. The journey underscores the importance of *self-determined governance* and ways by which custodian Indigenous peoples and local communities are able to maintain and enhance the life-supporting capacity of their territories.

This volume also sounds an alarm that the situation of many territories of life is now critical. Many are being damaged or even destroyed by colonial state powers and capitalist enterprises. By highlighting the perspective of custodians and offering specific tools and guidance, the volume advocates for governance institutions and practices that are local and diverse, resilient and adaptive, wise and inspiring. These are valuable offerings for all holders of responsibility for governance systems, those willing to nurture and enhance their institutions for the sake of conserving local ecosystems, and much beyond. As the world confronts unprecedented environmental challenges, governance vitality becomes ever more essential. This volume is a call for profound change to recognise and honour the vitality inherent in the governance of territories of life, in their pluralist knowledge frameworks and in those evolving institutions capable of conserving biological diversity *together* with a diversity of cultures, identities and languages. It is an invitation to understand, learn from and support the collective custodians of our planet's precious ecosystems. May the stories and insights within these pages inspire us all to govern conserved and protected areas in ways that are as dynamic, resilient, meaningful, diverse and vital as life itself.

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Kalpavriksh (India)

Vololona Rasoarimanana,
Co-founder of Fanonga Fokonolona (Madagascar)

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Trevor Sandwith,
Director, Centre for Conservation Action, IUCN

Ali Razmkhah,
Global Coordinator, ICCA Consortium

The Earth, the forests... are alive.
The river, the lakes, the mountains, the wetlands, the trees...
Everything is a living being. It is alive.

<div align="right">

José Gualinga, 2019[1]

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Preface

Life is the most powerful term we possess to express the human condition, and the condition of nature, on our planet. At times, life is most active and visible— a hive brimming with bees, a gymnast in the air. At times, it is strong and quiet— a seed waiting to generate a tree, yeast slowly fermenting with flour and water to recreate itself. Life is particularly stunning when it seems to merge diverse beings into one— trees drinking sunlight while creating shade and food for diverse insects and fungi at their roots; a run of salmon jumping up a waterfall; an intensely-scented flowering shrub attracting hummingbirds; a group of people working together to divert water to a field. In all this we see energy, vigour, strength, vivacity, health... the fullness of life! Yet, we are never far from decay and death, the bleeding wound, the rotten fruits, human apathy and fear, the open jaws of the bear waiting for the salmon to jump...

Two features of life seem fundamental. The first is **change**. Something that is alive is always changing: we know this from our own immediate experience of breathing, but also from seeing plants, animals and people around us inevitably growing, aging, dying... Even after death, change continues. Innumerable microorganisms like fungi, microbes and bacteria decompose every past 'being' into the constituents and food of many future 'beings'. The fact that life is intertwined with change has fascinated and inspired humans for millennia, from the ancient teachings of Asian religions (*mujō*, *anicca*, *anitya*— existence *as* impermanence) to the succinct aphorism of Heraclitus (*panta rhei*—all things always flow).

The second feature— possibly uniquely *perceived* or *created* by humans— is life's capacity to imbue matter with purpose, to generate **meaning**. It comes through in the earth-shaking attraction between a young couple in love, or the ingenious audacity of first travellers to distant shores. But it is also in the exquisite beauty of having lived, having reached maturity, distinctive imperfection (*wabi-sabi*), wisdom, humbleness and peace. We find that meaningful beauty in the veins of the trunk of an old olive tree, in stone walls seemingly invisible as they blend into a productive landscape, or in the words of an elder telling a story that connects people to their past. In fact, most of us want to continue living... but we also want to *make sense* of our living.

From the Latin word *vita*, which means life, comes the term **vitality**— the essence of possessing, conveying and giving continuity to life. As an attribute of all living beings, vitality naturally relates to energy and strength, in action and potential for action, but also to change and meaning. It expresses the capacity of maintaining oneself, functioning, often also reproducing, and evolving through time in ways responsive to the changing

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1   José Gualinga is an Elder of the Indigenous Kichwa of Sarayaku (Ecuador). The quote is from this video: https://youtu.be/70mt7bozJb8?list=PLuBpRnNXhKyQciWz4bRRdPqtLBaT5tdts accessed 2024.

context. But vitality can express even more, such as the fact of being an 'organism', hence imbued with self-determined purpose.[2] By analogy with our experience and understandings of 'life', the term vitality has also entered non-biological fields, for instance with reference to societies and cultures. We speak of the vitality of a city, of a work of art, of an economic programme. It thus comes naturally to ask: is it possible to speak about the **vitality of an institution?** In particular, does it make sense to explore the vitality of institutions concerned with conserving nature?

An attempt to do exactly that was made in 2014, during the IUCN World Parks Congress in Sydney, Australia. The participants in the 'governance stream' of the Congress[3] explored what vitality may mean for the institutions governing the territories and areas where the biological and cultural diversity of our planet is being conserved (with the non-incidental consequence of also maintaining human livelihoods and wellbeing). These were then referred to as 'protected and conserved areas'. In this work, we place the adjective 'conserved' first to attest to conserved areas having a history that long precedes protected areas. We recommend all readers review the definitions of these terms in Part VI.

During the Sydney Congress, participants explored the institutions that govern natural environments— the organisations and processes that conceive, implement and secure the respect of decisions, customs and rules regarding territories and nature in general. For about a decade before the Congress, interest had been alive about the *diversity* and *quality* of governance[4] delivered by institutions for conserved and protected areas.[5] By starting to explore the ***vitality* of governance**, researchers, practitioners and managers wanted to go further. They sought to understand when and how such **institutions performed in excellent and inspiring ways through time**. More broadly, they considered that governance vitality might reveal when and how people sustain **long-standing and meaningful relationships with nature**,[6] offering lessons for conserved and protected areas *beyond* governance diversity and quality, attempting to reach to the heart of the governance process.

Based on a first articulation of the vitality concept at the Sydney Congress,[7] selected interviews were carried out to further explore it in 2016–2017.[8] Then, more case examples were gathered, examined and discussed in 2019–2022, drawing from site-based studies and national, regional and global analyses carried out after the turn of the millennium. The majority of such studies focused on territories and areas governed, managed and *conserved* by Indigenous peoples and local communities,[9] a phenomenon increasingly referred to as **'territories of life'**.[10] Chosen from among these cases, this work offers the descriptions of 30 conserved and protected areas— not exemplary cases of vitality but situations where we can ***learn about* vitality**, and which

2   Bateson, 1972.

3   The IUCN World Parks Congress is held once every ten years and is a major event in conservation policy. The Sydney Congress comprised eight main 'streams' of events, each dedicated to a key topic, one of which was 'governance'.

4   IUCN Protected Areas Programme, 2004; CBD, 2004; SCBD, 2004b; IUCN, 2005; Borrini-Feyerabend *et al.*, 2013.

5   Exploring diversity revolved around asking "Is this institution appropriate to the context?", "Could an institution of a different type achieve better results?", and exploring quality meant asking "Does the institution respect 'good governance' criteria?". More in Part VI.

6   'Meaningful' is used here to mean 'effective in fostering and supporting life', in the relevant landscapes and seascapes, for humans and other beings. Other perspectives on the performance of governance institutions are possible, e.g. highlighting innovative solutions to problems, capacity to deal with social complexity, political and ideological stability, production of economic values, resilience, etc.

7   Borrini-Feyerabend *et al.*, 2014; Borrini-Feyerabend & Hill, 2015.

8   A series of twelve in-depth interviews investigating governance vitality were carried out by Jessica Campese and Michael Mitchell in 2016–2017. Most of them were with representatives of governing bodies and custodians of conserved and protected areas and three with global governance experts. Case examples 15, 17 and 22 are derived from these interviews.

9   At the time of the Sydney Congress, the 'areas governed, managed, and conserved by Indigenous peoples and local communities' were usually abbreviated as ICCAs, using an acronym originally developed for 'Indigenous and community conserved areas'. In this work, we will refrain as much as possible from acronyms and abbreviations. In place of ICCAs we will use, as applicable, 'territories of life'. Similarly, in place of the usual IPLCs for 'Indigenous peoples and local communities', we will use 'communities' or 'custodians'. We will also capitalise the term 'Indigenous' when referring to specific peoples, nations and individuals, adopting a form of respect that has become commonplace in much conservation and social science literature of the third millennium.

10   The expression originated among Indigenous peoples in Colombia (see later) and is now used in various languages and across continents. The website of the ICCA Consortium www.iccaconsortium.org accessed 2024 offers a repository of examples, reports, images, videos and analyses of territories of life at local, national, regional and global levels.

well illustrate the complex nature of what we are striving to understand. What characterises the governance institutions that manage to respond to change and remain effective and meaningful? What lessons can we draw on governing conserved and protected areas in ways that are inspiring and maintain a sense of vitality through time?

This work invites readers to take a **journey through history** and **case examples**, asking questions and exploring possible answers while weaving in insights from disciplines like **political economy** and **human ecology** along with accounts and short stories from a variety of real-life situations. The exploration is illuminating *per se*, but it engages us even more as we discover similarities among communities strongly bound to their life environments. Such communities relate to nature in the vital patrimonial[11] affective ways that characterise 'custodianship'. Ultimately, the journey invites us to understand whether, and how, vitality could be consciously nourished and even strengthened.

Who may like to join the journey? The people who discussed issues of governance vitality at the IUCN World Parks Congress in Sydney are a microcosm of those who might find it of interest. They comprise conservation professionals and environmental defenders; members of governing bodies and managers of conserved and protected areas, including Indigenous peoples and community custodians of territories of life; policy-makers dealing with land use and conservation and development initiatives; and staff of non-governmental organisations (NGOs), researchers and students concerned with the multiple dimensions of 'cultured living in nature', livelihoods and biocultural diversity.[12] However unlikely, it would be particularly welcome if some of the many economic and political actors that carry out and affect governance of nature would also join the journey. Beyond the specialists, however, everyone concerned about nature and human wellbeing may enjoy exploring concepts like 'governance vitality', 'custodianship' and 'territories of life' as they attempt to connect the dots about what is worth seeking, for conserved and protected areas, in our age of unprecedented crises and opportunities.

This work offers a mix of **diverse perspectives and narratives**. We discuss and learn from the resolve of Indigenous leaders, the practical needs of managers, the reflections of utopians, the insights of historians, anthropologists, human ecologists, and scholars of political economy in social-ecological[13] systems. The mix is refreshing, as all perspectives have merits and meaning— they coexist well and enrich one another. In this sense, the diverse parts and sections of this work are like **entry points in a hologram**, making it possible to approach the subject from the angle that best fits the interests of the reader. Some people best appreciate the present by first reading about the past. Others prefer beginning from definitions and analytic reasonings. Still others need to be intrigued and 'follow the energy' of what attracts them. Some readers are keen on major political phenomena, others on practical exercises that apply to specific situations. We recommend that readers start from the part or section that attracts them the most, knowing that understanding vitality is like putting together the pieces of a puzzle… there are many diverse interlocking facets and perspectives to discover. And we all may begin from our preferred bit of shape or colour. Below is a brief review of what to expect.

For about three million years, the genus *Homo* developed in small groups in diverse ecosystems across our planet. In **Part I**, we recall the relations between our distant ancestors and their 'territories', which we imagine

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11 We use 'patrimonial' here following Henri Ollagnon, who was among the first to discuss the phenomenon (Barthod & Ollagnon, 1991). We will later adopt the gender-neutral term 'heritage creating', which is more balanced.

12 Bridgewater and Rotherham (2019) offer an account of the evolution of the concept of biocultural diversity, which they understand as those dynamic, place-based aspects of nature that arise from links and feedback between human cultural diversity and biological diversity or, more simply, from the interaction of people and nature at a given time and in a given place.

13 We use the term 'social-ecological' in the sense, first described by Berkes and Folke (1998), that most social systems and ecological systems did not evolve separately but co-evolved.

to be only vaguely and porously defined. We infer all we believe we know about such relations from scant and indirect information, but they must have embedded many elements of vitality as they remained life-supportive under challenging conditions through millennia. Some of those have likely been passed on and still persist today. May we identify some such elements? The examples provide us with orientation as we explore the bonds that tied specific people to specific natural environments in recent centuries.

We start by discussing **territories and areas *conserved*** by communities that share **traditional lifestyles**. Foragers, pastoralists and shifting cultivators are described in the environments they have been shaping as part of long-standing **mobile** lifestyles. And we discuss the factors that have recently obscured their value or impeded the continuation of their sustainable practices. We also examine the long-standing territorial associations of **sedentary** communities, such as those of monastic centres or local communities that care together for their *commons*— the land, water and many other gifts of nature that have sustained them for centuries.

Fast-forwarding to recent history, we trace the emergence of contemporary institutions established to *protect* at least part of nature from the disruptive changes ushered in by modernity. From their diverse origins, **protected areas** have generated benefits, costs, opportunities and risks. They have meant wellbeing and satisfaction for some and terrible deprivations and injustices for others. We examine protected areas up to the recent **emergence of 'governance'** as one of their crucial features. The concept of governance broadens the perspective of conservation professionals and environmental defenders in new ways, both profound and practical.

The case examples of conserved and protected areas described in this work offer a glimpse of the diverse purposes and meanings— from the basic to the sophisticated— that nourish territorial governance institutions. They also reveal the diverse levels of energy and motivations that allow them to function through time. Drawing from such examples and other considerations, in **Part II** we identify **five features**— three in direct analogy with properties of living beings, and two related to the purpose and meaning of the institutions themselves— which appear **associated with vitality**. These characteristics do not spell out a 'vitality recipe' but offer insights and help us to ask questions in more depth. For instance, for an institution to function *well*, in ways that support the life of nature and people, is it generally better to adapt to, or to resist, change prompted from outside? Is it better to collaborate, or to compete with, other institutions? When can we speak of self-determination? What does it mean to make *wise* choices? How can an institution inspire social respect and adherence to its decisions and rules? Obviously, there are no univocal answers to questions such as these… but asking them may enrich self-awareness and broaden choice.

From the broad vista offered by Parts I and II we move on to explore, in **Part III,** the sources that nourish the motivation and energy— and thus the vitality— of an institution. We touch upon **'biological purposes'** and **'symbolic meanings'** and seek where they may be articulated in the cultural and political aims of institutions or embedded in the insights of local knowledge and mētis.[14] We also reflect on the fact that strong bonds between human communities and their territory also generate **emotions**— including rewarding and positive sentiments but also miserable and violent behaviours. Clearly, the very energy that sustains human relations and life can also nourish brutality, destruction and death. This ancient understanding makes us wonder… what does awaken the emotional awareness and affective bonds that connect some human communities with their territories, their ancestors, their descendants, the entire realm of nature? What keeps such awareness and bonds life-supportive rather than brutal and destructive? Ultimately, what concurs to keeping a governance institution 'vital'?' Our answer is simple enough to encourage practical steps to strengthen vitality… in full awareness of the advantages and limitations of diverse contexts.

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14   The concept of mētis, as used in this work, is defined in Part III.

Part IV opens with an appreciation of **custodianship**— the relation that characterises some emblematic examples of governance vitality and bonds communities to their **territories of life**. The expression 'territories of life', born among networks of Indigenous peoples in Latin America,[15] has been adopted to describe a phenomenon that reveals similar patterns through time and in all inhabited continents.[16] We describe custodianship here as a heritage-creating, affective bond that connects people with their territories of life and with their ancestors and descendants to come across generations. In this sense, custodianship is closely connected with **identity**, **autonomy** and **social morality**— it is a powerful **source of vitality**. We then explore territories of life in recent history, as they face the *hubris* of modernity and its unfolding variants of dominant 'reality', 'development', 'economy' and 'democracy'— too often unable to see and value them.

Next, we briefly examine **community conservation**— a phenomenon that arguably accompanied human survival for millennia but was first 'discovered' and described less than 50 years ago. We review its **alternating fortunes** in policy and narratives, while custodians struggled to continue *practising it* on the ground for their territories of life. Meanwhile, as part of their organising and networking, an international alliance of custodians started to promote self-strengthening and mutual support for self-determination in territories of life. Territories of life have long been recognised by custodians as essential for their own livelihoods, identity and moral economy. Recently, they are also becoming recognised more broadly in society as '**conserved areas**', capable of mitigating biodiversity loss and climate change. We argue that this role may remain possible— and even emerge enhanced by social recognition— if custodians also strengthen themselves and their capacity to care for territories of life. A very different fate may emerge, however, if custodians are drawn in by the very mainstream culture at the root of the crises and problems that affect nature.

To gain insights on what may lead to one or the other outcome, we discuss how a current **recognition crescendo** for territories and areas conserved by custodian Indigenous peoples and local communities focuses on providing them with economic support and, possibly, also legal land rights. We consider how this may be positive for self-determination and conservation objectives, and even **advance environmental justice**. **Just as probably**, however, we discuss how it may contribute to the **demise of territories of life**. Part of the difference may well be made by 'what comes first', that is whether custodians are strong enough— and their governance institutions vital enough— to maintain their bonds with the territory and stand up against the commodification of nature and the corollary specialisation and standardisation of all our relations with it. For that, we recall the visionary thinkers who recommend custodians to embrace their paths towards **resurgence, de-colonisation, self-strengthening** and re-awakening of the primacy of relations among people and between people and nature.

Can anything be done to nourish the vitality of governing institutions for conserved and protected areas? **Part V** tries to address this question. It begins by sketching out a **systemic understanding** of a governance institution, where vitality relates to other properties of governance, such as diversity and quality, but also to broad cultural elements like language and worldview. This perspective allows us to emphasise institutional **functioning through time**, rather than a specific decision-making organisation and its rules at a specific time, and to highlight **complexity and change**. We then recall several germane concepts extensively discussed in the literature (e.g. resilience, subsidiarity, sustainability, social-ecological fit, etc.) that offer insights and possess similarities and differences in comparison with vitality.

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15   A network of custodians of 'territorios de vida' (territories of life) established itself in Colombia in 2016 (Carolina Amaya, personal communication, 2016).
16   See ICCA Consortium, 2021.

Further, introducing the sections of this work that more specifically focus on action, we recall that some international bodies have adopted 'governance vitality' as part of their standards of excellence.[17] Do we care enough about any specific conserved or protected area to try to understand where it draws its governance vitality from? Are we keen to move from an emphasis on *coverage* of formal protection to an emphasis on enhanced chances of nature thriving because of vital governance in both conserved and protected areas? If so, the simple guidance we offer— **questions, indicators, tools**— may accompany governance institutions through an honest **self-assessment exercise** towards better understanding and nurturing of their own vitality.

Part V closes with a section dedicated to **policies to enhance vitality** of conserved and protected areas. The section sketches a few policy elements that address communities willing to **strengthen**, or to **establish and nourish**, some **bonds of custodianship** with specific territories. The communities may be longstanding, like Indigenous peoples with customary land rights, or be in the process of 'creating themselves' for the purpose of caring together for a territory. Those valuing and seeking a custodian role would be socially recognised, but also engaged in negotiations towards a possible formal agreement, for instance, taking on specific responsibilities while receiving appropriate forms of support. The community responsibilities could include territorial surveillance, specific management tasks, a role in biodiversity monitoring, and much else. Their benefits could include unique rights (e.g. rights of access and use of the territory, sustainably hunting and fishing there, taking on certain jobs...) and various types of support (e.g. technical, financial, for networking and exchange visits, etc.). The ultimate reward would be **security of governance** (e.g. formal collective ownership or other type of governance rights) for the territory under their care. Each custodianship agreement would be tailored to the context, with partners committed to maintaining a learning attitude through time.

'Custodianship policies' such as the one just sketched stand upon the will and capacity of communities to draw at least part of their livelihoods from their territories of life, and upon the evidence-based understanding that such territories are best conserved through time by the communities that *care* for them. In this light, a **sustainable and just future** would include **as many territories of life as possible** in the world. In the absence of custodianship policies, territories of life may result from a myriad of successful endogenous processes of self-determination... but the encouragement and support of enlightened policies would remain fundamental. The ideal situation would thus be one of **endogenous processes and adequate external support**, including policies— **that meet**, so to speak, '**midway**', and are mutually reinforcing. For this, many actors other than communities and policy-makers have important roles to play.

In **Part VI** we review the building blocks of governance vitality and other **concepts and terms** used in Parts I to V. You will find a lexicon, including definitions of what we mean by 'conservation', 'territories of life', 'conserved areas', 'protected areas', and considerations about their formal recognition and monitoring. The concepts of 'governance' and 'governance diversity and quality' are also briefly explained as they refer to conserved and protected areas. We encourage readers to review Part VI before or while approaching Parts I to V.

Finally, **Part VII** offers some **conclusions**, designed for those of us who read the end section first and go to the rest of the work only if the conclusions are worth tracing back to the information and argumentations that give them roots. You may start there if you wish to have a teaser for your reading, but this is not recommended. This work was developed as a journey of discovery— each step a destination *per se*, carrying part of the overall meaning. The ambition is to present **a mosaic of experiences and** diverse **perspectives** that slowly bring to light the meaning of 'governance vitality' and 'custodianship' of 'territories of life'. In this sense, the conclusions offer a few condensed ideas, but miss a key component of this work, which is the journey itself.

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17   'Governance vitality' is part of the standards of the IUCN Green List of Protected and Conserved Areas (Andersen & Enkerlin-Hoeflich, 2015).

Prelude

On a sunny winter day, the rapid and continuous changes of direction of a flock of starlings create fascinating patterns in the sky. The flock has no leader, but scientists believe that each bird instantly communicates with a small group of other birds (possibly the seven closest to it)[18] to remain in proximate distance with one another, keep the same direction and avoid collisions. The results of these many collaborations— small group by small group— is the evident vitality of their collective being, their capacity to find together strength, comfort… possibly the excitement of a dance. The behaviour is referred to as an example of 'self-organisation'— the emergence of new properties and functions at group level that are not present, or are irrelevant, at the level of an individual. In this way, despite lack of centralised decision-making, biological self-organising systems exhibit complex behaviours and are known to solve topological problems, such as maximising the desirable pattern of closeness or distance among entities.

18   Ballerini *et al.*, 2008; Farine, 2022.

Part I:
In search of
governance vitality

…for readers willing to take a journey through examples, stories, reflections and questions— seeking what contributes to 'vital' relations between people and nature…

I felt I had to know the secret of their timeless and irreverent vitality.

Bruce Chatwin, 1987

Time-tested conserved areas

Both 'economic development' and 'conservation of nature' are relatively new fields of understanding and action. In practice, the last century has seen them sweeping across all corners of the planet. In discourse, not least because of their complex interaction, they have helped to shape dominant worldviews and narratives. Among the related concepts that greatly affected perspectives in conservation of nature is **'governance'**. Regarding protected areas, governance has been discussed for around 20 years, since it was distinguished from the apparently purely technical, and thereby 'neutral', idea of 'management'.[19] Governance— a political concept *par excellence*— refers to the processes and ways by which institutions take, implement and try to secure the respect of decisions and rules regarding specific natural environments. Despite its definition and properties emerging only in 2003,[20] the concept has made an expeditious climb to the top of professional attention and policy development,[21] and is now prominent in relevant gatherings.[22] The first properties of governance examined in some depth have been 'diversity' and 'quality', which can be defined and assessed for individual protected areas as well as for their systems.[23] The most intriguing and least examined other property— that of 'vitality'— was first introduced and discussed at the IUCN World Parks Congress in Sydney in 2014.[24] Vitality of governance is one of the key topics of this work, where it is explored through a variety of questions, insights, concepts, tools and policy ideas, always based upon, and seeking reflection from, real examples of conserved and protected areas.[25]

To learn about what maintains a *vital* relation between people and nature, we start by adopting a working definition. We speak of **governance vitality** when a governance **institution maintains its *capacity to function through time*, *fully* and in *inspiring ways*—** including by *evolving* under changing, and possibly challenging, circumstances.[26] We purposefully focus on institutions for which the 'sustained capacity to function' includes *conserving nature*, as demonstrated by the health and integrity of the relevant ecosystems, and *contributing to the wellbeing of people*, as demonstrated by the health and perceived satisfaction and wellbeing of the relevant communities.[27] In the case of conserved areas, the objectives are often implicit, while in the case of protected areas they are generally explicit. In both cases, vital governance describes a **thriving relation** between people and nature. In fact, vitality is *revealed* by the motivation and energy that a governance institution demonstrates when it keeps playing its role through time and under varying circumstances (**being 'inspiring' to itself**) while gaining a measure of social respect and generating a sense of confidence and security in the broader

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19   Before the Durban Congress of 2003, conservation professionals focused nearly exclusively on 'management' and management plans (at times even regardless of implementation). For more on the distinction between governance and management, please see Part VI.

20   It happened at the Durban IUCN World Parks Congress (2003), see IUCN CEESP, 2003 and IUCN Protected Areas Programme, 2004.

21   IUCN Resolutions 3.012 and 3.049 (Bangkok, 2004); CBD, 2004; SCBD 2004b; IUCN Resolution 4.048 (Barcelona, 2008); CBD Decision 10/2, 2010 and Decision 14/8, 2018; IUCN Resolution 5.094 (Jeju, 2014). See also Borrini-Feyerabend *et al.*, 2004a; Dudley, 2008.

22   E.g. the Sydney IUCN World Parks Congress (2014), see: https://www.worldparkscongress.org/about/promise_of_sydney.html accessed 2024.

23   Borrini-Feyerabend *et al.*, 2013.

24   Borrini-Feyerabend & Hill, 2015. See also the three short movies available here: https://www.iccaconsortium.org/2016/03/01/the-heart-of-a-stream/ accessed 2024.

25   See Part VI for a lexicon of basic concepts, including 'governance', 'protected areas' and 'conserved areas'. A rough distinction between 'conserved' and 'protected' areas is as follows: the first encompass areas that exhibit conservation de facto; the second encompass areas formally recognised by State governments as dedicated to conservation.

26   As 'capacity to function through time', vitality is compatible with fluctuations in functionality and results, provided irreplaceable damage is not caused to the relevant ecosystems and/or societies.

27   The most fundamental of questions may be "governance for what?" (Oakeshott, 1996, quoted in Dror, 2001).

society (**being 'inspiring' to others**). What nourishes the implicit or explicit purpose and sense of meaning of governance institutions, their capacity to function '*in inspiring ways*' and maintain their motivation and energy through time? We will seek answers by exploring a variety of examples of conserved and protected areas.

The dominant lifestyles and narratives of the 21st century do not lend themselves easily to practising any 'inspiring governance' of natural environments. Well over half of the world's people live in urban areas[28] and are fully embedded in the global economy. Many have jobs in built environments, eat food that is industrially produced, and live and work far from nature. They hardly interact with natural environments, let alone 'govern' them directly or care much about those who do. In fact, many world citizens have massive environmental impacts, but such impacts are often mediated, indirect, invisible, outsourced and ignored. Many urban citizens can neglect and forget the patient and ingenious institutions that have made it possible for human communities to evolve in diverse ecosystems— from cloud forests to semi-arid savannah, from ocean shores to mountain tundra— drawing livelihoods from them during millennia. They may be aware of the existence of 'Indigenous peoples' and 'local communities' who live in closer contact with nature and more directly depend on it for their livelihoods, but this awareness is often superficial, possibly stressing diverse appearance and cultural characteristics. A few principally see them in their historical contexts and even fewer are fully aware of colonial, neo-colonial and post-colonial State situations.[29] In this work, we understand **'Indigenous peoples', 'traditional communities' and 'local communities'** in relation to their own collective self-definition grounded in historical and socio-political processes.[30] And we focus on the diverse institutions that define and accompany them through history, demonstrating the human capacity to live in diverse environments. Compared to such institutions, those that manage our contemporary urban lifestyles are complex and imposing but represent only a tiny blip in the timeline of the genus *Homo*. Their vitality is all to be proven.

A remarkable characteristic of the lifestyles that have demonstrated a long-lasting capacity to maintain a non-destructive relation between people and natural environments is the fact of having been mobile.[31] We thus start our exploration of vitality by touching upon three variations of mobile lifestyles— foraging, pastoralism and shifting cultivation— whose governing institutions accompanied much of our ancient history and can still be found, at times alive and well, today. We will describe many of the relevant territories as 'conserved areas', and briefly argue why. We will then also discuss settled communities, such as monastic institutions and, in more detail, community institutions that proved effective and lasting in governing their territories and commons as conserved areas. The section that follows discusses the institutions in charge of 'protected areas' that are officially established by State governments. These are among the most recent institutions designed to govern the relation between people and the natural environment, and among the fastest expanding today (at least in legislated coverage).

Foraging

Foragers are people who draw the necessities of life from **gathering, scavenging, hunting and fishing**. Gathering refers to collecting edible wild plants, such as fruits, vegetables, tubers, seeds and nuts, but also mushrooms, shellfish, eggs and insects. Scavenging is about consuming remnants of dead animals, in particular marrow and brains that are rich in fat and very nutritious, and encased inside bones, thus less easily spoiled by

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28   Ritchie & Roser, 2018.
29   See ILO, 1989 and UN, 2007. The complexity of the general applicability of the concept is discussed by Bowen (2000).
30   See Sajeva *et al.*, 2019.
31   As intended here, 'mobility' is understood as a strategy for environmental governance/management, with little to do with migratory phenomena of socio-economic, political or climatic origins.

bacteria. Hunting and fishing refer to pursuing, capturing and killing wildlife and fish for food, or as a source of materials like fur, hides and bones. Hunting and fishing, but also gathering and scavenging, are much facilitated or even enabled by being practised by a group. Besides taking advantage of collective strength, groups benefit from collective knowledge about seasonal phenomena, habitats, animal behaviours and the use of tools. Early tools included hand axes, scraping stones, spears, bows and arrows, hooks, traps, nets and baskets, and have massively changed with time. Because group hunting also makes use of stone structures and fire, we see it at the origin of cultural landscapes.[32] Today, fewer families depend *exclusively* on hunting or fishing for their food needs[33] and even fewer maintain the same practices and tools as our ancestors. Many are equipped with sophisticated technologies— automatic rifles, night-vision equipment, sonars and drones… and practices have often become industrial, as when trawlers scrape kilometres of seabed and freeze the catch on-board long before getting back to shore. Yet, some of today's gatherers, for instance the *mariscadoras* of Galicia described in case example 1, behave in ways quite similar to those of our ancestors.

Paleoanthropology is a discipline rich in diverse and controversial interpretations of inevitably scarce data. But the idea that the **genus *Homo*** 'emerged' between 3 and 2.5 million years ago[34] and lived by **foraging across the planet**[35] is not contentious. There are, however, different perceptions of what 'foraging' may imply. On the one hand, some typical phrases still found on reputable educational websites (e.g. "Before *Homo sapiens* evolved, our hominin ancestors foraged for millions of years…"[36]) convey a value judgement of foragers as protohumans, devoid of much that makes us 'evolved'. After all, foraging *per se* does not distinguish the genus *Homo* from other primates, who are foragers too. On the other hand, it is probable that the 'ecological skills' that facilitate foraging (e.g. finding fruit-bearing trees, detecting changes in the colour of fruits, extracting resources embedded in substrates, cracking bones to reach nutrient-rich marrow, avoiding the risks involved in hunting and fishing) as well as the related 'social skills' (competition and cooperation with other humans in foraging groups) were important in favouring the development of larger brains (encephalisation) and some specific brain structures of humans.[37] Some actually believe that the gregarious hominin species evolved larger brains *because* of the foragers' need to optimise ecological and social skills *together*.[38]

Early foraging groups[39] must have been quite ingenious. Between 2 and 1 million years ago, it is estimated that some had learned to **control fire**,[40] acquiring essential advantages over all other living creatures and enabling them to **cook food**.[41] In turn, cooked food provided them with more (better digestible) dietary energy, allowing for a size reduction in their teeth and digestive system and favouring encephalisation. In Africa, Asia and Europe there is evidence of *Homo* communities that used **hand axes** one million years ago[42] and managed complex terrestrial and **seafaring voyages** as large groups.[43] From roughly the same time, and in

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32 Many ancient stone structures were also developed to gather water (Laureano, 2013). Human-originated fires, from the initial burning of living biomass to the current burning of fossil biomass are a unique marker of human activity, with consequences for the planet so immense that some refer to the current era as the Pyrocene (Pyne, 2020).

33 The numbers may be proportionally fewer than in the past but, in absolute terms, large numbers of people continue to directly depend on hunting and fishing for protein intake and as a source of income.

34 Dunsworth, 2010.

35 See https://www.britannica.com/topic/hunter-gatherer accessed 2021.

36 See https://www.khanacademy.org/humanities/big-history-project/early-humans/how-did-first-humans-live/a/foraging?modal=1 accessed 2024 (emphasis added).

37 Barton, 2000.

38 Ibid.

39 Simmons (1989) estimates that 25 individuals constituted the typical size of Homo groups.

40 See the discussion by James (1989).

41 Gowlett & Wrangham, 2013.

42 These are the so-called 'Acheulian tools' (range 1.76–0.13 million years ago), all made of stone. More than for killing live animals, stone tools seem essential for cracking bones and reaching the nutrient-rich marrow and brains of dead animals. All other implements that plausibly went with them (e.g. ropes, baskets, wooden and skin utensils) have been destroyed by time, with the notable exception of the Schöningen spears (see footnote 47). In fact, the idea of a 'stone-age' may be less a reflection of the importance of stones for our ancestors than of our limited perspective and the passing of time.

43 Seafaring journeys by raft were necessary for the Homo groups to spread across the Wallace Line, a feat that took place about one million years ago (Bednarik, 2020).

various continents, evidence is found of early relations with **exograms**, that is, 'memory storages' *external* to our brains,[44] considered a powerful characteristic of the genus *Homo.*[45] Among these are some impressive early petroglyphs depicting vivid scenes of **group hunting**.[46]

Recently discovered evidence of group hunting dates back to 300,000 years ago,[47] but it was already well established that 130,000 years ago, and possibly earlier, *Homo* communities regularly managed to hunt powerful animals like mammoths, which allowed them to sustain the hardships of living at temperatures of minus 40°C in extreme locations such as the Arctic or the Tibetan highlands.[48] Largely because of those feats we suppose that, besides being ingenious, *Homo* communities were also particularly robust, and enjoyed a varied and rich diet. It is now widely accepted that, by 12,000 BCE, foraging had sustained human communities to occupy and use most of the world's terrestrial environments except Antarctica.[49]

It is widely believed that our foraging ancestors were **largely 'mobile'**. This is deduced from the fact that they spread throughout the planet, possibly following the migrations of herbivores, adapting to seasonal and climatic phenomena, or seeking food resources when these were exhausted in a particular location. Some groups may have regularly moved to meet fish and birds where they gathered during seasonal migration patterns.[50] Other groups may have moved to seek different types of vegetation, avoid or seek certain types of plant, avoid or seek water, or the habitats of diverse animals. Through time, those who followed herds of herbivores came to tame[51] or domesticate some of the animals[52] and consequently change their patterns of mobility. Depending on the abundance and reliability of plants, animals and water, foraging human communities require territories of diverse size and extent. If we imagine a spectrum of ecological and climatic conditions— from the most challenging to the easiest for foragers— we can place arid inland ecosystems as the most challenging. At the 'easier' extreme would be coastal areas and river watersheds, which are abundant in shellfish and fish, such as salmon in the American Northwest. Food-scarce environments require more frequent movements over larger areas, while abundant environments allow the accumulation of resources and the establishment of settlements. In some cases, foragers remained mobile *within the same territory* for millennia,[53] offering examples of the longest continuous cultural complexes known, able to keep themselves alive despite substantial climatic and other changes.

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44   The name is provided by Bednarik (2021) and derived from 'engrams'— the units of memory that were unsuccessfully hypothesised for a long time inside our brains.

45   Bednarik (ibid) explains that exograms are memory prompters, which elicit brain reactions like emotions and thoughts and accompany the capacity to communicate and develop a mental equivalent of external realities. Animals seem to lack the neural facilities to create and manipulate exograms, while the contemporary world of humans would be unthinkable without processes of exogram creation and manipulation— of which language and writing are prime examples. Bednarik identifies the earliest exograms with manuports (portable objects with special features) collected for their intrinsic properties and voluntarily kept and transferred. Other examples are bone and shell engraving, beads, pendants and the use of pigments. More recent exograms (135,000 to 65,000 years old) comprise figurines and vibrant petroglyphs evocatively created in acoustically resonant caves. Among others, Bednarik (2020) and Mithen (2005) also discuss the possible role of music (humming, rhythm, singing, gesturing, dancing, etc.) in the flourishing of human mental capacities, language and the expression of emotions.

46   Aubert *et al.*, 2019.

47   Excavated between 1994 and 1999 from a lignite mine in Germany, the Schöningen spears— a set of eight wooden spears found together with the remains of a kill of many horses and dated well above 300,000 years—revealed an expert use of wooden tools and group hunting practices that pre-date Neanderthals (Schoch *et al.*, 2015).

48   Bednarik, 2020, p. 26.

49   Ellis *et al.* (2021) stress that only about 17% of Earth's land (conservative estimate) is without evidence of prior human habitation or use over the past 12,000 years. They report that already by 10,000 BCE wildlands (defined by their "complete absence of human populations and intensive land uses") covered only 27.5% of Earth's surface. Contemporary biodiversity-rich areas, areas prioritised for conservation, and areas labelled as 'natural' show long and significant histories of human use.

50   Herding of birds is not common, but is reported (Blench, 2001).

51   In contrast to domestication, taming does not affect the morphological or biological characteristics of species (Svizzero, 2017). A typical example cited by Svizzero is that of reindeer herding. Reindeer provide humans with milk, meat, hide, horns and even energy for traction. But they return to the wild easily and can interbreed with animals living in the wild. Taming of plants may take place by tending tubers, aerating the soil, watering fields, or by voluntarily harvesting only part of the seeds produced.

52   Goudie, 1981.

53   In Australia and New Guinea there is evidence of the continuous presence of populations in discrete geographic areas for about 50,000 years (Tobler *et al.*, 2017).

Case example 1.

Self-organising women shellfish gatherers (*mariscadoras*) govern inter-tidal territories and gain new status along the coast of Galicia (Spain)[54]

Thousands of hectares of seashore along the coastline of Galicia, in the north of Spain, are constantly covered and uncovered by the ocean's tide. They comprise inlets, sandbanks, seagrasses, coastal lagoons and estuaries that host productive and diverse marine and inter-tidal habitats for bivalves, crustaceans, snails, polychaeta, seabirds, marine mammals and fish. People, and in particular women from local communities, have traditionally taken advantage of these habitats to collect shellfish at low tide, as their ancestors have done most likely for thousands of years. Today, women collectors (*mariscadoras*) and other community groups have organised themselves to continue the gathering in a professional way. In the process, they have become official caretakers of specific areas and segments of the coastline, acquired pride and social standing, and developed a system of territories under their custodianship.

Shellfish gathering takes place in Galician coastal areas of high ecological relevance, where the terrestrial-aquatic transition and the freshwater-brackish water transition occur. Up to the first half of the last century, the activity is said to have been 'unmanaged' (access was *not* regulated) and was mostly adopted for self-consumption by the poor or as a minor commercial activity of last resort. From the 1950s, however, unsustainable commercial harvesting began, including by people from outside the local areas. By the 1980s, the shellfish resources were collapsing, and becoming a marginal activity, fraught with conflicts and social contempt.

In 1993, an alliance among the local administration, some researchers and women harvesters successfully introduced new fishing legislation that included strict rules for shellfish harvesting. It was the uneasy beginning of the **process of self-governance** that is active today. After the legislation was approved, the first groups of shellfish gatherers emerged among the women who had traditionally harvested in their local territories. The groups were officially recognised and structured in a top-down fashion, and their 'professionalisation' was somehow imposed through training programmes. This caused many conflicts, including social rejection by those who defended the unregulated traditional system. Some women did not like having to join a *Cofradía* (fishermen's guild), paying taxes and contributing to social security, although this was compensated by access to social benefits and labour rights. Slowly, however, the governance practice, the inclusion into the *Cofradías*, the development of sensible local management plans and some enhanced public recognition improved the image of the new groups and of the women as 'professional collectors'.

Most importantly for the future of the initiative, **the rules worked well**. Not all groups of shellfish collectors are equally successful but, as their members were surveying and enforcing rules (e.g. establishing when and where shellfish can be collected, the tools permitted and the amount; setting up checkpoints where minimum sizes and allowable quota are controlled; carrying out surveillance at night; etc.), the shellfish populations did recover. The local caretaker groups themselves decided on the number of licences, which is crucial to secure a profitable and sustainable activity. The people who get a licence must be local (resident in the municipality) and preference goes to the unemployed and those who have undergone at least a short course about the activity.

Over time, the restoration of seashore productivity has rekindled the communities' attachment to the sea and the coast. Today, the recovered resources support thousands of primary jobs (harvesting) and secondary jobs (canneries, shops, etc.). Sea and marine traditions are highly appreciated in Galicia (e.g. in popular sayings and gastronomy) and relate to local identity. Local seafood is considered of high quality and attracts tourists. Parties with seafood themes are popular in summer, in particular for the *Día de la Virgen del Carmen* (Festival of the Virgin of Carmen, 16 July), patron of sea people. Shellfish collecting is a traditional artisanal practice, but the women have found a way to bring the rules into contemporary social mores. For instance, the checkpoints at the end of a workday on the beach, when the catch is controlled for size and quota and management issues are discussed, have also become an occasion for meetings and social events.

Problems have not disappeared. Some internal and external practices still cause some local overexploitation, pollution and conflicts. Bureaucracy consumes time and resources. And structural issues affect the coastal infrastructures through habitat fragmentation, urban and industrial pollution, and poaching. Shellfish harvesting is also particularly sensitive to climate change. Overall, the practice may not be essential for contemporary local livelihoods, but it is important and in specific places the economic dependence on shellfish collection is high. In fact, it remains a rare 'professional option' available for disadvantaged sectors of society.

What institution currently regulates shellfish gathering? Since 1986, Spain has been part of the European Union and EU decisions have come into play. Also in the 1980s, Spain devolved the rules for the collection of marine resources to the autonomous region of Galicia and, in 1993, Galicia passed a new law, based on traditional practices and allowing context-specific variations. In essence, the Xunta de Galicia endorses and promotes community governance (or co-governance). Subject to the minor requirement of collaborating with the local government, the *Cofradías* (fishermen's guilds) are thus the bodies in charge of governing the marine and coastal resources. The groups of shellfish gatherers are officially established as sub-groups of the 63 *Cofradías* of Galicia[55] and include 3,800 people with specific responsibility for their seashore resources. Most such groups directly

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55   See http://ww3.intecmar.gal/Sigremar/ accessed 2022 for information on the Cofradías and their list.

manage their own **inter-tidal territories**, which are **clearly demarcated** and could be referred to as their 'territories of life'.[56] A public database shows how important these seashore territories and their caretaker groups are for nature, culture and the local economy.[57] Environmental criteria and technical assistance from professional biologists employed by the *Cofradías* are used to develop management plans, but the shellfish gatherers' local knowledge from direct observations and oral transmission (mixed with a dose of magic beliefs and superstitions) is also used.

The community governance aspect of the seabed territories, whereby communities decide, enforce and monitor the rules is particularly noteworthy, along with the fact that many territories have **historical continuity** that can be traced back to the Middle Ages. All marine products gathered locally must first be sold in the fish markets, but part is bought back, consumed and appreciated locally. Unauthorised shellfish collecting still occurs, but the more a community depends on the shellfish for their livelihoods, the less poaching there is in the territory they care for. In other words, reliance on the seashore territories seems to be an important factor compelling the communities to govern and manage them. While historically most shellfish collectors were women and this remains true today, the trend is towards more men becoming part of the shellfish harvesting groups and their governing bodies. The opposite trend is seen at *Cofradía* level, where women have started becoming more active. The local youth, on the other hand, are less

willing to engage in the shellfish collecting profession. Despite the economic and environmental benefits, the important role that organised shellfish collectors play in governing and managing the local seashore territories is poorly recognised by young people. Local news about shellfish collecting tends to emphasise the conflicts rather than benefits. Moreover, there remain mixed social perceptions about the *mariscadoras*— a term that refers to honest workers but can also be used in a derogatory sense.

The groups of shellfish gatherers play a major role in maintaining the **environmental productivity** and **social-cultural vibrancy** of the Galician coastline. They are well organised and active in preserving the ecological functions of their seashore territories of life. Importantly, they do much more than 'foraging', as they clean specific areas, actively breed and manage some species, restore and manage habitats, monitor ecological indicators and collect data to improve management, and carry out surveillance and alert operations (to identify use by free-riders or overuse— which is important to limit negative impacts). Some say that the *mariscadoras* of Galicia have "domesticated the beaches".[58] What is certain is that they are steadily overcoming the atavistic social discrimination directed against them. The *mariscadoras* have gained much in terms of self-esteem, socio-economic standing and personal wellbeing. They are genuinely engaged in **governing and caring for their inter-tidal territories**, something they understand and *like* to do together.

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56   As noted later in this work, the term 'territory of life' can only be adopted by the relevant custodian community. In this case it was confirmed by some Galician residents and supporters of the mariscadoras.
57   Registered users may find maps of inter-tidal territories from the new site https://www.sherpadomar.com/.
58   Pinto, 2012.

On a par with mobility, **social organisation** is crucial for foragers— including **rules** and **norms** about who can access and use resources, when, where, at what time, and under what circumstances. Coming together and working *in groups* brings enormous advantages in procuring food, water and shelter and in defending the frail and the young (newborn humans need many years before becoming independent) as they are in managing fire, processing and cooking food, and building and piloting rafts.[59] To accomplish this, however, they must communicate, share a purpose, act together for it and distribute the benefits of their actions.[60] In so doing, they develop patterns of behaviour and accumulate **knowledge** about their environment, such as signs of the presence of underground water, variations to be expected through the seasons, the likely consequences of fire, specific properties of plants, the behaviour of animals, weather patterns and so much else. Rock art and other exograms testify to foragers' desire and capacity to communicate symbolically for at least **100,000 years**.[61] Besides rock art, some attachment and 'caring' about natural creatures is deduced from the rich cosmologies, stories and complex relationships with totem creatures that have been transmitted through generations of foragers. The modern perception is that the social institutions of foragers invariably embed great **ingenuity, beauty and complexity**.[62]

The perception of foragers was not always so positive. Wondering about the common traits of past and contemporary foragers has been a favourite occupation of scholars for a couple of centuries. Some early urbanites had a self-serving negative perception, describing foragers as "nasty and brutish"[63] or "savage and primitive", intellectually incapable of developing the technology needed for a sedentary existence and acquiring material goods.[64] In the late 19th and 20th centuries, others became more appreciative, highlighting the "communitarianism"[65] and "affluence"[66] of foragers, described as shunning material possessions and territorial control and exhibiting egalitarianism, self-confidence and the enlightened capacity to solve disputes by movement rather than violence.[67] The tendency of today's scholars is not to seek a common core among all foragers, but rather to stress their **wide historical and regional variability**.[68] In particular, cultural ecologists note that foragers in food-scarce and food-abundant environments behave in remarkably distinct ways and develop diverse lifestyles and institutions.[69] In food-scarce environments, groups move frequently and individual possessions are limited to what can be carried, which favours being thrifty, egalitarian and peaceful, and spacing births[70]… possibly each group being just an extended family. If camels, horses or other means of transport are available and if the environment is food-abundant and seasonally dependable, foragers may form larger clans and establish settlements. With that, there is a tendency to trade products, accumulate wealth, compete with others for prestige, fight battles, acquire slaves and defend specific territories.[71]

59   Berger and Luckmann (1966) emphasise that Homo sapiens "…is always, and in the same measure, Homo socius". Necessarily collaborative tasks, such as fire management and food cooking, may be older than one million years (Gowlett & Wrangham, 2013) and the even more challenging collective building and piloting of bamboo rafts was necessary for Homo groups to spread across the Wallace Line about one million years ago (Bednarik, 2020). But collaboration within Homo groups is hardly surprising. Many animal species collaborate in sophisticated ways (Kropotkin, 1902; Harcourt and De Waal, 1992) and even plants and fungi have complex positive interactions in the soil's 'rhizobiome' (Bais *et al.*, 2004).

60   Simmons, 1989. Kimball (1982) argued that the brain evolution of Homo sapiens could have happened only in communities, where speech and language evolve, symbols and tools are created, and learning is nurtured through time. And Krantz (1980) stressed that the very capacity to articulate the past and anticipate the future might have triggered the development of the larger brain that characterises our species.

61   In Europe, the earliest dated impressive figurines (e.g. Löwenmensch) and rock art (e.g. Chauvet caves) are reported as being about 40,000 years old, but pendants much older than 100,000 years have recently been found in Morocco (Sehasseh *et al.*, 2021). Bednarik (2020) even describes much older exograms. Conflicting theories exist about the kind of communication that could have taken place among humans at that time (Mithen, 2005).

62   Rosemary Hill, personal communication, 2022.

63   Thomas Hobbes, quoted in Kelly, 2013.

64   Morgan (1977), quoted in Kelly, 2013.

65   Kropotkin, 1902.

66   Sahlins, 1968.

67   Ibid.

68   Cummings *et al.*, 2014.

69   Kelly, 2013.

70   When necessary, it is possible to avoid conflict by splitting and creating new groups.

71   Kelly, 2013. When resources are scarce and movement frequent, the covered territories become very large… their surveillance and defence become unthinkable. Even in environments of abundant local resources, however, the tendency to defend such resources and fight is by no means generalised (Rosemary Hill, personal communication, 2022).

Extended families and clans of foragers[72] tend to create networks of kinship and reciprocity throughout a region. The kin groups usually congregate for a short period each year, and those gatherings are important for information sharing, exchanges, agreements about using land and other gifts of nature, and marriage partnerships. Sharing behaviours (food sharing in particular)[73] is a frequent feature in foraging communities, bringing social prestige to the hunters of large animals.[74] Overall, specialised activities and mobility help foragers to acquire a **growing body of knowledge and skills**, for instance about where to find and how to gather, capture and use specific plants and animals, where to procure other necessities of life, such as water and shelter, and how to recognise and predict seasons and weather events. As the life of entire groups may depend on such knowledge and skills, foragers value them highly and pass them on to descendants in various forms of enculturation. The **elders** are **often held in high esteem** as bearers of knowledge and skills. And, along with these, the elders pass on attitudes, narratives, interpretations and values— the '**worldviews**' that come to characterise diverse cultures.

Is a foraging lifestyle purely *extractive* or do foragers also impact *positively*[75] on their natural environments? In other words, do foragers relate to nature in ways that go **beyond** parasitic relations and **immediate self-interest**? A key factor in maintaining natural environments viable for the livelihoods of foragers is mobility,[76] which allows the replenishing of possibly diminished plants and animal populations. Anthropologists note that, before moving on, some foragers leave seeds scattered on the ground in their camps, so as to replenish resources, while others regularly burn land to "attract game by promoting young growth" or "increase the size and abundance of tubers".[77] Paleoanthropologists have similarly noted that early mosaics of used land with enhanced productivity of desired species had the tendency to re-attract people, creating **self-reinforcing feedbacks**[78] between foragers and their substantially modified environments— a process referred to as **niche construction**.[79] Foragers have been observed to interact intentionally with their environments in many ways,[80] for instance sowing wild seeds, irrigating wild plants, burning dead growth or putting pieces of tuber back into excavated holes, so that they may regenerate. Fishers have been observed to regularly open their fish traps to ensure a future population of fish, hunters to selectively cull animals and observe hunting restrictions, and honey collectors to leave honey in wild bees' nests to keep them returning and safeguard future bee generations.

Behaviours that may intelligently foresee a possible return to the same location do *not* constitute *per se* a form of **conservation ethics**. At times, however, they are accompanied by worldviews that emphasise **reciprocity**,[81] which is going a large step further. For instance, traditional Cree hunters in Canada trust that animals have intelligence, that they are co-custodians of the land, that they may be killed but humans should respect them, consume the kill entirely and share it with others.[82] Animals are believed to "give themselves" voluntarily to

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72 The typical numbers found in anthropological literature are 18 to 30 people for a mobile group and 500–800 people for regional gatherings (ibid).

73 Kelly (ibid) notes that this is not because of innate generosity but because of patterns of expected reciprocation (as this is difficult to ascertain, it may also relate to projections by the observer anthropologist).

74 For many reasons, women who breastfeed and carry children can hardly hunt large game, leaving that role to men and keeping for themselves (and children) activities like gathering plants, shellfish and insects, or capturing small game and fish. This unavoidable fact may be at the origin of some gendered behaviours and social hierarchies.

75 It is difficult to define 'positive' as it is hardly possible to say that one ecosystem is 'better' than another. We may approach positive by 'non-destructive' and 'better' by 'more resilient' or 'capable of sustaining a larger or richer biodiversity community'. The same questions should be asked for all livelihoods modalities— pastoralism, agriculture and, crucially, industrial development.

76 Patterns of mobility usually relate to the characteristics of the environment and may be exceedingly complex, e.g. movement involving individuals alone or in groups, being regular (daily, seasonally, annually, at a multiple annual scale) or irregular, covering long or short distances, engaging specific genders, ages, capacities, attitudes, etc.

77 Quotes from Kelly (2013) and references therein.

78 Bliege Bird *et al.*, 2020.

79 E.g. via widespread changes to species abundance, composition, community structure, richness and genetic diversity (Boivin *et al.*, 2016).

80 The following examples and references are from Kelly, 2013.

81 Berkes, 2012.

82 Feit, 1973.

those hunters who kill in moderation (it is a major transgression to kill too many animals, and this will be followed by bad luck).[83] This is true not only for large animals but also for birds, like geese. The Moose Cree believe that geese "act with humans in mind when they sacrifice themselves to the hunter".[84] They thus maintain an ethic of avoiding waste (take only the birds you will eat, eat as much of the animal as possible, share with others) but also of respect (do not hunt geese when they are feeding or sleeping, minimise disturbance, never be cruel).[85]

Other interesting practices of the Cree are rotation patterns in hunting areas, leaving territories to rest over 5–10 years, and patterns of elders' control over family hunting and trapping areas (e.g. for beavers during times of heavy commercial pressure).[86] Such beliefs are not at all common to all foraging cultures and situations, and overhunting is also observed among foragers, including in territories not far from those of the Cree. Yet, some anthropologists propose that, as foragers obtain food and other resources 'directly from the wild', they may share a common worldview that sees the **environment as a providing and caring parent**.[87] This is said to favour the spiritual attitudes found in **animism** and **shamanism**, which attribute a vital force to animate and inanimate elements in the environment.[88] While we resist primitivism and generalisations,[89] vitality surely comes to mind if we seek to describe human foragers, who successfully procured for themselves all they needed for survival and reproduction in the most diverse and often dangerous environments over hundreds of thousands of years.

As far back as 11,500 BCE and more commonly after 10,000 BCE, the process of domesticating plants and animals appears to have taken place separately and independently in different parts of the world.[90] This concurrence of domestication in diverse and distant environments is remarkable and scholars see as a plausible explanation the warmer and more stable climate enjoyed by our planet since the Holocene.[91] Subsequently, it is believed that the proportion of people who relied *solely* upon foraging for their livelihoods began to diminish. This change took place at an extremely slow pace. In fact, side by side and in combination with agriculture and pastoralism, it is estimated that foraging remained the *major* lifestyle of many world cultures well into the second millennium CE.[92] Today, peoples throughout the world continue to enjoy foods of both wild and domestic origin, adapting to environmental, seasonal and climatic variability and to the possibility of exchanges.[93] Some Indigenous peoples specifically resent colonial invasions, among other reasons, for having forced upon them the lifestyle and dietary changes that deprived them not only of land and freedom, but also of tastier food and better nutritional health.[94]

Few contemporary communities subsist *exclusively* on a foraging lifestyle,[95] although gathering, hunting and fishing remain extremely important for human livelihoods and wellbeing throughout the world (see

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83   Ibid.
84   Kuefler, 2010.
85   Ibid.
86   Berkes, 2012.
87   Bird-David, 1990.
88   See Peoples *et al.*, 2016. Animistic thinking is assumed to have been present among early hominins, certainly earlier than language.
89   Also stressed by Kelly (2013), forager communities show tremendous variability: some are egalitarian and others hierarchical, some reject material accumulation and others maximise their wealth, some are peace-seeking and others are competitive and combative, some are non-territorial and others show strong territorial behaviours.
90   Price & Bar-Yosef, 2011.
91   Gupta, 2004.
92   Simmons (1989, p. 47) reports that in the 15th century large portions of the world were still dominated by a food-collecting rather than food-production economy. See also Cummings *et al.*, 2014.
93   Cummings (2014) notes that the idea of people evolving from hunter-gatherer to farmer is inherently flawed.
94   Berkes & Farkas, 1978.
95   We should not assume that contemporary foragers are in continuity with their ancestors and exhibit their behaviour… let alone that they exhibit the behaviour of all our forager ancestors.

case example 1 describing the *mariscadoras* of Galicia, in Spain). For instance, the Inuit of Nunavut— a huge self-governed territory proclaimed in 1999 in the Canadian Arctic— have remained strongly attached to their traditional hunting and fishing practices. The Hadza of northern Tanzania are possibly the last exclusively forager people in Africa, hunting their food with hand-made bows and arrows, gathering edible plants like tubers, berries and baobab fruits, and harvesting honey. In general, the livelihoods of many Indigenous peoples in the Amazon region combine hunting, fishing, gathering, swidden agriculture and raising of domestic animals. While all these livelihoods are satisfying and appreciated, the hunting and fishing catches have tended to diminish[96] as the **territories** of the foragers have been **squeezed** by external forces and the modern **needs for cash** and **access to markets** have promoted trading of the products of hunting and fishing expeditions, and new lifestyles, including cultivating crops and seeking salaried work. As the foraging options of the communities have diminished, the original patterns of land use have changed at least in part and, with that, the accompanying cultures have changed.

Mobile pastoralism

Mobile pastoralists— present for several millennia in Africa, Europe, Asia and the Americas—[97] draw their livelihoods from domestic animals and engage habitually in **moving with their herds to** find **pasture, water and salt**, spanning varying altitudes and significantly different climates. Typically, they move with their herds at the change of season in patterns of *transhumance* between various wintering grounds in the lowlands and various summering grounds in the uplands. In environments of relatively constant altitude, they move their herds in more continual and less predictable patterns of *nomadism* (or *semi-nomadism*) usually depending on rainfall. All mobile pastoralists respond to ecological variations by adapting the time, direction, length and altitude of their migratory patterns but they also vary the number of people who migrate and the combination of animals they migrate with, each time.[98]

In 'non-equilibrium' ecological landscapes,[99] cycles of herd loss and recovery tend to occur following the vagaries of climate. When climate favours abundant grazing and water, both people and herds become numerous. In periods of drought, mobility increases, more animals die or are eaten, and women give birth to fewer babies. Through time, the understanding of weather cycles (seasonal, annual, inter-annual and at the scale of decades) and the expectation of catastrophic loss have prompted mobile pastoralists to assign great cultural value to the size of their herds.[100] It has also supported **elaborate social exchange** and **alliance networks**, with **reciprocities** related to lineage or clan systems and classes of age that secure access to grazing land in wide landscapes and the recovery of herds after droughts, livestock epidemics or raids.

Pastoralists seem to have always cared deeply about their animals, as inferred from the pastoral scenes and animal figurines retrieved among the most ancient human artefacts. Important burials of cattle are found

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96   See, for instance, Hoover *et al.*, 2016.
97   Numerous sources discuss that mobile pastoralism must have existed for at least 10,000 years in Africa (Marshall & Hildebrand, 2002; Little, 2016); 8,000 years in Europe (McClure, 2015); 5,000 years in Asia (Frachetti, 2012); and up to 7,000 years in the Andes (Dransart, 2018).
98   Farvar, 2003.
99   See Sullivan & Homewood, 2003. While modern ecologists have no trouble in seeing that all ecosystems are far from equilibrium conditions, the concepts of 'ecological equilibrium', 'climax community' and 'carrying capacity' are still widely applied (Rapacciuolo *et al.*, 2019). An evident overdue paradigm change seems blocked by vested interests in academia, institutions (including the UN Convention to Combat Desertification) and policy. While the equilibrium perspective promotes control-oriented, technocratic responses to ecological problems (e.g. 'green belts', forest planting no matter where and for whom), the non-equilibrium perspective embraces variability and flexibility and is clearly more attuned to traditional practices such as mobile pastoralism (Scoones, 2022), foraging and shifting cultivation.
100   McCabe, 1990.

even to predate burials of people.[101] Mobility over large areas makes local fortifications useless and territorial defence impossible, which renders social agreements and social norms all the more precious, even providing a lifeline in times of catastrophic herd loss. **Periodic gatherings** and **collective ritual practices** are fundamental, as they bring dispersed peoples together and offer occasions to strengthen social cohesion. These gatherings are generally anchored to specific places, which may be naturally impressive, useful (e.g. salt licks) or characterised by built monuments and landscape modifications, including cattle and human burial sites.

The governing institutions of mobile pastoralists provide for the social agreements and norms that secure the gatherings and the reciprocity practices that go with them. In fact, these institutions exemplify some of the richest and most complex cultures developed by humans, as shown by the Gadaa system of the Oromo of Ethiopia (case example 6). While their cultural variety is magnificent and resists any simplification, the governing institutions of mobile pastoralists are nevertheless suggestive of similarities in their broadly shared cultural traits, such as respect for the accumulated **experience of the elders**, high value accorded to community affiliation and ties,[102] and even— as suggested by excavations of burial grounds of early mobile pastoralists— the **importance of communities versus single individuals, including leaders**.[103]

In recent millennia, as human population has increased and sedentarised agriculture and settlements have come to control climatically favourable and productive environments, mobile pastoralists have been pushed towards areas that are ecologically marginal and have become adept at **strategic adaptation in dryland and semi-dryland environments**. Another of their cultural characteristics that becomes increasingly relevant is the valuing of **biological monitoring** regarding pastoral practices. As recently recounted,[104] the elders of West Asian transhumant tribes despatch scouts early in the spring season to assess the migration territories according to specific ecological indicators. Following the reports of the scouts, they estimate the number of animals allowed to migrate and the number of women who should go with them to process dairy products (one woman is expected to herd about 35 lactating animals). Every woman, in turn, needs to migrate with one tent-hold, whose children are assigned to herd lambs and kids, while adult men guide dry animals (males and dry females) further afield. The people who cannot migrate productively stay behind and take responsibility for other chores, such as cultivating wheat and barley for human and livestock use. If, in the next season, the pasture improves, more tent-holds may gather a herd of livestock and join the migration. If this does not prove possible over many seasons, some members of the tribe may move permanently 'out of the system' and settle in towns and villages near and far.

These patterns of **ongoing alertness** and **flexible adaptation** to the land and the seasons remain common to mobile pastoralists in Iran[105] as elsewhere. For instance, some Oromo pastoralists who recently received support to cope with climate change and could freely choose how to invest resources, decided to buy cheap motorbikes to investigate early in the season where the herds should migrate and find grazing.[106] The governance institutions of mobile pastoralists also have a major concern about **preventing overgrazing**, as many set strict rules to permit migration, regulate grazing patterns, and invent ingenious techniques to restore pastures.[107] Throughout West

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101   These are found in the Sahel, largely predating human burials, sometimes accompanied by megalithic standing stones. At times stone beads and other artefacts have also been buried, suggesting that such cemeteries played a role in early pastoralist life (di Lernia *et al.*, 2013).
102   Recent discoveries of communal burial practices of ancient pastoralists may corroborate this (Sawchuk *et al.*, 2018).
103   Elizabeth Sawchuk, quoted in Rapp Learn, 2018.
104   When not otherwise referenced, the accounts of pastoral lifestyles in West Asia mentioned in this work are from unpublished manuscripts and presentations by M. Taghi Farvar from 1998 to 2018.
105   Ali Razmkhah, personal communication, 2023.
106   Ced Hesse, communication at a Pastoral Dialogue webinar organised by Kalpavriksh on 30 January 2021. Interestingly the great Sahelian ecologist Théodore Monod proposed to survey land by plane, followed by announcements by radio about where pasture is available.
107   Taghi M. Farvar reported that tribal women in Iran collect desirable wild seeds in animal skins, which they pierce and hang around the neck of the lead goats of the flocks. The seeds are thus spread onto the rangelands, get trodden into the soil by the animals and fertilised by their droppings. With the first rains the range species are renewed and enriched.

Asia and the Sudano-Sahelian region, they may also use an ancient practice that temporarily excludes animals from accessing certain rangelands, forests and wetlands. These early examples of **consciously conserved areas** (known across different countries as *hema*, *masad*, *mahmiyya*, *mahjar* and *qoroq)* have an associated set of customary laws regarding community benefits, responsibilities and sanctions,[108] along with patterns of good communication and negotiation, and strong solidarity among groups and tribes.

Besides these area-based conservation practices, mobile pastoralists are seen as 'ecologically friendly' in general terms. For instance, a few Iranian tribes scatter some dry feed on the snow during harsh winters, so that gazelles and wild goats and sheep may eat and survive.[109] Joint migration of wild and domesticated species is known to have been common, possibly also because the domestic animals spread the seeds of palatable species for grazers, creating habitats favourable for wildlife. In India, mobile pastoralists used to be called upon as the ideal first users and shapers of dry landscapes, as they created biodiverse environments favouring the recharging of aquifers.[110] Moreover, some Asian traditional pastoralists are said to rarely hunt[111] and, when they do, their practices are highly regulated by their societies.[112]

The last couple of centuries have seen a combination of practical and conceptual attacks on mobile pastoral cultures and lifestyles. **Privatisation of common land** has combined with the **imposition of sedentarisation** schemes, the blocking of migration corridors,[113] the promotion of large-scale agriculture, the appropriation of scarce water resources for industrial agriculture and livestock farming, taxation policies that favour imports of meat and milk products, education programmes that malign mobile lifestyles, and top-down conservation initiatives.[114] Overall, this has created an overwhelmingly negative climate for pastoral mobility. State governments fear their inability to exercise surveillance, control and taxation of mobile peoples, and national 'development' and modernisation policies have shown poor understanding and vision regarding agropastoral systems, marginalising mobile pastoral communities. In Africa, the phenomenon goes back to colonial times[115] while in Asia it is related to a variety of regimes— endogenous or imposed— prompted by the apparent lack of modernity of mobile lifestyles (see the telling graphic in Figure 1).

The flexibility inherent in mobile lifestyles enables mobile pastoralists to interact and establish alliances with sedentary societies along their routes of mobility, and for groups to move in[116] and out of pastoralism as conditions require.[117] It is conceivable, however, that cultural and communication gaps may have separated the mobile and sedentary components of some societies (the top bureaucrats in particular), as the logic of mobility

108   Farvar, 2003.
109   M. Taghi Farvar, personal communication, 2003.
110   Purendu Kavoori, communication at a Pastoral Dialogue webinar organised by Kalpavriksh on 19 December 2020.
111   M. Taghi Farvar stated this as true for Iran in recent decades, while Ali Razmkhah (personal communication, 2023) notes that hunting was practised by tribal leaders during the Qajar era (1789–1925). In Sudan, pastoralists consider non-pastoral subsistence activities, such as agriculture, hunting and gathering, as signs of poverty and helplessness, as they seemingly reveal not having enough wealth (animals) to meet the clan needs by a pastoral diet alone (El Mahi, 2001).
112   For instance, the Chahdegal Balouch peoples of Iran have developed regulations for the hunting of wild boar, wild goat, rams and rabbits. Only a limited number of people, most belonging to the highest social caste, are permitted to hunt in common hunting grounds; the meat must be distributed among all members of the sub-tribe and outsiders are completely prohibited from hunting (Shahiki *et al.*, 2021).
113   Many State borders traced in colonial times cut across migration routes. Even within single States, routes have been blocked by development initiatives and infrastructure, like fenced highways and railroads in Mongolia, or for military purposes, as in the Negev, where Israel has forbidden the traditional migration of Bedouin tribes.
114   An excellent region-by-region summary is offered by Scoones (2022).
115   Blench, 2001.
116   An interesting example of 'moving into pastoralism' is offered by Mongolia in the 1990s, when many reverted to herding because of the turmoil of USSR-related economies.
117   Mobile pastoral societies can accumulate considerable wealth, and even mobilise armies. The history of West Asia has seen several confederacies of pastoralists control large territories under the chief of a dominant tribe, forming a dynasty that may resist for centuries, possibly until urbanisation and corruption debilitate it. At that point, the lines of affiliation and unity typically change, and another coalition of tribes takes over the governance of the territory and forms a new dynasty. Noticeably, the same governance institutions that regulated grazing decisions, customs and rules at the level of nomadic camp, clan, sub-tribe, tribe and tribal confederacy were those able to mobilise for defence or conquest. Each pastoral level was able to quickly identify a few warriors and provide them with horses, arms, shields and supplies. At the end of the conflict, the entire army could equally quickly dissolve back into the pastoral nomadic lifestyle.

Territories of life

often seems foreign, unattractive or even incomprehensible to many modern settled communities. Along the routes of regular transhumance, one can also find strong social relations and long-standing **exchange arrangements with farmers**, as pastoralists make use of crop residues and provide fertilising manure, milk products and other trade goods. These relationships are **under strain** in contemporary societies, as national bureaucracies have favoured modernised large-scale agriculture, marginalising other rural lifestyles. They have also enforced a variety of administrative and land-use initiatives— from national borders to large infrastructures— that are poorly compatible with pastoralism.

Historic events in Iran affecting nomadism and rangelands (not to scale)
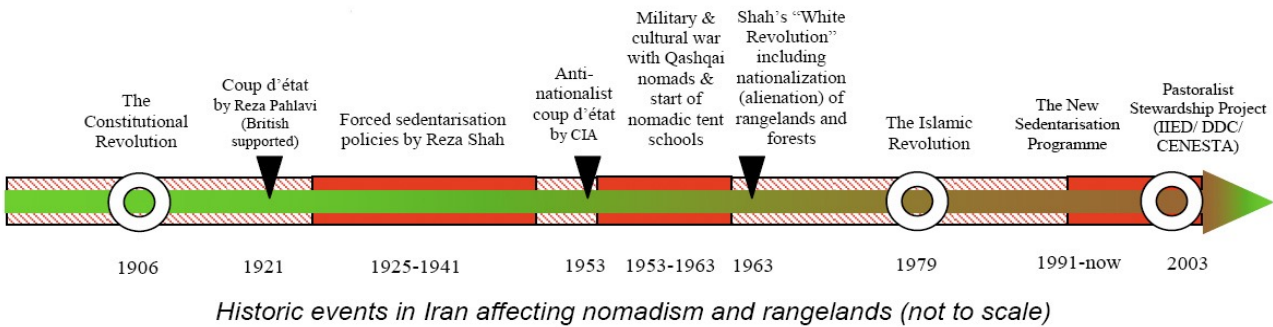
Figure 1. A timeline of events (not to scale) affecting transhumance and rangeland territories of life in Iran in the 20th century (from a PowerPoint presentation offered by M. T. Farvar in 1998)

Profound **changes** are also **caused by** the **monetisation** of pastoral practices. The trucking of animals between pastures, the availability of supplementary feeding and the hiring of temporary guardians for the herds are becoming increasingly common, at times with governmental support and subsidies. This is changing the basic rules of mobile pastoralism, and particularly so when traditional communities guarding their own animals are replaced by absentee livestock owners motivated by market demands only. The absentee owners need to hire herders, and these may possess limited knowledge of local grazing territories and little concern for their long-term integrity.[118] In some cases, the loss of knowledge and capacities and the accompanying ecological change are so severe that the full demise of pastoral livelihoods patterns seems inexorable.

Interestingly, a sizeable contemporary movement has emerged to support mobile pastoralism, based on an enhanced appreciation of both non-equilibrium ecology and the many benefits of this authentic, 'free' and knowledge-rich lifestyle.[119] In particular, mobile pastoralism is uniquely suited to respond to climate change,[120] and bound to become increasingly appreciated in the decades ahead.[121] At the time of writing, however, it remains poorly recognised by modern societies, the agricultural mainstream remaining firmly occupied by industrial agriculture and sedentary livestock rearing practices.[122] Individual cases of re-empowerment of pastoral communities, such as the Sarıkeçili Yörüks of Türkiye and the Abolhassani Tribal Confederacy of Iran described in case examples 2 and 18, remain as elusive as they are inspiring.

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118   An in-depth analysis of the initial phases of these processes in the Sahel— which have deepened since then— is offered by Franke and Chasin (1980).
119   Here is a related 'knowledge hub': https://www.fao.org/pastoralist-knowledge-hub/what-we-do/en/ accessed 2024. The Centre for Patroralism www.pastoralism.org.in accessed 2024 is also a remarkable source for information and organising, in India and globally.
120   Scoones, 2022.
121   A positive indication is provided by the many preparatory activities towards the celebration of the first International Year of Rangeland and Pastoralism in 2026 (https://iyrp.info/ accessed 2024).
122   Weis, 2013.

Case example 2.

The Sarıkeçili Yörüks: a millennia-old tradition of transhumant pastoralists facing modernity in Türkiye[123]

For thousands of years, mobile pastoralists (nomadic, semi-nomadic and transhumant) have contributed to **shaping the landscapes and wild and domestic biodiversity** of Türkiye. Today, their practices— albeit severely diminished by national policies— still nourish the country's cultural diversity and heritage. Some tribes that still practise mobile pastoralism include the Yörük ("those who walk") and Koçer, who migrate seasonally with their herds from the Mediterranean shores to the Taurus Mountains and large steppes of Central Anatolia. The Yörük and Koçer pride themselves on keeping alive the wisdom of pastoral life, based on an in-depth knowledge of the landscape through which they move, and on experience accumulated over millennia.

The pastoralist community of Sarıkeçili Yörüks includes more than 150 families. Migrating hundreds of kilometres on foot with their goats between their wintering grounds (*kışlak*) at the shores of the Mediterranean Sea and their summering grounds (*yaylak*) in the Taurus Mountains and beyond, they maintain the biodiversity dependent on grazing, contribute to local economies, and produce high-quality, healthy food. In the summer, when the Mediterranean coast is humid and hot, they move to higher areas, where the animals find good grazing and the people produce butter and cheese. The very term *yayla* is synonymous with 'fertility and prosperity' and the starting of transhumance is a time of festivity. If a member of the tribe dies on route, the body is taken to the summering ground to find eternal peace.[124]

The movement of the tribe is planned precisely, after discussion of timing, the election of a leader for the journey, preparation of food and tents, and assignment of duties. Every evening the tribe stops for the night in a predetermined place, and the journey usually lasts a few days. Water is found in cisterns and wells along the way and stored in leather containers. In the South-Western Taurus region, rain is abundant enough to allow forests to grow, and it is there that the Sarıkeçili Yörüks have their autumn grounds (*güzlek*), in a land full of olive, pine, oak, beech, juniper and cedar trees and the short brush suited as food for goats.[125] The traditional living quarters of the Sarıkeçili Yörüks are black tents— an ancient and sophisticated construction made up of wooden poles and woven goat hair.[126] The goat hair is resistant to rainwater and expands to block the cold when wet, but becomes porous when the atmosphere is dry, letting through both air and light. Several woven elements of different size and thickness are sewn together for a tent. The entire tent is relatively light, portable (usually by camels) and easily set up, providing comfortable closed and semi-closed spaces made of organic and recycled materials. Inside the tent, colours abound in an array of woven rugs, saddlebags, sacks and bags. Along the coast, in winter, the Sarıkeçili Yörüks also practise agriculture and reside in permanent houses.

The **transhumance territory** of the Sarıkeçili Yörüks is one of the most important areas of plant diversity in Türkiye,[127] including a variety of habitats boasting endemic species (maquis and shrublands, coastal and inner wetlands, Mediterranean forests, alpine ecosystems, riverine and steppe ecosystems, etc.). The Sarıkeçili Yörüks have played a critical role in the evolution and maintenance of such grazing-dependent habitats, and their migration routes have maintained ecological corridors— avoiding their fragmentation and ensuring

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123   Case example compiled by Grazia Borrini-Feyerabend based on Kavas and Bakır (2015); Thevenin (2015); and a presentation by Engin Yılmaz in the workshop Territories of life in Armenia and beyond (Yerevan, 16–21 June 2019). The pictures of a child in front of a black tent and of a moment in the transhumance of the Sarıkeçili Yörüks are both courtesy of Yolda Initiative.

124   Kavas & Bakır, 2015.

125   Wild goats prosper there, while Inland Anatolia is more suitable for sheep.

126   Genç & Koyuncu, 2011.

127   Noroozi *et al.*, 2019.

ecological connectivity between them. Ecologists who have studied the consequences of seasonal transhumance in the landscape stress that it helps to disperse plant seeds, contributes to soil nutrient cycling, prevents water pollution and destructive wildfires, generates spatial heterogeneity, increases plant species diversity and, overall, increases the resilience of ecosystems.[128] While the transhumant pastoralists themselves rarely use these words, their culture and practices are based on the understanding that their survival, and that of future generations, depends on nature. They thus have a deep **sense of responsibility and connectedness** to the landscapes they manage. Their evolving knowledge, practices and institutions focus on keeping a lasting interaction with their environment. Several agreements, forms of reciprocity and conflict management mechanisms have existed for centuries among diverse tribes

to respect traditional rights to access and use of land, water and pasture. Little of this, however, is formally recognised and respected by governmental institutions.

From the end of the 17th century and intensifying in the 19th and 20th centuries, mobile pastoralists have suffered many forms of **dispossession** of their customary rights to pasture, water and other gifts of nature. The administration of the late Ottoman Empire disliked the fact that mobile people cannot be easily controlled and imposed upon them a requirement to permanently settle. This continued during the modern Turkish Republic through State expropriation and privatisation of land, prohibition of grazing in certain forests and rangelands, and prohibition of migrating along traditional routes. After the 1950s, further complications were added by large-scale agricultural expansion, the development

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128   Engin Yılmaz, presentation at the workshop Territories of life in Armenia and beyond (Yerevan, 16–21 June 2019).

of motorways and new legal regulations for forest use. Fewer and fewer black tents could be counted in the summer pastures. Instead, more and more permanent constructions sprung up, usually made of poor cement as they are inhabited only a few weeks per year as holiday homes. Today, these constructions permanently damage and disfigure many *yaylak* environments.

In the space of just 80 years, the conversion of rangelands to other land uses, in particular agriculture, has reduced the total area of rangelands in Türkiye by about 70% (from 44.5 million ha in 1930 to 14.6 million ha in 2010).[129] Often lacking access to institutionalised power, mobile pastoralists have found themselves politically and economically marginalised, even **criminalised**, just because they maintain **their will to move**. Denial of access to their land has even been made in the name of 'conserving nature'. The continuing hardships have compelled many traditional pastoralists to abandon their mobile lifestyle and settle into new areas and livelihoods. With these shifts, they have inevitably lost many of the skills and institutions that allowed them to engage closely with the environment, be flexible and dynamic users of the land and adapt to natural difficulties. Among the few who have conserved their mobility, the Sarıkeçili Yörüks are possibly those most strongly attached to their **identity** *as a community* and the traditional institutions that go with that. For instance,

the Sarıkeçili Yörüks Association has been active in defending the traditional rights to use public rangelands and forests for transhumant grazing, and this not only for their tribe, but for *all* mobile pastoralists in Türkiye.

As improbable as it would have seemed until recently, a resurgence of interest and appreciation for transhumant pastoralism is currently taking place in all countries around the Mediterranean shores.[130] As part of that, the Yörük people of Türkiye are being re-appreciated as direct descendants of the earliest inhabitants of the region. Local museums and interpretation centres are being created and pastoralist associations are working together to organise *yayla* festivals and fairs. Türkiye seemingly even applied to include the transhumance of the Sarıkeçili Yörük in the UNESCO Representative List of Intangible Cultural Heritage.[131] Even a feature film is being prepared on them.[132] It is difficult, however, to find the right balance between romanticising pastoralism (e.g. for national identity and pride, tourism attraction, political advantages) and maintaining or restoring the conditions that safeguard its genuine continuity. Only **securing the collective governance of their entire territories**— wintering and summering grounds and migration corridors— may offer the conditions for the Sarıkeçili, and other mobile pastoralists, to consolidate their custodian roles in years and decades to come.

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129   *Koc et al.*, 2016.
130   As earlier noted, this is even expected to grow globally in the International Year of Rangelands and Pastoralists.
131   At the time of writing, this application was still to be reviewed.
132   Some preview shots are available here: https://www.youtube.com/watch?v=Vkn5_RLYLUQ accessed 2024. In 2020, the shooting of the film was interrupted because of the COVID pandemic, but more filming can be found on YouTube dated 2021 and 2022.

Shifting cultivation

Another **mobile** lifestyle that has been longstanding for millennia is shifting (or swidden) cultivation.[133] One of the first forms of **agriculture** practised by humans, shifting cultivation, remains alive and even well in places today in the **warm and humid forested tropics**. Shifting cultivation refers to the intermittent clearing of forest for staple crop production, followed by a period of forest fallow, meant to restore the productivity of the land.[134] The land to be cultivated is first slashed and then, if conditions are suitable, burned before being seeded,[135] to improve soil fertility and eliminate weeds, pests and other pathogens. After clearing, and during forest regeneration, sunlight and natural successions contribute to habitat diversity and species richness.[136] Farmers take advantage of that by hunting rodents, game birds and herbivorous animals, good sources of animal proteins that supplement fishing in wetlands. The variety of crops grown in the fields can be impressive, including food staples, like cassava, rice or millet, intercropped with vegetables and other useful crops. 'Sacred crops' are also relatively common.[137] The period of cultivation is traditionally much shorter than the fallow period,[138] closing a **cycle of agricultural production and land regeneration** that allows human communities to reuse the same land for generations. Recent analyses stress that long fallows not only add **new fertile soil** to land[139] but produce a **net carbon sequestration** from the atmosphere.[140]

As mobile pastoralism is uniquely suited to drylands, shifting cultivation is uniquely suited to the humid tropical ecosystems where it has developed and continues to this day.[141] Importantly, it takes on distinct features depending on factors as diverse as topography, biotic and climatic conditions of the land, availability of water, labour, tools, technical implements and seeds, possession of livestock, relations with the larger society, etc.[142]

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133   Conklin, 1961.
134   Conklin, 1957; Cramb *et al.*, 2009.
135   In some cases, slashed vegetation is mulched rather than burned (Conklin, 1961)
136   Including species that could not inhabit closed forests (Margalef, 1968).
137   Conklin, 1961. Comparable systems were also used in temperate zones, as part of various forms of agroforestry.
138   Cultivation may be one year only, while fallow may be 15–20 years or more.
139   Rosset, 2021. Others dispute that for non-volcanic soils in tropical areas.
140   ...rather than the net emission that many see as inevitable because of the burned vegetation (Trakansuphakon, 2021).
141   The practice has also been present for a long time in humid forest areas of central and northern Europe (e.g. Sweden, Finland, Germany).
142   Conklin, 1961.

Case example 3.

More than 2,000 years of shifting cultivation by the Karen in the Salween River basin of Burma/Myanmar[143]

In local history, the arrival of Karen communities in current South-East Burma/Myanmar, in the basin of the Salween River,[144] is the point at which the Karen calendar begins, 740 BCE. From ancient history through the period of British colonial domination and up to the middle of the 20th century, the Karen people's traditional livelihood and relations with the territory did not change significantly. Karen livelihood is intimately tied to nature and based on upland *ku* shifting cultivation practices combined with fishing and lowland cultivation of orchards, agroforestry, hunting of small animals, and gathering of non-timber forest products. *Ku* is also the name that the Karen use for their **upland rotational farming plots**— selected and allotted to households based on customary practice and cultivated for a limited time before they are let to regrow naturally (typically between 7 and 10 years). Food and other products are bartered or traded for cash, both internally and externally.

Both upland *ku* cultivation and lowland agriculture are heavily dependent on local knowledge and know-how, and the Karen's use of land, flora and fauna is guided by local taboos and seasonality. As known to scholars and demonstrated in the Karen territory, shifting cultivation can coexist with **exceptional biodiversity**— including rare and endangered species such as tigers, gibbons, pangolins, leopards, elephants and great hornbills. Various communities have their own fish and wildlife 'conservation zones', community forests and herbal medicinal forests, all managed by following traditional practices.[145] In recent years, environmental awareness and explicit wildlife-friendly practices have been actively promoted by the Karen as part of their own Salween

Peace Park, a protected area they themselves have conceived, developed and agreed upon and are today collectively governing... compatibly with the national military regime.

In Karen language, another important term is *kaw*, which literally can be translated as 'land' but has many layers of meaning. A *kaw* is the ancestral home of a specific Karen community, comprising its land, forest, river, flora, fauna and people. Some *kaw* are small, with only one village located within it, others are large and host more than ten villages. The *kaw* embodies the way the community governs and manages the local environment but also the culture it has developed and the social and physical health of the community, which is known to be deeply connected to the health of the land, the waters and the forest. A *kaw* is a **self-perpetuating territory**, the **biocultural unit of life** where each community practises shifting cultivation and develops rules for fishing, hunting and the use of forest resources. In the sense just described, the local Salween River basin has been the larger *kaw* or 'territory of life'[146] of its Indigenous Karen custodians for many centuries.

In recent years, approximately 60,000 Karen residents within the Salween basin undertook a laborious multi-year process of successive consultations, developed their own agreed rules, and formally decided that their territory should fulfil their own three core aspirations: 1. Peace and self-determination; 2. Environmental integrity; and 3. Cultural survival. They initially held a referendum on a Charter on the desired future of their land and more than 75% of the local population older than 16 voted in favour of the Charter. Following the Charter, in

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143   147 Case example compiled by Grazia Borrini-Feyerabend based on information provided by Paul Sein Twa, Caspar Palmano and Julia Fogerite in 2018. The picture of upland farming by Karen people in the Salween Peace Park of Burma/Myanmar is courtesy of Ee Tu Hta/KESAN. We use Burma/Myanmar here as there is no consensus on the name of the country, which was changed by a military junta, still in power at the time of writing. The Karen people also inhabit Thailand.

144   The longest undammed river in mainland South-East Asia, supporting the livelihoods of about 10 million people.

145   Rich accounts of these processes are available in Burmese and English translation (e.g. in Karen Indigenous Peoples of Kamoethway, undated.)

146   The term is used by Karen authorities.

December 2018, they formally established the 'Salween Peace Park' (*Kholo Tamutaku Karer*)— a territory covering 548,500 ha formally dedicated to generating peace and protecting a stronghold of biodiversity and Karen culture (including customary land governance and management systems) from old and new threats. The park has a governance institution comprising delegated representatives from all the 348 villages it includes. Shifting cultivation in specific sections of the park is conceived as an integral part of its management plan. Overall, the Salween Peace Park is clearly a **'conserved area'**— and indeed one of the most **remarkable and inspiring** ones in Southeast Asia.[147] Thanks in no small measure to the presence and active defence of the Karen people, the **Salween River** is the **only major Asian river still free-flowing**, uninterrupted by dams.

The Karen people have been suffering for decades at the hands of the Myanmar Armed Forces (Tatmadaw), which engaged them in a civil war that began shortly after independence from British rule, in 1948. A sustained campaign against the Karen was carried out in the 1990s, targeting civilians under an extremely brutal 'four cuts' strategy that started as early as the 1960s.[148] At its height, the campaign displaced around 80% of the 107,000 people living in Mutraw District. The Karen National Union and Tatmadaw signed a bilateral ceasefire in 2012. A National Ceasefire Agreement with diverse Indigenous nationalities was further signed in 2015, but sporadic military action continued to victimise the Karen even after the signing. The civil war has caused the displacement of some communities and the loss of both people and *kaw*, but the Karen have in large part succeeded in resisting destructive 'development' initiatives (mega hydropower, roads, mining, logging) and the poaching and trafficking of wildlife initiated, or allowed by, the government and its allied companies inside and outside the country. After the Tatmadaw took power in a military coup in February 2021, the Karen territory and Salween Peace Park have been repeatedly attacked and bombed from the air, in a reprise of the 'four cuts' military strategy. At the time of writing, this is continuing.

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147   After the coup d'état of 1 February 2021 carried out by the Myanmar Army (Tatmadaw), the confrontation between the Tatmadaw and the Karen people has escalated again as part of the national rebellion against the coup. Villages in the Salween Peace Park have been bombed, the population has been terrorised, and many found refuge in the forest or escaped as refugees to Thailand. Since then, some wounded people are allowed to remain in the relative safety of Thailand, but the majority have been sent back to their destroyed villages. Reports and videos are available from KESAN and international media (e.g. https://www.youtube.com/watch?v=6C6AAGC_Lv4, accessed 2024).

148   https://www.ohchr.org/en/press-releases/2023/03/militarys-four-cuts-doctrine-drives-perpetual-human-rights-crisis-myanmar accessed 2024.

Moreover, shifting cultivation is usually practised only in suitable parts of a landscape,[149] depending on the presence of specific 'tree/soil indicators' and fallow-land typologies,[150] while other parts are destined for other uses, revealing an applied **knowledge of micro-environments** passed on through generations of land-use planning. In general, shifting cultivators relate at the same time with **several sites in diverse stages of re-growth**. So, they may be slashing one area, seeding another, fishing and hunting in yet another, and surveying the regeneration of weeds to identify the areas suited for the next burning. They harvest crops but also hunt, fish and collect wild plants and roots for both subsistence and the market, and invest labour variably in response to what is most productive at different times.[151] In all, shifting cultivation is part of **complex, diverse, knowledge-rich** and **adaptive livelihood** strategies,[152] particularly suited for the territories of life of peoples in the humid tropics, like the Karen of Burma/Myanmar described in case example 3.

Today's shifting cultivators are typically Indigenous peoples and ethnic minorities who conserve languages, religions, values and crops specific to them, quite diverse from those of mainstream populations in the same country. Because of this, and because they often have **few material possessions**, they are viewed by some as **'primitive'**.[153] Related to this, shifting cultivation shares with mobile pastoralism the fact of being the target of blame for environmental problems— mostly deforestation for the former and land degradation for the latter. Yet, tropical landscapes are dynamic ecosystems composed of patches that are not in 'equilibrium conditions', which have responded for millennia to disturbances of a natural and anthropogenic nature. The fallow areas created by shifting cultivators are one type of such disturbances, suited to enhancing the overall biological diversity of the system. The crucial condition to be respected is the length of the fallow period, which is necessary for soil regeneration, and is shortened only when the customary forest territory is reduced, or the shifting cultivator community becomes too large to be sustained.[154]

The territories of swidden communities have been independent and dispersed, with limited overlaps as swidden farmers' mobility has been 'constrained' only by neighbouring swidden farmers.[155] In other words, swidden agriculture has remained viable wherever the amount of forest land available per person has not been severely reduced. Today, responding to increasing populations and demands for land, some forms of 'Indigenous fallow management' are also being devised to enhance the productivity of the fallows (e.g. by incorporating herbaceous legumes and other green manures, fodder crops, crops useful for roof thatching, establishing alley cropping with trees, etc.). In some cases, this swidden agriculture approximates some forms of permanent **agroforestry**.[156] Not all situations are suitable, however, as shifting cultivators are not always able to defend their land from the cattle of neighbouring farmers, from wildlife and livestock grazers feasting on legumes or from other crop-raiding species. They may also be reluctant to invest in tree planting, as other people may more easily than them acquire titles to the land and trees.[157]

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149   Typically along rivers.
150   Novellino, 2007.
151   Conklin, 1957; Dove, 1983; Warner, 1991; Brookfield & Padoch, 1994; Cairns, 2007; Novellino, 2010.
152   Novellino (2007) uses the term 'integral swidden'.
153   Warner, 1991.
154   See the excellent short movie: https://youtu.be/G9luBhMplEw accessed 2024. The period of cultivation is traditionally much shorter than the fallow period; fallow length of 15–20 years might have been common in the past, but now a 7–10 year fallow is considered very good: clearing fallows of 20 years may even lead to communities being accused of deforestation (Jeremy Ironside, personal communication, 2021).
155   In Ratanakiri (Cambodia) traditional community territories where people engaged in rotational farming accommodated around 30 people per km², i.e. per 100 ha (Jeremy Ironside, personal communication, 2021). See Ironside *et al.*, 2017.
156   Cairns, 2017.
157   Ibid. Also, Tom Barton, personal communication, 2022.

Case example 4.

The spirit hills of the Kavet: from sustainable shifting cultivation to mining and logging in Virachey National Park (Cambodia)[158]

The Brao Indigenous people live on both sides of the Cambodia–Laos border. A sub-group of the Brao, the Kavet, used to live in what is now Virachey National Park, encompassing 337,723 ha of tropical forests close to the Lao and Vietnamese border, in the Ratanakiri and Stung Treng provinces of north-eastern Cambodia. For centuries, the Kavet practised **shifting cultivation** in the riparian bamboo groves along the Virachey rivers and streams ('Kavet' is the name of a stream in Virachey; they were also called 'bamboo people'). The Kavet used to move in **cyclic patterns along the banks of streams**, leaving behind fallow areas rich in the biodiversity they nurtured and eventually returning to the same areas they had farmed one or two decades before. The practice was combined with strict conservation in the hills— the home of the spirits and source of many useful products (vines, mushrooms, medicinal plants) and of all sacred springs and lakes ('life springs'). They did not need to fell trees for cultivation or as timber, as they used bamboos for all their housing and other needs. And, as their **productivity** was **excellent**, they could sell extra rice to the lowland Lao and Khmer living along the Sesan River. Guerin (2001) reports that, from 1905 to 1919, the Lao and Khmer were saved six times by the upland rice of the Brao Kavet, while the opposite happened only once, in 1913. Yields of 2.3 to 2.4 tonnes per hectare were common in the upland swiddens, while they were below 2 tonnes per hectare in the lowland wet paddies.

Matters became more complicated after the Khmer Rouge came to power. In 1975, most Brao from the Ta Veng district escaped to Viet Nam and then Laos.[159] In late 1978, after the Vietnamese invaded Cambodia to oust the Khmer Rouge from power, some Kavet people also fled to Laos. During the 1980s and 1990s, the Cambodian government 'persuaded' the Kavet to move out of Virachey, where they had decided to establish a national park, and settle in a few lowland villages south of the park, including the Kok Lak area. The idea was for them to become settled lowland farmers, build permanent houses and receive buffaloes through an initiative backed by the United Nations Development Programme (UNDP)— a sort of compensation expected to boost their productivity.

Over the years, the **resettled** Kavet adopted lowland rice farming, but both the land and the number of buffaloes provided were insufficient to meet their needs and they experienced several difficult periods. When **hunger** was particularly severe, some contravened government rules and went back to the upland forest to harvest wild tubers just to survive. Others continued some swidden farming in nearby upland and lowland areas. **Tubers**, and other resources vital for livelihoods, such as **bamboo, vines, mushrooms, forest vegetables and fruits, medicinal plants, even sharpening stones**, are what the communities **missed** and repeatedly asked to have access to inside the park. They also wanted to be able to **access the sacred areas** they used to visit for ceremonies, observing special rules (e.g. only Kavet language can be spoken there) and performing rituals. These sacred areas have special characteristics (e.g. bamboo of different sizes, rocks, caves, waterfalls, grasslands, beautiful vistas, etc.) and the elders wanted to be able to go back there, even if they knew that this exposed them to possible dangers and diseases. The Kavet elders stressed that respecting the hills, watershed areas and sources of streams was important for their own fate and livelihoods as people.

Faced with the demands of the Kavet communities and the recommendation of a World Bank project that

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158   Case example compiled by Grazia Borrini-Feyerabend based on Ironside & Baird, 2003; Borrini-Feyerabend & Ironside, 2013; Baird, 2013; and extensive personal communications by Jeremy Ironside, 2021. Picture of Kavet community members during a day of celebration in Kok Lak courtesy of Grazia Borrini-Feyerabend.
159   Some Brao people joined the Vietnamese and formed a northeastern front as part of the invasion of Cambodia against the Khmer Rouge. This led to some Brao having high level government jobs (provincial governors, etc.) because they supported the invasion.

had promoted and was supporting Virachey National Park, the Cambodian **government finally conceded** about 10,000 ha inside the park to four villages in Kok Lak Commune as a **community protected area** (CPA) called O'Tung.[160] The CPA included some of their sacred areas, but not all, and the four villages were granted permission to collect some forest products there. The CPA was supposed to be governed by a community committee but, in practice, the Kavet had poor knowledge of their role and, at least initially, park authorities retained full control. Importantly, as the government zoned the

park to create the CPA, it **also allowed mining and timber concessions** over other areas inside and outside the park. For instance, Trey Pheap, the largest logging company in the country, was granted two concessions in 2011 in Virachey National Park's so-called 'sustainable use' areas. This ended up allowing timber exploitation throughout Virachey. Some particularly massive logging took place in the concession areas, which were simply handed back to the government once logging was complete— with little management for 'sustainability' in sight.

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160   This was formally agreed in 2006 (Ministry of Agriculture, Forestry and Fisheries of Cambodia, 2006) but time was necessary for the arrangement to become effective. Other smaller CPAs were assigned to other Kavet and Brao communities in other parts of Virachey. In total five CPAs were assigned.

In September 2009, when unprecedented floods hit the area, the Kavet elders interpreted the phenomenon as a direct consequence of the exploratory drilling in the mining concessions close to the sacred hills, which had irritated the spirits. As a result of both the granted concessions and the difficulty of controlling access even from other countries, **illegal logging** of valuable timber species and **wildlife trading** escalated significantly inside and in areas adjacent to the park. Some Kavet were even persuaded to help extract timber and trade wildlife— practices hitherto completely alien to them. Logging was allowed to take place in O'Tung CPA and local authorities encouraged people to work for the loggers. In fact, the logging operations created community conflicts and devastated the traditional solidarity among the Kavet. An external evaluation carried out in 2015[161] reported that the Chief of Kok Lak Commune (a Kavet) was paid US$3,500 per month to allow illegal logging in the CPA and the transporting of illegally logged timber through Kok Lak Commune, including logs from various other parts of Virachey National Park. **Elders** from the commune resent that they were **not adequately consulted** during the formulation of the agreement **nor included in signing the agreement** for O'Tung CPA, which was signed only by the Chief. An elder was reported to say that traditional Kavet are the only ones caring for forest conservation.

Illegal logging inside the park has recently reduced— possibly because of decreased demands due to the pandemic that started in 2020, or because the most valuable timber is now rare. It is also reported that, during the dry season of 2019, residents from the four Kok Lak villages collected US$65,000 worth of malva nuts (*Scaphium affine*) in the O'Tung CPA. This is significant because throughout the region the tall trees that produce the malva nuts are cut down to harvest the nuts quickly and easily. In O'Tung there are regulations against cutting the malva nut trees, so the harvests that take place every year and intensify every 4–7 years are truly considerable. Only the combination of some decent sources of livelihoods, clear rights to the CPA inside Virachey, provision of technical support but also— and urgently— the **engagement of traditional elders in the governance of the community protected area** would offer hope that some of the ecological knowledge and respect for the land of the Kavet may remain alive.

161   Nguyen *et al.*, 2015.

Remarkably, policy-makers and conservation organisations often fail to distinguish between communities for whom shifting cultivation is a traditional, year-round, community-wide, largely self-contained, and ritually sanctioned way of life, and **'incipient swiddeners'**, who possess little of the necessary knowledge and skills and can be ecologically destructive.[162] In most cases, traditional shifting cultivators can hardly be blamed for forest loss and land degradation, as the shortening fallow periods and poor natural regeneration are due to **land grabbing**, expanding urban areas, infrastructure (e.g. hydropower plants), extractive industries (including logging), cattle farms and large-scale agriculture, in particular palm oil monocultures. All these factors, driven by socio-political change for which shifting cultivators are far from responsible, consume and fragment forests and shrink the areas they traditionally used. Among the factors that reduce their living environments, there is also the sequestration of forest for the creation of protected areas, as happened to the Kavet people of Cambodia (see case example 4), or for broad conservation objectives, as is ongoing for small Mayan communities in Mexico (see case example 29). In all, it is both incorrect and disingenuous to attribute deforestation to the practices of shifting cultivators *per se*.[163]

Monastic institutions

Mobile communities and lifestyles are not the only example of territorial governance and management institutions whose roots can be traced to antiquity. Another institution that demonstrates centuries of vitality is not characterised by mobility but by long-term sedentary life and environmental care: monastic life.[164] Found in both **Western and Eastern religious traditions**, monasticism is much broader than any culture-specific or country-specific phenomenon, spanning Buddhism,[165] Jainism,[166] Christianity,[167] Taoism[168] and other religions[169] in all inhabited continents. In the Christian tradition, monastic ascetic lifestyles developed in the first centuries CE in today's Egypt and Syria, and later expanded throughout North Africa, Europe and beyond. Monastic communities are autonomous congregations of men (monks) or women (nuns) who voluntarily leave secular life and submit to modesty, chastity, poverty, solidarity and obedience for their own spiritual fulfilment and the common good of their community. In the Buddhist tradition, the choice of poverty went as far as an obligation to beg for food. While some choose to isolate themselves in eremitic lifestyles, many more choose the so-called coenobitic lifestyle, living together as a 'family' under an abbot or abbess. In general, such monastic communities have maintained a large degree of **autonomy** and often aspired to some degree of autarchy.[170] Some have seen their monastery as a living organism, which should be **as independent and as free as possible** from worldly pressures.[171]

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162   Warner, 1991. See also Dressler & Pulhin, 2010.

163   Angelsen, 1995. See also the many perspectives cogently collected in Cairns (2015). For a specific case of shifting cultivators directly facing mining and palm oil expansion see: https://intercontinentalcry.org/palawan-stop-blaming-indigenous-peoples-farming-practices-kaingin-for-deforestation/ accessed 2021.

164   As an example, the Monastery of St. Catherine's, founded in 337 CE at the foot of Mount Sinai, in Egypt, is still active today. It has been under the protection of Islamic law since 623 CE and its mountain orchards and gardens are tended by the Muslim Gebaliya Bedouin tribe who has been collaborating with the Orthodox monastic community for centuries (Grainger & Gilbert, 2008, quoted in Mallarach *et al.*, 2014).

165   In India, since about the 4th century BCE.

166   In India, also since about the 4th century BCE.

167   In West Asia and North Africa, since about the 2nd century CE.

168   In China, since about the 12th century CE.

169   In Palestine, some believe that the Essene community (a Jewish separatist sect) formed an ascetic monastic community in Qumran around the 2nd century BCE (https://www.loc.gov/exhibits/scrolls/late.html accessed 2024).

170   Many today would rather use the term 'food sovereignty'.

171   Mallarach *et al.*, 2014.

In Western Europe, from the 6th century onwards, the model of Christian monastic communities founded by Benedict of Norcia provided a tremendous impulse to the movement.[172] Monastic communities follow specific **common rules** (**or customs**),[173] and those designed by Benedict are well known for their balance: each day, eight hours of the life of a monk or nun is devoted to prayer,[174] eight hours to sleep, and eight hours to manual work and/or acts of charity. The efficiency of Benedictine discipline made monasteries **stable and productive**, allowed the **refinement of technologies** (e.g. water mills, small dams, purification systems, aquaculture) and— as monasteries lived in symbiosis with nearby communities— fostered **economic vigour** (surplus of agricultural produce, marketable products) in hitherto isolated rural environments.[175]

The Benedictine monastic discipline included care for the collectively owned property and land— buildings, forestlands, croplands, pasturelands, springs and gardens— through a mandatory schedule of manual labour. The motto "*ora et labora*" (prayer and work) came to characterise centuries of incredible dedication to combining ethical reflection and manual work. And the requirement was often perceived to go beyond care into **reverence**— dealing with every element of creation as one would deal with "a sacred vessel of the altar". The **humble, disciplined, well-coordinated collective labour** of monks, nuns and their associated peasant communities included crafts— like papermaking, bell-making, copying and decorating sacred books— and singing in praise of God. Most uniquely, work was dedicated to the land and the sustenance of the monastery, creating much of the vast diversity of cultivars, domestic species, foods (including wild food, like honey and herbs), beverages (including wine, beer and spirits), textiles, medicinal plant remedies and culinary traditions that still characterise European regions, and Mediterranean regions in particular.

The monastic communities did not only focus on horticulture and what is today referred to as 'agrobiodiversity'. Many monasteries tended nearby forests[176] and pastures, kept and managed wetlands,[177] regulated waters,[178] and generally assigned a primary value to the **relation with the land** ("only those who have produced bread and wine know the communion with God").[179] Thousands of monasteries throughout Europe became caretakers of the land and producers and storehouses of both knowledge and economic values.[180] We find here the origin of the coincidence of sites of great natural value with sites of spiritual and cultural importance around ancient monasteries,[181] a fascinating combination of **biological and cultural diversity** still very alive in Europe, as shown in the Mount Athos peninsula of Greece (case example 5). Less well known than their importance for cultural history is the role of monasteries in the *economic* history of Europe. This spans both practical and theoretical implications, as monasteries have been centres of economic education and pioneered economic enterprises rooted in the concept and practice of the **common good**.[182]

172   The Benedictine rules were reformed by the Cistercians in the 11th century towards an even stricter adherence to the rules about manual labour and self-sufficiency. Other orders, such as the Franciscans and Dominicans of the 12th century that are usually called 'mendicant orders', came to focus less on monastic life and work on the land and more on travelling vocations for charitable work, teaching, preaching and suppressing heresy.

173   Churches with no influence from Roman jurisprudence embrace 'customs' rather than 'rules' (Josep-Maria Mallarach, personal communication, 2021).

174   This includes reading the sacred texts, oral or mental prayer, meditation and contemplation.

175   Bruni, 2020.

176   The Camaldoli Hermitage in Italy was founded in 1024 CE and one of the first occupations of the monks was the widespread planting of trees to ensure a steady supply of wood and timber. Today, it remains one of the longest continuously occupied monasteries in Europe and the Camaldoli Mountain still exhibits exemplary forestry practices. Rare and most valuable remnants of once vast forests can also be found in the Simien Mountains of Ethiopia in the surroundings of ancient monasteries (Tilman Jaeger, personal observation, 2017).

177   A recently re-discovered example is that of the Boudelo Abbey in Flanders, Belgium.

178   Leroux-Dhuys, 1999, quoted in Mallarach & Papayannis, 2011.

179   Bruni, 2020.

180   Today, monasteries in Europe are fewer, smaller and less powerful (an exception is found in the Natural Park of Vanatori-Neamt, Romania, which includes over 2,000 monks and nuns organised in self-sufficient communities). They have begun, however, an interesting process of rediscovering their environmental vocations (Mallarach & Papayannis, 2011).

181   Mallarach & Papayannis, 2007.

182   Bruni, 2020. Interestingly, according to the rule of St. Augustine (cited by Adubato, 2017) the properties of individual monks were to be held in common, not for the sake of an imposed equality, but so that all monks would be free to seek "nobler things" together.

Overall, monastic life is a good example of an institution aimed not only at securing livelihoods but also at nurturing **inspiring collective values**. The monks and nuns do not share any progeny, like normal communities or clans. Through centuries, they have shared common aspirations— such as stability,[183] discipline, sobriety, accepting material poverty while seeking spiritual wealth, pursuing the sense of sacred, silence, solitude, anachoresis,[184] expressing the love of God and gratitude for creation.[185] These shared values have united the people who followed this lifestyle and created a bond between them and the land that they cared for across centuries. Their values prompted them to assemble and generate ideas, narratives, artworks and spiritual satisfaction. True enough, many monasteries have also become known for luxurious lifestyles, excesses and abuses, and for being centres of wealth allied to the political powers of their time.[186] Indeed, all institutions can be corrupted or misused by vested interests. Further, not all monks and nuns joined monasteries of their own free will, as many children were destined to monastic life by their parents,[187] often for practical reasons (e.g. to be able to eat enough, or to study, as their families could not provide for them, or in order to secure a powerful connection with the Church). But practical reasons do not necessarily impede embracing other values.

As noted by Josep-Maria Mallarach *et al.* (2014), the peak of expansion of Christian monasteries was first reached in North Africa (5th–6th centuries CE), then in West Asia (10th–13th centuries CE), then Europe (11th–14th centuries CE) and finally Russia (15th–16th centuries CE). During the long history of monastic communities, disruption by wars and pillage were never far away. Misfortune culminated with the Lutheran Reformation, which from the 16th century actively suppressed monasticism in much of Northern and Eastern Europe. Political powers of all sorts— from the Tudors of England to French revolutionaries of the late 1700s to later communist revolutionaries in Russia and beyond— actively confiscated properties, **suppressed monasticism** and/or enforced prohibitions, persecutions and other severe limitations. Without entering into debates about whether monasteries 'deserved' the lavish donations they often received, it is a fact that the protestant reforms and conflicts that followed resulted in the destruction of monastic communities and pillaging of their properties. This had **damaging consequences for the cultural and natural heritage** of many regions of Europe. During the Reformation in England, even the precious libraries hand-copied by monks and nuns were destroyed. In Spain, some monastic forests that had been carefully managed for centuries were cut down or seriously degraded, endogenous cultivars of fruit and vegetables were lost, and much local ecological knowledge was forgotten.[188]

Monastic life is no exemption from the misconduct, transgressions and crimes of human societies in general. For the powers and cultures that rebelled against it for various economic and political reasons, it even represents a culmination of evil. Monastic life, however, also offered spiritual wellbeing and meaning to many individuals over centuries. With that, it nurtured devotion, solidarity, discipline, hard work and provided for the motivation and capacity to collaborate for the longer-term, higher goals of the monastic communities and their territories. In this sense, there is little doubt that monastic life has represented, and continues to represent, a rich form of purposeful communal living with important consequences for local environments.

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183   For instance, Benedictine monks commit to stay in the same monastery their entire life.
184   i.e. withdrawal from the world…
185   Mallarach & Papayannis, 2011.
186   This is as true in today's Russia (Köllner, 2020) as it was in 19th century Sicily (De Roberto, 1977).
187   The practice is called oblatio and was meant as a religious act— a sacrifice to God. It was also an alternative to expositio, i.e. the abandonment of infants for whom parents could not or would not assume responsibility. The hope of foster love and success despite humble beginnings contributed to the popularity of oblatio. Oblatio and expositio were common during the Middle Ages, until monastic orders discouraged oblatio after the 13th century (Eastburn Boswell, 1984).
188   Mallarach *et al.*, 2014. In former communist countries in Europe, recovery and partial restitution of buildings and properties has been happening since the fall of the Berlin Wall. In Georgia, for instance, the post-communist government has given back all the former properties to the Georgian Orthodox Church (Josep-Maria Mallarach, personal communication, 2021). We may wonder how much of that change is based on sincere tolerance and piety, and how much on political expediency.

Case example 5.

The monastic self-governed territory of Mount Athos, Greece[189]

Currently, the only self-governed monastic territory in Europe is the rugged peninsula of Mount Athos, in north-eastern Greece, approximately 50 km long and 10 km wide. On the tip of the peninsula, the almost perfectly conical Mount Athos[190] rises to a height of 2,033 m above sea level. As the isthmus with the mainland is closed to all movements, the monastic communities can only be accessed by sea, maintaining a sense of isolation and strict control over access. The spiritual, cultural and natural heritage associated with Mount Athos dates from the end of the first millennium CE. After more than a millennium of uninterrupted monastic life, **hundreds of monastic settlements** distributed in the territories of 20 sovereign Christian Orthodox monasteries still lead a vibrant life on the Athonite peninsula at the beginning of the third millennium. Greek, Russian, Serbian, Bulgarian and Cypriot monastic communities were all established during the Byzantine times, inspired by the traditions of Eastern Christianity. Developing through the ages in parallel paths, they still conserve some peculiarities related to their diverse ethnic backgrounds. The monastic population reached its peak in the 18th century with almost 50,000 monks, and its lowest ebb in the 1970s. Since then, the number of monks has been increasing steadily, and well over 2,000 monks live today on the Athonite peninsula.

The heritage of Mount Athos has multiple roots integrated into a **living, millennia-old tradition**. The monastic communities carefully maintain that tradition and have adopted only a limited number of contemporary technologies to satisfy their needs. For instance, electricity is used in some monasteries and state-of-the-art methods are being used for restoring and protecting icons and ancient manuscripts. The spiritual heritage of the area originates from the Byzantine Orthodox tradition, and the Ecumenical Patriarch of Constantinople maintains the overall spiritual leadership. Since its establishment, the area has been dedicated to the Virgin Mary and has been known as 'the little garden of Saint Mary'— a dedication balanced by the strict rule that no female, whether human or domestic animal, is welcome on the Athonite peninsula.[191] It is said that this rule was always respected, and it remains even today part of local customs. At the heart of the cultural heritage of the place are its **intangible spiritual practices** (*hesychia*) and the practice of **chanting** and other liturgical sacred art. All this is embedded in Byzantine architecture, which melds styles from diverse epochs and countries and pulls together artefacts, frescoes, icons, manuscripts, objects of religious art and other gifts from devout leaders and pilgrims. Most of these are now properly maintained, although fires and insensitive restorations have occasionally caused serious damage.

The cultural heritage is integrated in the rich natural environment of the Athos peninsula, outstanding for its rapid succession of diverse climatic conditions and ecosystems— from Mediterranean along the coasts to Alpine at the tip of Mount Athos. The monks locally produce part of their food, some bake their own bread, others keep vineyards, fruit orchards and olive groves, and others engage in fishing, at times with the help of volunteers and workers from outside. The variety of climate types provides habitats for many plant and animal species— many endemics to the peninsula. The absence of grazing in the entire peninsula has allowed the existence of a dense forest of deciduous and coniferous plants and maquis vegetation, including some of the most intact littoral landscapes in the Mediterranean region. In 1988, the entire monastic republic was recognised as a **World Heritage Site for both its natural**

189   Case example compiled by Grazia Borrini-Feyerabend based on: Mallarach & Papayannis, 2011; Josep-Maria Mallarach, personal communication, 2021; and https://www.youtube.com/watch?v=U5pwfLRI-R8 accessed 2024.
       Picture of Mediterranean woodlands and traditional cultivars that surround most monastic settlements in the self-governed territory of Mount Athos courtesy of Josep-Maria Mallarach.

190   Another name for the mountain is Agion Oros (holy mountain).

191   An exception is made for female cats (herding cats is obviously not easy... not even for holy men!) and wildlife.

and cultural wealth and later included in the Natura 2000 European Union network. Both these designations were decided by the Greek State without the participation and agreement of the monastic communities.[192]

While all monks on Mount Athos are recognised as citizens of Greece, the territory is governed by an institution called the Holy Community (*Iera Kinotia*), which consists of representatives of the twenty sovereign monasteries in the area. The representatives are renewed each year, on 1 January. Each monastery has jurisdiction for the management of its territory while general matters (such as opening of roads, entry of vehicles and fighting forest fires) are decided at the level of the Holy Community. Only for major matters, the Holy Supervision (*Iera Epistasia*— a council of four members, each representing a group of five autonomous monasteries) meets with the Greek authorities. This system has been in operation since the independence of Modern Greece and has managed to fend off threats such as mass tourism. In fact, the unique vitality of the Holy Community could be ascribed to its **customary subsidiarity**, which allows maximum autonomy to each one of the hundreds of monastic settlements on the peninsula, from the smallest to the largest, without compromising the unity of the confederation.

Despite a thousand years of effective governance of its territory, obtaining internal agreements on land management initiatives that are well-conceived and balanced, and adequate funding to sustain them, is all but easy. In recent years adult men in organised pilgrimages have been allowed to visit Mt. Athos and some monasteries have received significant investments from abroad[193] to boost their accommodation capacity. There is a risk that this eventually affects the spiritual vocation of the community and its balance of internal powers. The potential, on the other hand, is that the visits may offer an enriching experience to pilgrims and the related income may be properly invested in the upkeep of the monasteries and the management of the land. The **threats and opportunities of modernity** invariably present a challenge… even to governance institutions of demonstrable age and vitality.

192   Josep-Maria Mallarach, personal communication, 2021.
193   In particular from the countries of their church affiliations.

Is it not too soon to admit, with all its consequences,
that there are as many 'natures' as 'cultures'

Jacques Bugnicourt, 1987

Communities governing territories and commons

Where may we trace the origin of the concept of 'territory'? In some cases, livelihoods based on foraging have been practised for as long as *50,000 years* across the *same* landscapes, despite substantial climatic and other changes. This amazing finding, highlighted by Tobler *et al.* (2017) for Aboriginal Australians, offers the strongest possible ground for their cultural attachment to 'country'. In other world regions, even the practices considered traditional to specific ecosystems have a much shorter history. As the climate warmed and became more stable during the last 12,000 years (Holocene), foraging lifestyles were increasingly combined with pastoralism (following the domestication of herbivores) and horticulture (most likely beginning in flood-retreat areas of river valleys and wetlands). With that, human groups[194] came to move more regularly or settle for longer periods in diverse ecological contexts. Some built ingenious stone constructions to collect, channel and store water or trap fish and wildlife, others managed land by terracing, and others developed housing, defence and complex symbolic structures.

It is generally understood that the early settled communities could produce food in more abundant quantity than fully mobile groups. Settled communities thus tended to become larger but, as the food was of lesser variety and nutritional quality, most likely they were also less healthy than their fully mobile counterparts.[195] Larger communities, on the other hand, allowed their members to diversify their crafts and deepen their capacities, encouraging the development of technologies. In turn, this promoted exchanges, collaboration and the adoption of various types of social rules.[196] Yet, we should not assume that early institutions were stable and well defined, nor that there was a one-directional 'progress' from mobility to permanent settlements. Some scholars have interpreted recent archaeological findings as evidence of "oscillating patterns of social arrangements", possibly even *seasonal* changes from being organised in mobile bands and tribes, to getting back into stable settlements with some of the characteristics of a 'State'.[197]

Through time, and despite instabilities, we posit that groups of humans settled in a given environment or moved repeatedly along the same migration routes, developing both a **sense of place** and a **sense of self**— expressed by the different terms that in different languages mean 'people' or 'community'.[198] A 'sense of place' implies an awareness of the characteristics of the environment, with its seasons and weather patterns, diverse soils in different areas, sources and bodies of water, shelters and caves, stones and minerals, tides and winds, movements of sun and shadows, stars and clouds. With that, humans likely developed an awareness of other *beings*— plants and insects, birds and fish, peaceful herbivores, dangerous predators and groups of 'people' possibly similar but distinct from one's own. And they likely developed an awareness of even other 'presences' in nature— remembrances and premonitions, joys and fears, deities and monsters, areas of dangers and areas

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194   Human ecologists generally describe the scale of aggregation to include family groups (25–50 people, presumably the earliest), local groups (100–500 people, acephalous or not) and regional polities, possibly encompassing thousands of people (Johnson & Earle, 2000).

195   Larsen, 2009.

196   Johnson & Earle, 2000.

197   Graeber & Wengrow, 2021.

198   Seamon (2018) defines 'place' as "an environmental locus that gathers human experiences, actions, and meanings spatially and temporally" or "a region within which other persons, things, spaces, and abstract locations, and even one's self can appear, be recognized, identified and interacted with". Specific spaces may elicit strong feelings in people.

of peace, memories of loss and desperation, visions and elation. While such perceptions can only be guessed, the term **'territory'** attempts to encompass both the **physical features** and **economic values of 'places'** as well as the variety of **intangible elements of** historical, cultural, spiritual, relational and psychological **meaning** perceived by people as integral to it.

A 'territory' implies the existence of a human group that lives in it, perceives it, and shapes it.[199] Closely related to this is the concept of **'commons'**,[200] which describes a sophisticated relation between a human group and a portion or the totality of a territory. Naming an area as commons reveals that the group can make a distinction between what relates to all and what relates only to some, what is to be shared and what is 'private'. Further, what is outside the commons is the responsibility of single individuals or families, while the commons are the responsibility of all, they **create a 'community'** by establishing a relation with a group of people in a collective way. Noticeably, a relation with the commons is not necessarily of an economic nature, or of economic nature *only*. It involves language and understanding, and patterns of decision-making, rulemaking, labouring, caretaking, transforming and valuing the gifts of nature[201] that relate to the 'community'.

Through time, successive generations of human groups who take decisions together about the same territory or commons are bound to distil some **accepted 'ways of doing things'** and to structure their own **organisations, processes, rules and duties**. With that, they are also likely to identify what is *not* to be done, possibly to be enshrined in restrictions and taboos. Using evolving languages and narratives,[202] some beliefs, values, ceremonies and rituals— part of larger worldviews— become established and keep reproducing and deepening the relation between specific communities and their territories. Processes of this type create the systemic and dynamic phenomenon we call a **territorial 'governance institution'**— the ability to create, implement and secure the respect of local decisions and rules.[203] In turn, an institution accumulates, replicates, enriches and passes on experience while performing its functions and responding to change.

The variety of territorial governance institutions reflects the variety of communities and ecologies that gave them birth. Many relate to a **distinguishable landscape unit**— a forest, a lake, a watershed, a coastal landscape, an alpine pasture— a place for which everyone in the community takes responsibility and from which everyone benefits according to agreed rules. Often, the community dramatically shapes the landscape unit with an investment of labour and resources, which is passed on to descendants. In semiarid areas of Africa, some local communities have sustained huge investments of labour to construct and maintain artificial water basins ('*marres*') that are naturally inundated in particular seasons and provide the community with fish and other freshwater organisms over many months.[204] In mountain areas of Europe, pastures were developed by collectively removing trees and managing the land to diminish natural hazards, such as by channelling water and repairing pathways (the *Regole*, in Italy, continues to organise such collective work every year, as described in case example 7). In coastal seascapes, fisheries were and are enhanced by placing and regularly

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199   As discussed by Giménez (1999), a 'territory' is a space that has been appropriated (e.g. by a system of limits, nodes, relations) and valued by a human group in a variety of practical and/or symbolic terms and modalities. Several territories generally coexist in a nested fashion, some directly perceived and known, and others more abstractly recognised. They are all, however, 'cultural' spaces, with symbolic dimensions, institutions, rituals and affective relations perceived by individuals as part of their own 'socio-territorial identity'. Territories are spaces where a collective history has left visible signs and 'monuments' ... a sort of micro-regional 'motherland' of great identity value.

200   See Ciriacy-Wantrup & Bishop, 1975.

201   We use the term 'gifts of nature' instead of the more common expression 'natural resources' to signify that nature offers to humans a variety of values that go well beyond the economic value usually attributed to natural resources.

202   'Narratives' are the building blocks we use for our cognitive processes and explanatory frameworks... generally while remaining unconscious of their power and their capacity to condition our life and our perception of all that exists.

203   For Agrawal and Gibson (1999) this ability is the essence of being a 'community' (see Part V of this work). For Berlain (2021), freedom is not anomie (absence of rules) but autonomy (respecting collectively agreed rules).

204   In the early 1990s in Northern Cameroon many renounced the obligation to 'repair' these marres because "the investment in modern technology and financial resources seemed too important" (author's local observations and discussions). This is ironic as their elders had constructed them with their bare hands. Likely, the true reason for the disrepair was the demise of the institutions governing and managing the marres and their fisheries as commons. The institutions were, in fact, actively disempowered by the modern State administration.

repairing stone barriers and reef-like structures.[205] In estuarine environments, human-made dikes extending for kilometres have protected scarce land from salty water.[206]

It is following these **collective investments in labour and resources** that many commons and territories came to embody and increasingly evidenced the relation with a community, weaving intangible elements of local knowledge and spiritual relations with the land but also economic ('harvestable') elements, such as fruits, timber, fuelwood, minerals, and even water, fisheries and wildlife, which can be harvested locally but also flow in and out of specific landscape units. In particular, the investments made by communities that decide to live with wildlife may be important, as there can be many **opportunity costs** when a territory is kept as a wildlife habitat and wildlife interacts with people, domestic animals and crops.[207]

The communities who refer to themselves as 'Indigenous peoples' or as members of an 'Indigenous nation' generally also recognise a close connection with a territory and territory-specific history, language, culture and worldview. Many **governing institutions of Indigenous peoples** remain today powerful caretakers of their territories and commons in ways as various as the ecosystems they relate to.[208] In some cases, their governing institutions were shaped by centuries of **resistance to colonial forces**, with collective values codified and transmitted in separate languages and unique customs.[209] In other cases, they remained relatively undisturbed and free to evolve in endogenous ways but, today, find themselves embedded in larger societies that hardly fit their worldviews and values.[210] Regardless of their specific history, some believe that 'indigeneity' is a *way of being* more than any attribute ("...to become Indigenous is to grow the circle of healing to include all of creation...").[211]

Some communities that did not directly suffer from colonisation and do not refer to themselves as 'Indigenous' have also similarly conserved traditional collective institutions and a close connection with the gifts of nature.[212] In the globalised market system, **non-Indigenous community institutions** governing their commons are the exception rather than the rule, as private property and State property have come to dominate contemporary societies. Yet, they do exist,[213] and some governments have specific policies to address them, as other governments have policies specifically designed for Indigenous peoples.[214] In rural and coastal communities, the term 'commons' generally applies to water, wildlife, pasture, fisheries and forest products while land is often

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205   Some, for instance, remain well managed in Southern Spain. A full renewal movement for such structures is on the way in Hawaii, spearheaded by an organisation called KUA (www.kuahawaii.org accessed 2024).

206   Impressive examples equipped with mechanisms that allow or impede the flow of rainwater into the riverine areas are still clearly visible in Casamance (Senegal). Allowing the flow of rainwater from the land to the river at low tide 'washes out' the salt that may have contaminated the land.

207   Barua *et al.*, 2013.

208   See the case examples 3, 6, 9, 10, 18, 23 (part a. and part b.), 26, 29 and 30 in this work. More examples of territories closely connected with caretakers who self-identify as Indigenous peoples are described in Borrini-Feyerabend *et al.*, 2010; Kothari *et al.*, 2012; Farvar *et al.*, 2018; Pimbert & Borrini-Feyerabend, 2019; FAO & FILAC, 2021; ICCA Consortium, 2021; and in www.iccaconsortium.org.

209   Barkin & Sánchez, 2020.

210   See www.iwgia.org accessed 2024.

211   Wall Kimmerer, 2020.

212   For instance, from medieval times to the 19th century, the primary units of governance in most of Europe and Russia were territorial communities, including some dispersed and clan-based, that progressively evolved into village-based communities (Blum, 1971). We will return to this in Part IV when discussing the demise of the commons as part of the 'modernisation' phenomenon.

213   See case examples 1, 7, 15 and 28 in this work.

214   See also case examples 5 and 8, related to more specific situations where States assign privileges to specific groups of individuals (the monks of Mount Athos, the owners of Alpine pastures) assimilating them to a community having collective rights. Diverse countries have adopted diverse definitions of what is a 'people' and what is a 'community', who is 'Indigenous' and who is 'traditional' (under a multiplicity of terms, from Quilombo to Afro-Colombian, from montane to tribal). Such definitions are consequential as they may legally determine who can hold collective rights. The variety of situations and forms of legal recognitions of natural human communities, or lack thereof, is per se instructive. National policies to regulate the collective land rights of traditional communities have been established in countries like Brazil, India, Colombia and South Africa— even though they are often controversial, and their application is patchy and surprisingly easy to sabotage by withdrawing budgets, changing heads of organisations, neglecting enforcement of rules. For instance, many achievements of Indigenous peoples and traditional communities in Brazil seemed to rapidly vanish under the Bolsonaro government (2019–2022).

laboured and maintained by families of small-scale peasants and fisherfolks.²¹⁵ 'Commons' may also refer to something intangible, like the knowledge kept alive with reference to a given territory and its products, as shown by the cheese production cooperative of Étivaz in Switzerland (case example 8). It is crucial to note the **variety of commons** among diverse communities and the fact that communities do not need to *own* land collectively to possess some commons or to exercise legitimate **governance** over them.²¹⁶ In some national contexts, legal ownership is required for any type of territorial governance… but the existence of **customary rights** is also recognised, based on a multiplicity of bonds that gives them ground. It has to be recognised, however, that customary recognition may be fleeting if substantial interests are discovered in the specific location.

The **bonds** that link communities to the territories and commons are many and diverse. Some easily recognised connections are **cultural**, as generations develop and pass on memories, names and meanings attached to specific features in the territories. Related to those, some perceived bonds are **spiritual,** as divinities, values, feelings and a variety of symbolic values are seen as residing in the land or being rooted there. Probably most connections exist because it is in and from the specific territory that people satisfy their **livelihood** needs: food, water, materials to build shelter, land on which to grow crops, graze animals, find refuge and security. Then, there are bonds of **local knowledge**— the capacity to understand phenomena in the territory and how these influence, and can be influenced by, the presence and action of people. Multiple bonds that develop in the practical and symbolic realms and intertwine with the perceived 'place' and 'self' may give birth to a sense of **collective identity** related to the territory where the identity is grounded… and even a sense of **collective responsibility** for it. When this happens, the communities naturally seek respect and recognition for their governance role and, if necessary, engage in **struggles for self-determination**. All these bonds are generally interlaced and poorly separable,²¹⁷ but we will discuss a few of their distinct manifestations and dimensions to explore how they give shape and strength to governance institutions.

Cultural and spiritual bonds

For both Indigenous peoples and non-Indigenous communities with a connection to specific territories and commons, it is usually possible to identify one or more individuals or bodies (organisations) in charge of key relevant decisions. They may be responsible, for instance, for dividing and assigning land for cultivation, establishing and modifying rules to access certain areas, or rules for harvesting and processing products for a specific label. They may decide when to start fishing, harvesting mushrooms and fruits in the forest, hunting specific wildlife or leaving for the seasonal transhumance. They may decide how to share the harvest with other communities, where to channel water and in what proportions to distribute it. At times, these organisations are one and the same as those in charge of the community's socio-political decisions.²¹⁸ Often, however,

215   Among desert communities, water is traditionally managed in common and subdivided to irrigate the fields of different families. For instance, up to the end of the last century, the social organisation of the oasis of Siwa (Marsa Matrouh, Egypt) was based on a tribal system, each tribe counting on a Sheikh elected by consensus by all households. Ten qabilas (tribes) had lived since time immemorial in Siwa and in the separate but socially related small oasis of El Ghara. A more recent 'qabila' of people of Bedouin origin was welcomed in the 20th century, taking the total of qabilas to 11. With further social distinction among butuns (clans) within a given qabila and two main groupings (Easterners and Westerners), the total population of the oasis was about 20,000 (the very traditional El Ghara was only 350 people). Most qabilas were not localised on a given territory, but households within the same qabila owned plots of land (orchards) scattered throughout the oasis. People belonging to different qabilas organised themselves in collaborative systems (hatiyyas) to manage the water from each well, serving several gardens (karsheef) supporting an abundant production of dates, olives and alfalfa, which was used to feed the small livestock kept by women in the courtyards of their homes. At the turn of the millennium, this system was under very heavy pressure (Grazia Borrini-Feyerabend, personal observations, 1999). On the one hand, a mineral water industry had been established to take advantage of the deepest local aquifer and land was rapidly bought by outside exploiters, including with the consensus of some Sheikhs who sold their traditional qabila rights. With natural population growth of well above 3% per year, the demand for agricultural land was also increasing, but poor drainage was creating superficial lakes of salty water that were progressively invading the cultivated karsheefs.
216   See case examples 1 and 5 in this work, and the discussion on governance security in Part V.
217   Several examples of positive interaction between communities and nature in the Mediterranean region are offered by Zogib (2013). The examples are described as 'cultural conservation practices', but actually concern all aspects of livelihoods.
218   See, among others, case examples 10, 18, 22 and 30 in this work.

the individuals or bodies in charge of matters related to the land and the commons coincide with, or are more closely related to, those responsible for ritual and spiritual matters. For instance, in many rural villages of West Africa some specific families/clans are devoted to **"maintaining the spiritual ties between nature, supra-natural entities and people"**.[219] These clans— called by different ethnic groups Balobero, Tigatu or Tendaana, among other terms— are said to be the **descendants of the original inhabitants of the place** and to remain in charge of all that naturally belongs to the place. It is only among them that one finds the *chefs des terres* who distribute land for people to cultivate according to their need.[220] And only they are responsible for maintaining sacred groves and other forested areas, sometimes referred to as "the skin of the Earth", and for regulating access to wild products (e.g. announcing when wild fruits are ripe and can be harvested). The members of these 'original clans' never hold political power (e.g. they *cannot* become head of the village) but hold undisputed spiritual power. They are often poor in material terms but highly respected in society— for instance they can intervene and impose the cessation of violence when others are fighting.

Many traditional societies see **women** as holding special **powers and roles concerning nature**. For instance, among the Djola of Casamance (Senegal), only female elders place the most important fetishes (entry points of connection between visible and invisible realities) to signal local use rules, indicate areas where access is forbidden, call attention to natural features, etc. Traditional societies in general assign distinct and comple-mentary roles for women and men in their relationship with nature, including in agricultural production, food processing, animal rearing, water collection, building shelter, hunting, fishing, etc. In some cultures, the symbolic image of women is associated with nature as 'nurturing mother'. In other cultures, women are closer to 'wild beings', violent weather events, or strong impulses that need to be 'dominated'.[221]

Some scholars have interpreted these associations as reflections of a fundamental difference between the gen-ders and their 'naturally' differing and complementary roles vis-à-vis nature.[222] Others reject this and explain the generalised different perception of women versus men as related to two main facts. The first is that women bear, breastfeed and raise children and thus have had— for millennia— **distinctive risks and capacities** with respect to men (e.g. as part of foraging groups). The second is that societies place **different expectations and burdens according to gender**.[223] For instance, rural women or women of particular social classes or castes may disproportionally bear the negative consequences of environmental degradation (e.g. loss of forest-based products traditionally gathered by women) or of the introduction of new technologies (e.g. because these may favour more literate men), etc.[224] These negative consequences cannot be attributed to *intrinsic* gender characteristics. Rather, they should be investigated as expression of specific political economies and material realities.[225] In other words, if much about gender is intrinsic, much about 'gender roles' is "historically and socially constructed".[226]

In the Colombian Amazon, Indigenous peoples possess various forms of outward symbolism but tend to focus on inner spiritual practice, such as observing the **ceremonial calendars** where rituals are repeated to assert again and again how to interact with nature and people (see Picture 1). These practices exist side by side with

219 Information based on field interviews and observations by Grazia Borrini-Feyerabend in the early 2000s.
220 Like chefs des terres (literally meaning the 'masters of the land'), the terms chefs de l'eau ('masters of water') and maîtres de la brousse ('those who rule the forest') are well-known in French, as French colonial actors have encountered and described them in West Africa. The traditional authorities described by these terms are vividly compared by Djiga (2009) to a rhizome— playing a primordial, often invisible but essential role in the rooting and spreading of a plant. In this light, the State authorities would be the aerial (above-surface) part of the plant, controlled by the traditional roots.
221 Merchant, 1980.
222 Illich (1983) has done exactly that, emphasising the gender dividing line in traditional societies, lamenting its loss in modern times, and attributing this to the rise of market relations in modern societies.
223 Shepher-Hughes, 1983.
224 Agarwal, 1992.
225 Ibid.
226 Carolyn Merchant quoted in Cronan Rose, 1991.

some forms of 'immaterial' management of entire territories that involve the strict following of a calendar of ceremonies, prayers, dances and invocations based on knowledge passed on within the specific clans where shamans are born. Such knowledge allows the shamans— for instance, the *Kumuã* of the Vaupés region of Puerto Nariño—[227] to interpret the changing constellations and meteorological conditions (e.g. winds, rains, particular events) via dreams, visions mediated by sacred plants, dances, re-enacting of mythical events, stories, music and visits to sites. Following the traditional calendar and instructing people how to behave in nature is said to prevent human infirmities and ensure proper patterns in shifting cultivation and communication with animals, fish, trees and other invisible beings in the territory of life. The **calendar, practices and rituals** *in themselves* are the indispensable bond connecting people and nature, and if the calendar and rituals are not respected, the relationship cannot but suffer.

Attention to calendars, celebrations, processions, songs and dances and complex social reciprocities are common to many Indigenous peoples who possess **institutions in charge of spiritual life** that also **regulate access to, and use of, the gifts of nature**. In some cases, such institutions focus attention to specific sites and features, which are referred to as 'sacred',[228] a sort of *heart* of the territory, able to nourish it and replenish it with energy (often also critical habitats or nesting sites of sacred species). Some sacred sites are visited regularly and offered respect in formal ways, while others must never be 'trespassed' and 'contaminated'.[229] Many embed divine presences, such as the hills of the Tibetan Plateau that host specific '*Numina*' in close **reciprocity** with nearby villages.[230] The Tibetan *Numina*, the hills where they live and their caretaker villages are connected by a close bond: the villagers protect their hills, the hills host and maintain the *Numina*, and the *Numina* keep the villages safe.[231] For other peoples, it is the entire territory that is imbued with spirituality, and the relevant authorities dedicate themselves to maintaining values that have the same validity throughout the land: consensus, peace, respect, reciprocity, fair sharing of the gifts of nature... The Borana of Ethiopia offer a perfect example of such an institution (see case example 6).

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227 See ASATRIZY & Riascos, 2008. The traditional organisation ASATRIZY currently uses the term 'territory of life' for its own territory (see https://cemi.org.co/fotos-territorios).

228 See https://sacrednaturalsites.org/ accessed 2024; Wild & McLeod, 2008; Verschuuren *et al.*, 2021.

229 An example is the mangrove area where spirits live, constituted as an inaccessible 'red zone' in the community conserved area of Kawawana (Casamance, Senegal) (see ICCA Consortium, 2021).

230 See this telling short video: https://youtu.be/GehFrfhZd0w accessed 2024 where John Studley, who studied the Numina of the Tibetan Plateau, estimates they still occupied, in 2016, about 25% of the land. He stressed that the Numina survived under the radar of political governance but were being jeopardised by powerful secularisation and modernisation influences.

231 This animistic belief is reminiscent also of the genii locorum of Ancient Rome— spirits protective of the natural abundance and productivity of specific places.

Case example 6.

Governing the spiritual and livelihoods relations between people and nature: a sophisticated institution faces repression, 'development' and possible rebirth in modern Ethiopia[232]

A long-standing feature of the Oromo people— the largest linguistic group in East Africa— is the *Gadaa*, an institution that has weakened or disappeared among most Oromo but is kept alive among the Borana, a nomadic pastoralist section of the Oromo mostly located in Southern Ethiopia and Northern Kenya. The *Gadaa* is **a political-ritual system based on generational classes** (*luuba*). At birth, each member of the society enters a generational class located five positions below the class of his/her father. Every eight years— a *Gadaa* period— all classes are promoted to the next higher stage, or grade. Each stage introduces new responsibilities and new roles in social life. The stage known by the name *Gadaa* is the most important. When a new generational class reaches that stage, a group of six officers (*Hayyuu Aduulaa*) selected and trained during the previous stages, takes over the responsibility to lead the *yaa'aa gadaa*, an itinerant village that engages in the ritual and political activities that are crucial for all the Borana. Organising the *Gumii Gaayyoo*— the General Assembly and only legislative body of the Borana— is one such activity.[233] According to the structural effect of the *Gadaa* system, **every eight years a new generational class takes on the political leadership**, with the 'sons' coming back after five *Gadaa* periods, or 40 years.[234]

Besides the elective *Gadaa* offices, the Borana give much relevance to the *Qaalluu*— a ritual leader who passes on his power by direct descendance to the son he has with the *Qaallittii*— a female ritual leader always coming from the same lineage. The *Qaalluu* is related to the divinity and does not perform any manual work, does not move with the herds, resides in a 'ritualistic settlement' (*yaa'a qualluu*) and is in a permanent relation with the divinity. There are two major *Qaalluu* and three minor ones among the Borana. The relation between the *Gadaa* officers and the *Qaalluu* is ritually governed, with the result of a **dualistic governance** by which no one has full control. The people belonging to the same clan and lineages as the *Qaalluu* are the *Warra Qaalluu* (**people of the *Qaalluu***). They cannot be elected in the *Gadaa* but can be nominated *Hayyuu* by giving service at the *yaa'aa qaallu*. All the others are *Warra Bokuu* (**people of the Sceptre**). People from both the *Warra Bokuu* and *Warra Qaalluu* gather at the *Gumii Gaayoo*. In fact, the *Gadaa* and *Qaalluu* are part of the same institution and together aim at maintaining the **supreme value** of the Borana, which is **peace— with God and among the people**.

Assemblies (*kora*) are crucial for social life and decision-making processes and are held at various levels or by different functional groupings, such as for a village, for a grazing district, for all the users of a well, for a clan (*gosa*), etc. The *kora* takes **decisions by consensus**. Everyone can participate, including children and women, but usually only experienced men express opinions. Women participate indirectly in decision-making via their husbands, with whom it is expected that they discuss all decisions. They can directly hold the symbol of power only if their husband dies before completing a term of office. The Borana women are highly respected and have their own organisations and rituals. Married women carry the *Siinqee*, an insignia that symbolises

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232   Case example compiled by Grazia Borrini-Feyerabend based on Bassi, 1988a; Bassi, 1988b; Bassi, 2002; Ta'a, 2004; and Marco Bassi, personal communications, 2021. Picture of a Borana clan assembly in Dambaala Dibaayyuu (between Melbaana and Megga), 1990, courtesy of Marco Bassi.

233   The ritual cycle takes place with reference to an elaborated luni-solar calendar, based on the intersection of the 27 cycles of day-names (sideral cycle of the moon) with 12 lunar months (synodic cycle of the moon), with corrections made by empirical evaluation of conjunctions of the moon with selected star groups (Bassi, 2002).

234   The eight years during which a generational class stays in power at the yaa'aa gadaa take on the personal name of the first Hayyuu Aduulaa, an officer known by the title of Abbaa Gadaa or 'father' of the Gadaa period. All officers are elected respecting the rule of distribution across the major clans of the Borana.

material and spiritual power and commands respect—for instance, to prevent bloodshed and impose peace in time of conflict. Women perform many rituals to bring harmony and reconciliation, including a ritual where coffee beans are broken, fried in butter, and served with milk and salt on a wooden bowl after a collective prayer. In another ritual, women take sheep in a circle around a village with which a dispute has taken place and with whom they wish to make peace.[235]

Building consensus at the assemblies is the **responsibility of elders and other officers**, the *Hayyuu*. An elder is usually a respected mature person (aged more than 40) but may also be a younger person who is known as experienced, knowledgeable and socially influential. The elders and the officers do not enact new laws or give general principles, which are the mandate of the *Gumii Gayoo*, but deal with individual cases based on customary laws. Through their capacity to moderate the assemblies and influence the participants, the elders and officers together oversee that peace is maintained internally, and with other peoples. They usually help to solve disputes by prescribing major compensatory payments in heads of cattle. The arguments of leaders and elders are based on the **customary rules** of the Borana (*aada*) and **prior decisions** (*seera*) of leaders and/or of the *Gumii Gaayoo.*

Rules are about the use of pasture and trees and especially about the use of wells, which all have a male caretaker 'father of the well'. Examples of rules are the prohibition to cut certain species of trees or to sell water rather than offer it as a gift to other Borana clans, all of which have responsibility to cooperate and perform rituals together. In fact, everyone in society shares responsibilities in complex forms of **reciprocity**. For instance, if a family is affected by war or natural catastrophe, the *Buusaa Gonofaa* custom implies that both its clan mates and other families will restock its herd. Someone disrespecting the rule and not willing to accept the various levels of traditional judgement, with the *Gumii Gaayoo* as the ultimate authority, will be socially ostracised to the point that other Borana would not help him in any way and will refrain even from greeting him. This is a very severe punishment if one considers that the help of

several people is *needed* to get water from the deep *Tulaa* wells and provide it to the animals. In addition to the various types of assemblies, the *yaa'a gadaa* and *yaa'a qualluu* function as **permanent councils** and perform an important integrative role among the different clans.

The Gadaa traditional institution briefly described here is an excellent example of a systemic entity that intricately connects language (crucially important as this is a strongly **oral culture**), values, **rituals**, organisations, rules governing people and rules governing the gifts of nature into an overall **worldview**. This complex institution has ensured centuries of meaningful, if not easy, life for the Borana. And this is not surprising, as nomadic pastoralism, limited traditional farming, reciprocity, solidarity, consensus decision-making, the respect of rules and the orientation towards peaceful relationships are well suited to the harsh dryland environment of Southern Ethiopia, dominated by large areas of limited fertility and irregular rainfall. Life can be pleasant and abundant, there, but also extremely precarious. The appropriateness and intelligence of social rules are crucial for survival.

Two momentous processes set in motion during the last century— demographic growth and agricultural encroachment into pastoral land— have generated a profound and lasting crisis for the Borana institutions and livelihoods. From the beginning of the 20th century, while the Borana and other Oromo residents also increased in numbers, powerful **waves of in-migration** from the highlands of the north started arriving in the territory of the Borana. Already at the time of the Ethiopian Empire, many armed soldiers came to settle in the most favourable places for agriculture, bringing with them farmer servants from other parts of Ethiopia. The early settlements developed into progressively larger towns, which **took over** all the **most productive sites** for both settlement and agriculture, such as the riverbanks and higher humid forest areas— crucial for the viability of the entire vast pastoral system. The pastoralists remained marginal to the process of urbanisation and largely excluded from education, (the education was offered in Amharic, a main official language rarely spoken by the pastoralists). While the economy was

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235   Ta'a, 2004.

solidly controlled by the urban elite, livestock numbers dropped below the survival threshold for most pastoralist families, which progressively fell into poverty and severe food crises.

Throughout the dictatorial socialist period (rebel resistance, violent repression, innumerable human rights abuses) and the following development-obsessed period (resettlement programmes, donor-driven projects), the pastoralists saw their capacity to cope with environmental crises increasingly attacked and disempowered.[236] Their livelihood problems affected the norms and values sustaining the traditional institution and, with that, the governance of the people, the land and the relation with the sacred values of the Borana. The traditional *Gadaa* institution— specifically undermined and suppressed by various regimes— seemed doomed to disappear.

Contrary to expectations, however, the *Gadaa* system is today under a form of **renaissance**. Since 1991, Ethiopia has adopted a multi-national constitutional model. Slowly, different ethnic nationalities have been allowed to re-discover their cultural roots. For instance, the Oromo have built on the research by several scholars and intellectuals on the *Gadaa* system and revived some *Gadaa* centres through the Oromia National Regional State. In 2016, the *Gadaa* system achieved official recognition as part of the UNESCO Representative List of Intangible Cultural Heritage of Humanity.[237] Today, Bule Hora University has launched a master's degree programme in *Gadaa* studies, Jimma University has started the *Gadaa Journal*, and several research centres of the universities located in Oromia are exploring how the system could be utilised in the 21st century to foster deliberative democracy for the Oromia National Regional State. It is difficult to imagine how the system could serve many millions of Oromo citizens, not only because of issues of scale but also because of the egalitarian, generation-based roles that are at the heart of the system. But the *Gadaa* can continue to govern the territories of life of the *nomadic pastoral communities* in an effective and meaningful way. Viable social units should be able to live well on their territories… provided they include all ecological niches necessary for sustainable livelihoods.

236   This historical evolution is helpfully reviewed in Bassi, 2002.
237   https://ich.unesco.org/en/RL/gada-system-an-indigenous-democratic-socio-political-system-of-the-oromo-01164 accessed 2024.

Livelihood bonds

As shown for the *Gadaa* institution of the Ethiopian Borana (case example 6), it is hardly possible to separate the cultural and spiritual bonds that connect a people and its territory from the bonds that pertain to its material livelihood needs, in particular food and water. A similarly telling example of deep interplay between the satisfaction of spiritual and material needs comes from Asia, under the remarkably diverse ecological conditions of Bali (Indonesia). In Bali, the local **traditional irrigation societies** (*subak*) work under the transcendent authority of Dewi Sri, goddess of rice and fertility. Every stage of a *subak*'s water sharing is marked by a ritual ceremony, held in the temples at the top of the water flow and in the shrines interspersed among the rice terraces. The ceremonies are scheduled according to one of the Balinese calendars (the *pawu-kon* calendar of 210 days per year— exactly double the local cycle for growing rice), and at each ceremony the farmers are reminded of the timings and sequence of the water flows.[238] Century after century, Bali's water and land management to produce rice— the staple food central to the local diet and livelihoods— has thus functioned embedded in spiritual life. Similar ceremonies and similar demonstrated capacity to continue to produce sustainably for millennia in deeply **manicured terraced environments** are found in other countries in South-East Asia and across the Mediterranean region, the Andes and the Himalayas. While the labour-demanding terracing and cultivation may be maintained by families and clans, an entire community is bonded to a territory by collectively managing water, maintaining security (including to prevent natural disasters and wildlife attacks), dealing with spiritual duties, etc.

In India, the **orans** of Rajasthan are natural territories of various sizes collectively ruled, managed and used for **grazing** herds and collecting **water**, **wild foods, medicinal plants** and other **forest products**. Invariably, *orans* are important for local spiritual practices (e.g. they all include a temple and are dedicated to a specific 'deity').[239] There are an estimated 25,000 *orans* in Rajasthan,[240] and most include one or more water bodies (see Picture 2), crucially important for the regeneration of aquifers and the ecological functioning of the Aravalli Range and Thar Desert ecosystems, including for soil production, plant pollination, seed dispersal and maintenance of local climate. The *orans* regulate water flows, mitigate the destructive consequences of both floods and droughts, and provide habitats and landscape connectivity— the underpinning of local plant and animal biodiversity. Depending upon the same traditional knowledge and practice that keep the *orans* alive, the **khadeens** are natural depressions in the land where rainwater, often channelled with the help of sand embankments arranged by peasants, can remain stored underground for long periods. As peasants sow seeds in the muddy *khadeens*, it becomes possible to cultivate crops even in areas subjected to long and severe droughts. *Khadeens* are also important for wildlife, and as sources of drinking water.

Today, the *orans*, the *khadeens* and all commons of the traditional communities of Rajasthan continue to support the livelihoods of millions of peasants, pastoralists and their livestock.[241] Yet, the institutions governing them are **poorly visible**—[242] the proper behaviours and practices that regulate them are so much **part of social norms** that they have melted into 'normal life'. An ominous consequence of that poor visibility is that— while a frenzy of infrastructure development and development businesses is sweeping India— many

238   Reader, 1990.
239   Singh, 2016.
240   Environmental Education Centre, 2017.
241   For the orans, a specific example is well illustrated in ICCA Consortium, 2021. For the khadeens, see: https://india.mongabay.com/2023/12/resurrecting-khadeen-the-ancient-water-harvesting-structure-of-rajasthan/
242   The variety of behaviour related to territories of life is extreme. On the other side of the planet, in the coastal bays and inlets of Southeastern Alaska, Indigenous peoples used to make their relationship with nature as conspicuously visible as possible: they carved and erected elaborate totem poles to show lineages, reciprocities, relations with the deceased and connections with the supernatural beings that transform themselves into animals and participate in people's lives. Much of this, today, has been actively transformed by invading cultures (Hoagland, 1997).

urban dwellers, bureaucrats and developers see the *orans*, *the khadeens* and the commons in general as 'idle' land, just waiting to be occupied and made productive.[243] Facing this, there are reports of communities rising against the 'development' interventions imposed upon them.[244]

Most governance institutions of the commons see livelihoods as a fundamental concern. In the High Atlas region of Maghreb, an ancient[245] widespread institution called **agdal** (*azayn* in Amazigh) is a system by which communities 'set aside' and actively survey specific areas and territories during certain periods.[246] In so doing, they both secure exclusive uses and regulate access to optimise food productivity in line with the rhythm of the seasons. The system is similar throughout the Maghreb and applies to **cultivated fields and orchards** (*séguia*), **community forests** and **communal pastures**. The *séguia* protects plants in the crucial period when they need to fully ripen before harvest, as in the case of grain fields but also orchards of walnut, argan trees or date palms in oases. The forest *igdalem* (plural of *agdal*) are protected during the summer months and harvested in carefully regulated ways to secure timber, or when families need extra firewood and fodder for their animals during particularly severe winters.[247] The pastoral *igdalem* concern mostly high-altitude pastures, where the transhumant tribes meet every summer and celebrate some of their most appreciated festivities. During specified periods at the end of winter, and occasionally even in the midst of summer, access to all the migration routes to the summer fields is forbidden, to favour the development of the pasture grasses and allow them to reseed. Other *igdalem* concern the grassland around waterways or protect villages against landslides and falling stones.

All types of *agdal* were numerous in the past. Today, they are still found wherever a clan or long-time resident community (*douar*) that matured a collective customary right and possesses a respected organisation (*jmaâ, naib, amghar*) is still capable of organising the surveillance of the rules (usually by individuals of known honesty and voluntarism) and adjudicating sanctions for infractions (e.g. to support festivities or other common

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243   The Delhi-Mumbai expressway under construction and the industrial belt supposed to surround it are a major source of concern. Another source of concern is the extensive use of the land for solar power plants (see: https://india.mongabay.com/2020/07/locals-brace-to-fight-for-their-oran-in-rajasthan/).

244   Rahman, 2020; Veena *et al.*, 2021.

245   Rock engravings from the Bronze Age are found to depict pastoralist-hunters in the most productive high altitude pasture igdalem, demonstrating the historical and cultural value of these environments.

246   Auclair & Alifriqui, 2012. The name agdal means 'garden' and embeds a dual sense of 'forbidden' and 'sacred' referring to an abundance of vital resources secured by a community for its life of today and tomorrow. The name is polysemantic, referring to both a territory and the institution that secures it. And the concept is symbolic of the many values of the High Atlas cultures— including 'acting for the collective good' and 'conserving resources for the long term'. In this sense, the agdal is a place revealing honour— which rules the relations among people within a community, and a place revealing baraka (blessings)— which rules the relations between God and the different tribes. A summary analysis of igdalem in Morocco is available in Alifriqui (2016).

247   An analysis of forest igdalem in Morocco is available in Herzenni (2008).

needs).[248] Regrettably, despite its effectiveness and embedded ecological wisdom, the ancient *agdal* institution is not faring well in the face of modernity. The causes likely include the uncertainty of governance due to the **multiplication of territorial authorities** (old *jmaâ* and religious authorities as well as new municipalities and technical services). This is compounded by changing patterns of land use, destructive initiatives by unscrupulous investors, and reduced interest among young people in rural life. The *agdal* institution is part of the social-ecological heritage of the entire region, but it is unclear, today, how it could be revived, strengthened and made to fit contemporary livelihood conditions.[249]

A relatively recent example of a community land governance institution centred on livelihoods *are the **ejidos*** of Mexico. Like the *agdals*, they are rooted in local knowledge and capacities and community organisations but, unlike the *agdals*, they benefit from strong legal backing. With variable overall socio-economic results, *ejidos* cover, in the new millennium, *more than two-thirds of Mexico's 64 million ha of forested land,*[250] *providing livelihood support to about three million people via individual and* **communal farming, ranching, forestry operations** *and, in some cases,* **tourism initiatives***. The ejidos come with secure collective tenure based on an agrarian reform strongly promoted and implemented by President Lázaro Cárdenas in the 1930s.*[251] *The ejidatarios— those who were assigned land together— had the choice of cultivating parcels individually, cultivating all land in common, or subdividing their property to accommodate both. Different paths were taken according to the ejidatarios and the value of the land they received. Many of the economically and ecologically successful ejidos coincide with situations where the ejidatarios had, or managed to develop, some* **shared trust***, including because of shared ethnicity.*[252] *It also seems important to have had a body of local knowledge and know-how (e.g. in forestry) and the capacity to coordinate collective work.*[253] *The system has not fared well, on the other hand, in situations where the land was too poor or the forest too small to ensure a decent living, when the community was divided, or when the economic infrastructure (e.g. roads, support for sustainable forest production) was acutely insufficient.*[254] *The ejido system does not fit well with a neoliberal economy and, in* 1992, a parliamentary amendment to the Mexican Constitution even attempted to end it once and for all by allowing the privatisation and fragmentation of *ejido* land. The amendment was approved, but was mostly ineffective. Most *ejidos* remain today as they were prior to the constitutional amendment.[255] *The example of Xcalot Akal (case example 29) illustrates new threats and opportunities facing ejidos that enter schemes of 'payments for ecosystem services'.*

In Europe, the local institutions for the governance of commons— which for centuries were the widespread *norm*— have now been largely substituted by rural municipalities, run by elected councils and generally based on political party affiliations. Only some particularly successful institutions managed to resist the pressure, conserve their original features and get official recognition and support. This, for instance, is the case of the *Regole of Cortina d'Ampezzo*, in Italy, whose process of official recognition went as far as influencing the legislation of its region and State (see case example 7). Other customary institutions for the governance of commons are still active in Europe, but many are struggling to be recognised by State governments as valuable land governance regimes.[256]

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248   Auclair, 2012.
249   Auclair, op. cit.
250   Gaworecki, 2018.
251   This was a main measure in the *land reform*.
252   DiGiano *et al.*, 2008.
253   Salas, 2018. Some refer to this as 'social capital' (Ostrom, 2000)— a term not adopted in this work.
254   Merino & Martínez, 2014. Winters *et al.* (2002) also confirm the positive ecological results of the presence of social and 'public' capital.
255   David Barkin, personal communication, 2023. The amendment to Article 27 of the Constitution is discussed in Olivera Lozano (2005).
256   See Vasile (2019) and Iordăchescu *et al.* (2021) for the case of Romania. In France, the 'sections de commune' or 'biens sectionaux' comprise land governed directly by rural municipalities. A proposed legislation recently attempted to eliminate them and incorporate land under state property, which would have amounted to nothing short of massive land grabbing and cultural disruption (Smith, 2020). The proposed legislation, however, became 'null and void' after years of waiting for discussion in the French Senate (Gretchen Walters, personal communication, 2023).

Case example 7.

From rags to riches: a thousand years of diplomatic skills and tenacious determination for a mountain community that governs a World Heritage Site in Italy[257]

Set in a spectacular high valley of the Alpine Dolomites, the Italian municipality of Cortina d'Ampezzo includes a large territory of pastures and managed forests held by the *Regole* d'Ampezzo, a community organisation that originates in the distant Middle Ages. The first residents settled the valley after centuries of frequentation during the summer season only, when they painstakingly cleared the forest at the bottom of the valley and managed to till at least part of the land. Most of them were shepherds and used the territory as pasture for their herds (cattle, goats and sheep) and to extract timber, firewood and other products from the coniferous forests. Since the first millennium, the inhabitants of the Ampezzo Valley developed their own **common rules** ('*regole*' means rules) to manage the pasture and forests. The oldest conserved written example dates from 1225 and some such rules likely regulated the extraction of timber for the ship the young Marco Polo boarded for his famous journey to China. From 1338 on, some documents called *Laudi*[258] listed the agreed rules for the entire Ampezzo valley. Times were not peaceful, and the *Laudi* needed **frequent adjustments** to suit this or the other invading army of military 'protectors'. In 1420, the Republic of Venice formally recognised the common property of the Ampezzo valley under the governance of various *Regole* organisations. In so doing, the Republic secured a reliable source of timber, while the *Regole* passed a major test of their **diplomatic capacities** that would allow them to maintain their own constitution, privileges and habits under many and diverse dominant powers.

For centuries, the *Regole* managed, maintained and lived from the Ampezzo's pastures and forests. They successfully kept their institution alive, despite the internal disagreements and resulting revisions recorded in local judicial documents. In 1885, the collective property of the *Regole* d'Ampezzo was formally reconfirmed by the Austrian Emperors of the Habsburg dynasty. The First World War saw the valley in the line of fire, and its forests damaged by indiscriminate timber extraction. At the end of the war, the valley passed to the Kingdom of Italy, whose legislation initially refused any type of formal recognition of the *Regole*. But the *Regole* were not discouraged and launched into **legal battles**. Through several interim solutions, an agreement between the new Ampezzo Municipality and the *Regole* was reached only after the end of the Second World War, clarifying the boundaries of land ownership between the two. In 1962, the *Regole* developed a new *Laudo*. From then on, they continued to interact with the evolving administration and legislation of the Italian Republic, which became increasingly aware of the *Regole*'s uncommon **capacity to manage the land** and **conserve its ecological integrity**.

The valley of Cortina is large and sunny, encircled by imposing mountains, sharply shaped and tainted a characteristic pale rose. In winter, the valley is covered in snow. In both the summer and winter seasons, tourism is an economic pillar.[259] Today, the municipality has approximately 6,000 residents who, at the height of the tourist season, share the valley with a massive influx of tourists, bringing the total inhabitants to well above 50,000 persons.[260] The initial development of tourism

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257 Case example compiled by Grazia Borrini-Feyerabend based on Lorenzi and Borrini-Feyerabend (2011). The picture of members of the Regole managing trails at the beginning of spring is courtesy of the Regole of Cortina d'Ampezzo.
258 From the Latin "laudamus quod..." which can be translated as "we openly appreciate and recommend that...".
259 In 2026, Cortina will host the second Winter Olympic Games of its history.
260 The number of tourists in Cortina is well above one million people/day per annum (Lorenzi & Lorenzi, 2022).

was accompanied by rapid and poorly regulated housing developments. Since 1972, however, building permits have been blocked. This has guaranteed the conservation of most of the territory but induced a disproportionate rise in the price of real estate and the cost of living— resented in particular by young couples seeking to establish new families.

In 1979, the *Regole* were involved in a controversy with the Italian Army, which was using their pastures for military practices, damaging the territory, and starkly acting in ways that harmed both traditional activities and tourism. Once again, the *Regole* proved their ingenuity and capacity to embrace innovation: they **asked** the Region of Veneto **to establish a natural park** on their property. This proved an excellent idea, which fended off both the military exercises and a freeway that was being planned and would have defaced the territory. In 1990, after long and careful negotiations, the Natural Park of the Dolomiti d'Ampezzo was thus established, including part of the territory of the *Regole* as well as land belonging to the Italian State. The protected area is formally governed by the *Regole* under a mandate of the Veneto Region and is part of a larger composite National Park recognised as a World Heritage Site for its natural values.

The formal recognition of the governance of a protected area by a *sui generis* community institution has required modifications to the regional and national legislation. Building upon their centuries of **diplomatic experience**, the *Regole* managed to achieve that feat… and more. They obtained a **tax-free status** and now receive **project funds** and **financial support** for the management of the protected area from the Veneto regional government, the Italian State and even, for specific projects, from the European Union. Noticeably, the *Regole* have obtained **recognition** and respect despite some eyebrow-raising characteristics, including that their inherited membership rights and responsibilities are passed on nearly solely along a male descendant line (as they have also elected a woman as president, many stress that this is not due to misogyny, but to keep faith to their territory-based tradition). The *Regole* still take decisions in their General Assembly, where all the representatives of member families meet at least once a year[261] and decisions are thoroughly discussed to obtain consensus or as strong a majority as possible. Elected officials rotate frequently, preventing the establishment of power groups. In fact, every member of the *Regole* sooner or later takes on a role in the administration of the common heritage. This form of **direct engagement** fosters an equilibrium between conservative and progressive decisions, as well as between economic and environmental concerns.

Where does the vitality of the institution governing the *Regole* d'Ampezzo come from? Likely, the fact that the valley is relatively isolated, and that the environment demands **hard work** to support human livelihoods has contributed. But history shows that the *Regole* were not left undisturbed. On the contrary, they had to relate with successive invading powers and legislators. They had to placate ambitions, satisfy material needs and adjust to the diverse views of what is proper and legitimate under various hostile dominant powers. The *Regole* have met these requirements by a unique mixture of **flexibility**, **diplomatic capacities** and **unwavering determination**. We may speculate that the very combination of historically harsh living conditions— requiring cooperation and unity just to survive— and the repeated attempts by external powers to take control over their territory stimulated and maintained the uncommon vitality of the *Regole* as a governance institution. In recent times, it is also likely that tourism-related wealth has also encouraged people to remain in the valley. Finally and crucially, a role was likely played by the rich **local knowledge, skills and practices** that were handed down from generation to generation and nourished a sense of possessing a **common heritage**— a territory to be governed and managed together.[262]

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261 The members number about 1,200 persons representing approximately 1,000 households. The title of Regoliere or Consorte (the latter literally 'a person who shares the same fate as the others') is acquired by each male son from his father and grandfather at the age of 25; in the case of no male son, the rights pass to all daughters, provided they do not marry outside the community. This system has its historical logic, as the valley could only ensure the livelihood of a limited number of families. If the rights had been extended to all immigrants, it would not have been possible to satisfy the needs of the community. Because of this, the community historically closed itself off to all foreigners (people not born locally). The contemporary economy, however, brought job opportunities unrelated to the land, and the residents have grown in number. The members of the Regole, in the third millennium, comprise only about 40% of the residents of the municipality of Cortina.

262 The Regole d'Ampezzo govern a territory of more than 16,000 ha (160 km2).

A common heritage demands much from everyone. It asks for physical work and other investments to respond to community needs, exemplary respect of rules and readiness to take on public duties for the good of all. For the *Regole*, the interests of individuals have always been subordinated to those of the community and anyone who repeatedly disrespected the rules was expelled—a socially disastrous fate that centuries ago may have meant starvation. Balancing these harsh conditions is the fact that the territory offers timber, firewood, pasture, water and wood products to all member families.

Whatever was in surplus to local uses (e.g. timber) was always sold to acquire what the community could not produce itself, such as wheat, salt, metals, etc. The community income allowed it to support families in difficult conditions as well as the sick or poor. This was done so well that, for centuries, deprivation and inequities were rarely encountered in the valley.[263] The *Regole* d'Ampezzo maintained themselves for centuries as a **prosperous independent republic based on local solidarity**.

263   Merlo *et al.*, 1989.

The *Regole* used to exercise their own civil and penal justice and often negotiated exemptions from taxes and military service from their 'protectors'. Only the birth of modern States and the innovations brought about by Napoleon, the crown of Austria and the State of Italy altered that equilibrium. State laws and institutions never mixed well with the collective nature of the *Regole*, midway between a public service association and a private landowner. Yet, the *Regole* managed to re-affirm their territory as a **collective heritage** and succeeded in having it recognised as **indivisible**[264] and **inalienable**.[265] This logic is in open contrast with the capitalistic logic of contemporary economies. Timber extraction and the careful management of part of the territory for tourist activities (ski slopes, alpine shelters, storage places, etc.) provide the *Regole* with a sizeable income, but this is no longer, as it originally was, essential for local livelihoods. The **income** is thus fully **re-invested in the conservation of the territory**, to keep it intact for future generations. If one immediate benefit can be identified, it is a feeling of **justified pride** in the territory they have conserved so well and, for some, a strong sense of collective identity as a result. The territory of the *Regole* is not fenced and can be enjoyed by all, but only the members of the organisation have the right and responsibility to care for it and to maintain it as custodians. In this sense, the **responsibility** for the heritage is perceived **as a privilege**. And the responsibility is daunting. The heritage of the *Regole* has immense economic, ecological and cultural value and needs to be managed in a sustainable and equitable way. The institution itself is a formal 'private actor' with a sizeable budget and staff.

Building upon a stunning thousand years of history, the *Regole* continue to function and entrust the care of their territory to new generations. Their governance is well consolidated, but the fact that local livelihoods are no longer directly dependent upon the local gifts of nature brings unprecedented challenges to the vitality of the bond between the territory and its people. This is compounded by demographic factors (natality among the *Regolieri* is well below replacement rate, as among Italian citizens and European citizens in general) and political factors (the local economy is thriving, but increasingly controlled by non-residents).[266] Some of the governance rules that keep the *Regole* as a closed community with little capacity to incorporate new members[267] may soon change in response to these challenges. The new rules, however, must preserve the sense of 'community' felt by the *Regolieri* and the bond that the *Regolieri* have with the territory and the respect they bring to it— the intangible element that has made the difference between good governance and short-sighted exploitation of the land.[268]

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264   The territory cannot be subdivided among the families that collectively possess the rights, nor can a family identify a given part of the territory where it would have its own specific rights, as the uses must be exercised collectively and without recourse to quotas.

265   The assets of the Regole cannot be passed on to a third party, they can neither be sold nor exchanged or claimed, and they are guaranteed to maintain their unity and silvo-pastoral nature in perpetuity.

266   Lorenzi & Lorenzi, 2022. The Winter Olympics took place for the first time in Cortina in 1956, jump-starting the tourist boom of the area. They will again take place in Cortina in 2026, with many possible further impacts.

267   This is so even among long-term residents not from the original Regolieri or from the families of daughters of the original Regolieri (ibid).

268   Ibid.

Livelihoods bonds between communities and their commons encompass terrestrial but also coastal and marine environments. For instance, Japan has many longstanding and flourishing community-based **fishery operations**.[269] For some researchers, this is due to strong traditional capacities to govern and manage specific *sato-umi* (**seascapes**), including by establishing collective rules for using marine resources, carrying out management initiatives like planting of mangroves, enriching coastal habitats by positioning and maintaining specific rock patterns at sea, and taking care of ongoing **surveillance of the compliance to rules**.[270] There exist more than a thousand local institutions governing *sato-umi* in Japan, of which some two-thirds have some official recognition at the local government level.[271] Other commentators point to national legislation, which favours and promotes community engagement in fisheries at municipal level.[272]

Community institutions governing fisheries and coastal areas— often depending on a favourable mix of traditional capacities and favourable legal niches— exist in many places other than Japan. Examples span from Melanesia and Polynesia[273] to Spain (see the example of the *mariscadoras* of Galicia described in case example 1), from Madagascar[274] to Taiwan. The small island of Lanyu (Pongso no Tao), off the southeastern coast of Taiwan, is known for a major traditional celebration: the yearly return of flying fish. In local memory it has always been an occasion for the elders to speak about environmental issues and dispense advice among all the

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269   We are talking here of fishing in customary coastal and marine territories and, mostly, national waters— not of industrial fishing by the extractive fleets operated by Japan and many other countries throughout the oceans.
270   Yanagi, 2013. See also Kalland, 1999.
271   Sninikiro Kakuma and Noboyuki Yagi, quoted in Borrini-Feyerabend *et al.*, 2010, p. 13.
272   For Yamamoto (1995), this derives from the democratic reforms enacted by the Allied Forces that occupied Japan from 1945 to 1952 and promoted a redistribution of land and fishing rights. The Fishing Cooperative Associations established at that time could obtain exclusive fishing rights from their municipalities, which nourished a sense of 'ownership' and promoted the sustainable management of local fisheries.
273   Govan *et al.*, 2009a.
274   See: https://mihari-network.org/ accessed 2024.

Tao people. Recently, however, the fishing practices have changed drastically, for instance the collectively-owned and decorated rowing boats have been replaced by motor boats belonging to individual families. Today, the traditional ceremony for the return of the flying fish is attended more as part of folklore than as the serious moment of fishery governance and community organising that it used to be. Similarly, the collective boats are cared for with pride and beautifully decorated... but rarely actually used. Yet, the elders of Pongso no Tao keep stressing environmentally sound advice— such as avoiding constructing buildings too close to the beaches (see Picture 3). In Hawaii, social-ecological production systems of so-called pre-contact societies were inspired by natural ecosystems in local practices that some refer to as 'ecomimicry'.[275] The end result of such practices— an increase in species richness and abundance (*'āina momona*)— was crucially dependent on maximising species fecundity by **strictly regulating harvests**. Only societies gifted with effective local governance and stewardship ethics are capable of that. Today's legal and social conditions, however, are rarely supportive of traditional governance rules[276] and institutions. Enabling environments would imply adequate social services, economic incentives, research and conservation policies, local discussion platforms and well-enforced anti-pollution laws— all of which are too often absent or scarce. Moreover, as industrial fishing and fishmeal production expand their destructive practices, many fishing communities with an ancient history of governing their fisheries come to face truly hard odds.[277] The need to **link local governance institutions and fishing territories**[278] and the need to recognise local ecological knowledge, practices and capacities are surfacing only too slowly.[279]

Bonds of knowledge and mētis

The relations between specific communities and their territories and commons are nourished by shared **memories** ('local history'), shared **language** (names for different places and the gifts they offer to people) and specific elements of useful knowledge.[280] We use the term **local knowledge** to describe knowledge derived by a sequence of historical observations in the same or similar localities— which some call 'natural experiments'—[281] accumulated, compared, reflected upon, refined and enriched as they are passed on from one generation to another. Clearly associated with local knowledge is the concept of **mētis**—[282] the *know-how* that resists any form of codification and is only acquired through engaged local practice. Crucially, local knowledge goes way beyond the description of given environments, the behaviour of animal species, or the property of plants, soil, watercourses and the weather. It rather concerns various forms of ecosystem *management*— like, what happens when fire affects the land, when we hunt out certain animals, when we harvest and reseed specific plants, when we physically shape the landscape or seascape in certain ways... Typically, it encapsulates ways by which **biological diversity** can be **modified, restored** and even **locally enhanced**[283] through multi-purpose interventions. For instance, the local knowledge embedded in terracing is useful to protect slopes, but also "...it replenishes soils and harvests water... takes an aesthetic value... [and is fully appreciated] within a social organization and a shared system of values which it supports".[284]

275 Winter *et al.*, 2020.
276 For instance: observing no-fishing days; using only prescribed gear; observing fishing taboos on specific places, species or periods; enacting seasonal fishery changes; dedicating certain types of fish only to certain peoples or occasions; carrying out biological monitoring; actively feeding wild fish; enriching habitats; and ensuring harsh punishments for infractions.
277 Sonneveld *et al.*, 2019.
278 Kalland, 1999.
279 Friedlander *et al.*, 2013.
280 See the description of tawai— an important concept for the Penan of Malaysia described in case example 19.
281 Gadgil *et al.* (2003) and Berkes (2012) offer excellent accounts of this, referring to 'traditional knowledge'. In this work, we use the term 'local knowledge' rather than 'traditional knowledge' to emphasise the dynamic nature of knowledge systems, which constantly evolve and integrate non-traditional elements that need to make local sense.
282 Scott, 1998.
283 Gadgil *et al.*, 1993. For instance, species richness may be locally enriched, or rare habitats may be restored.
284 Laureano, 2018.

The commons of Indigenous peoples and local communities in all world regions offer innumerable fine examples of regulations and enforcement of management practices based on local knowledge of the local environment.[285] Among the examples cited by Carl Folke *et al.* (2003) are the Chisasibi Cree hunters of Northern Quebec who "…rotate trapping areas on a 4 year cycle to allow populations of beaver to recover and seem to manage fish on a 5 to 10-year scale and caribou on an 80 to 100-year scale…"; the Maya descendants whose "…shifting cultivation systems, such as the milpa of tropical Mexico, sequence crops and non-crops…"; the Indigenous Hawaiians who "…manage whole river valleys as integrated farming systems, from the upland forest all the way to the coral reef…"; the African herders whose "…range reserves provide 'savings banks' of forage…"; or the Indian peasants whose "…sacred groves absorb disturbance as fire breaks for cultivated areas and villages…".[286] These **knowledge-rich management practices**, in turn, represent powerful bonds linking specific communities with specific territories, commons and the biological diversity they sustain. In fact, communities develop mechanisms for the **enhancement, adaptation and intergenerational transmission** of such knowledge,[287] while they apply and use it in the very context of its development.

A good part of **local knowledge** is expressed as 'accepted ways of doing things', rationalised because of diverse benefits or simply passed on through cultural or spiritual myths, stories and beliefs. Like scientific knowledge, local knowledge makes full sense only when perceived within a broader system of reference and meaning, a specific worldview.[288] Yet, while scientific knowledge is usually uncritically perceived as 'objective and invariant', it is accepted that local knowledge is **not separable from the social-ecological context** where it evolved, as it is "multifunctional, complex […] an integral part of a consolidated network of links and relations, signs and meanings…".[289] It thus makes sense that local knowledge is eminently **place-based**, as it finds most of its predictive and other values in the specific location where it was developed, and **socially-based**, as it finds most of its normative and regulating power and insights within the society and worldview that developed it.

This important feature of local knowledge is an element of concern. In fact, many of the **worldviews** that accompanied the development of knowledge **have changed** through time in major ways. We wonder about the original 'dreaming' worldviews of the Aboriginal peoples of Australia, as the elements of songlines that remain today can only suggest the immense physical and spiritual journeys of their ancestors across a huge land.[290] Similarly, we marvel at the engravings in hard granite rock in inaccessible places along the rapids of rivers in the Colombian Amazon, left behind by people who had no metal tools. The pictures of R. E. Schultes[291] convey their power, and their possible connection with human fertility. Even the shamans of today, however, even those who draw the *same design patterns* possibly 'suggested' by the same sacred plants… do they maintain the worldviews of their ancestors? If not, do they attain the *same* local knowledge?

285 Berkes *et al.*, 2000.
286 Folke *et al.*, 2007, and references therein.
287 Ibid.
288 The development of worldviews is a fascinating process, possibly emerging from the mental capacity to focus and unfocus our attention on specific relations and associations. In this way, some normal animal behaviours, like imitating and remembering, evolve into concepts, semantic hierarchies, and streams of related concepts, enabling new experiences to be framed in terms of previous ones. When the meaning of each concept shifts depending on the context provided by others' simultaneously evoked concepts, we may say that they form a conceptual web that, from the inside, is experienced as an integrated model of the world, or 'worldview' (Gabora & Aerts, 2009).
289 Laureano, 2018.
290 Chatwin, 1987; Norris & Harney, 2014.
291 Schultes, 1988.

Case example 8.

The valley of cheese: a regional natural park supports the economic and identity values of local knowledge in the Gruyère Pays-d'Enhaut region (Switzerland)[292]

The mountain valley of Gruyère Pays-d'Enhaut, in western Switzerland, spans about 180 km² of pre-alpine and alpine territory between 800 and 2,500 m above sea level. The valley carries the memories of at least 1,000 years of habitation by communities who tended forests and exploited mountain pastures with their cows and other animals. A written document recalling the local capacity to make cheese dates from 1312. A couple of centuries later, the Church and the Counts of Gruyère supported the organisation of grandiose celebrations in the high mountain pastures and graciously accepted that part of their 'dues' could be paid to them in the form of cheese.

In the 17th and 18th centuries, the production of **milk, butter and cheese** from the mountain pastures intensified and the valley continued to prosper from the **flourishing commerce** in cheese. The French Academy even came to establish the entry '*gruyère*' to refer to both the valley and the cheese exported from there. The commerce of the valley's hard cheese (cured and seasoned) was favoured by the secularisation of land consequent to the Protestant Reform and the strong demand for the cheese from various armies during the 30-Year War (hard cheese is energy-rich and conserves well— properties that make it excellent value for army food). The demand was so high that most of the valley's forests were cleared for pasture to increase cheese production.

Unlike in other valleys of Switzerland, many pastures in the Gruyère Pays-d'Enhaut region are family-owned or owned by the municipalities (the *communes*). During the early and mid-20th century, cheese production in Europe became more industrial in nature, to optimise production and satisfy the market demand for low-cost products. The local peasants of Gruyère Pays-d'Enhaut, however, remained attached to their family cheese-making tradition on the alpine pasture, which was less suited to large-scale production and commercialisation, and was more knowledge intensive and demanding. This brought about a vicious circle of **impoverishment** in the valley. As labour for cheese production became redundant and the economic crisis worsened, many migrated away from the area, taking the knowledge necessary to produce the excellent hard cheese of their motherland to other valleys and countries. As local employment plummeted, so did the resources of the municipalities. An important but still insufficient measure to respond to this crisis was the **creation of a cooperative** where the herders pooled together their cheese to be stored, cured and marketed in a reliable and economically more efficient fashion.

In 1975, a new Swiss federal policy emerged to offer special support to mountain municipalities that organised themselves on a regional basis. In the Gruyère Pays-d'Enhaut Valley, three visionary municipalities grouped with several individuals and businesses to give birth to a regional development organisation. In turn, the organisation developed the framework needed to reflect upon the environmental and economic resources of the entire valley. From the beginning, there was clarity about seeking an **endogenous and participative path to 'development'**, rooted in the local capacities in forestry and agriculture. The cheese traditionally produced on the alpine pasture was thus recognised as a local treasure (the 'gold of the pasture') and the cooperative of producers was supported to establish the AOP[293]

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292   Case example compiled by Grazia Borrini-Feyerabend based on a presentation by Francois Margot in Geneva in 2017, and on Zbinden (2008). See also: https://youtu.be/YLjrElbQBZA accessed 2024. The picture of daily cheese making chores in the chalet d'alpage de Rodomont-Devant is courtesy of the Parc Naturel Regional de Gruyère Pays d'Enhaut.

293   AOP is a French language acronym for 'appellation d'origine protégée', i.e. 'protected designation of origin'.

label *Étivaz* to benefit from it. Landscape conservation was also among the initial objectives of the regional organisation, although broader ecological considerations, such as sustainable production and biodiversity conservation, were not mentioned. As a matter of fact, the establishment of a first 'nature reserve' in the region, in 1945–1960,[294] had created some notable controversies between local landowners and municipalities, on one side, and conservation advocates on the other.

Regardless of local opposition, towards the end of the 20th century, the natural reserve was further extended. Some national and regional authorities had carried out studies in the valley and discovered biotopes and wetlands of national importance, which prompted a conservation organisation to buy more land and devote it to conservation. Meanwhile, the **opposition to 'conservation'** of landowners and local municipalities— which had barely been involved in decision-making about it— was only augmenting. Finally, in the early years

of the new millennium, the idea of a 'regional natural park' emerged, with the explicit aim of building a bridge between 'conserving nature' and 'developing' the valley. Drawing from the definition of the UNESCO biosphere reserve, the regional natural parks of Switzerland are designed to favour landscape integrity, sustainable economic development and environmental awareness. In the Gruyère Pays d'Enhaut Valley, the park engaged all concerned municipalities by the **signing of a Charter** that includes a shared analysis of the situation, a plan with 10-year objectives and several agreements to reach them. The property rights of landowners are respected and agreements between them and the park's coordinating authority are ratified by the municipalities. Cooperation, communication and transparency are promoted, and subsidiarity is established as a principle.

The regional natural park of Gruyère Pays-d'Enhaut has demonstrated its value for the families who own the mountain pastures and remain custodians of the

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294   The land was privately acquired and donated to the municipality of Château-d'Oex in 1945 on condition that it became the nucleus of a large nature reserve. It took until 1960 to complete the necessary agreements between the Canton, the municipality and the environmental NGO Pro Natura.

local knowledge of cheese production. The park actively highlights, promotes and supports their capacities, and the cooperative that produces the Étivaz cheese has received an enormous publicity boost from the park. For instance, the *chalets d'alpage* (mountain huts) where cheese making is still carried out in traditional ways are doubling up as centres where tourists can learn about ancient traditions, sleep 'on hay', and eat and buy local products. Today, there are machines to milk the cows in the high pasture huts, cheese is mostly transported by car rather than by mule across mountain passes, and the cooperative has enormously enlarged its storage capacity and acquired a robot to turn, clean and add salt to the cheese. Yet, milk is still processed in the mountain pastures over a wood fire and according to traditional recipes.

Throughout the summer months the owners of the *chalets d'alpage* and their families stay in the alpine pastures and, morning after morning, make cheese by hand. During the rest of the day, they are busy tending their pastures and their cows. They usually also keep some sheep, goats, small farm animals and at times also pigs, raised in the open air and nourished with the so-called 'small milk' (*petit lait*) derived from the cheese production. It is demanding, skilled and satisfying work for all those involved, and certainly a reason to feel a bond of **identity with other fellow producers**, and some form of **affective connection with the land and the animals**. The connections with other members of the community in the producer cooperative may, in great part, be of an economic nature, but the **local knowledge** about the pasture, the weather, the animals, and the complex process of transforming milk into cheese of excellent taste and flavour also play a powerful role. It can be affirmed that the presence of the natural regional park has enriched, secured and added value to the local capacity to govern and manage the environment in a collective way.

In eco-centric (rather than anthropocentric) worldviews, many features of the natural world possess totemic powers and responsibilities. Some worldviews emphasise gender roles.[295] Others disregard material possessions, and do not perceive time as a linear phenomenon that allows the possibility of 'progress'. Still others do not conceive power as embedded in coercive force but in prestige, generosity in the anarchistic vigour of storytelling, jokes, abundant sexuality and celebrations which render despotic power hardly possible.[296] Such diverse worldviews generate profoundly diverse relations with nature.[297] We can only guess at the worldviews and 'frameworks of meaning' that evolved in human communities throughout millennia and were expressed in thousands of diverse languages. The erosion and loss of such **languages** throughout the world— currently rapid and relentless— is an ominous sign of the loss of diverse 'frameworks of meaning' and the bonds they weave between communities and their territories. And, with those, go the diverse organisations, processes, rules and values of local governance institutions that much contribute to conserving biological diversity.[298]

Why do languages disappear? Why is a great deal of local knowledge no longer passed on to young people? Why do some territories and commons become depopulated and poorly governed? There are many reasons, most of which require detailed analyses of political economy. Totalitarian regimes, for instance, impose language, culture and behavioural uniformity within their borders to strengthen national and patriotic feeling.[299] Colonial practices have played a role via **forced sedentarisation, indoctrination** and forced **use of dominant languages**.[300] Even policies and practices framed and designed with the intention of being beneficial— such as the provision of access to **school education** for children and adolescents—[301] are crucial factors of language and cultural loss. Local knowledge and practices, and the associated biodiversity, can even be rapidly upset by **environmental policies** designed to solve specific problems. In 1999, for instance, China adopted a policy to respond to devastating floods— the country-wide Grain for Green programme that discontinued agriculture on slopes over 25 degrees, where trees were instead to be planted. If farmers planted trees, they would receive grain subsidies for eight consecutive years. Among many others, the Dulong shifting cultivators— custodians of sophisticated local knowledge combining special seeds, tools and practices to cultivate highly sloped land— were compelled to abandon their customary livelihood practices. Among the consequences, the Dulong children missed learning from their parents, many of the unique seeds and tools used by the Dulong were not maintained, and people became increasingly accustomed to the food of the lowlands.[302] By the end of the programme, how much of their local knowledge and capacity to pursue traditional livelihoods was lost? Today, as the Chinese government proudly claims to have eradicated poverty among the Dulong, others wonder whether this was worth the price of their distinct culture and sense of identity.[303]

295   In the Haudenosaunee Confederacy, women of the Clan Mothers are responsible for the appointment, oversight and potential removal of male Tribal Chiefs— an embedded, effective system of separation of powers, possibly one of the oldest known among humans (see https://www.haudenosauneeconfederacy.com/ accessed 2024)

296   Clastres, 1974.

297   For a description of some "other ways of being human" that we may recognise as part of more enlightened approaches to history, see Anderson (2018).

298   The organisation Terralingua (www.terralingua.org accessed 2024) has developed and uploaded comprehensive information about these processes.

299   An example from Spain is discussed by Shabad and Gunther (1982). See also the Chinese example discussed in the text.

300   An example is discussed by Heyes and Jacobs (2008).

301   An example is discussed by Eoin (2016). The promotion of multilingualism, multiculturalism and education for critical thinking is also possible, but complex to implement and rarely adopted.

302   Wilkes & Shicai, 2007.

303   This is not a rhetorical question and does not have an easy answer. By 2009, changes in land use and grain availability had already so clearly affected local agricultural knowledge and practices that seed fairs, arts competitions and the revival of swidden cultivation in small areas were attempted (Shicai *et al.*, 2010). By the early 2010s, however, dependence of the Dulong on government programmes was extremely high and the surplus of rural labourers had produced a pool of off-farm workers seeking wage labour at the mercy of the market. Orphans of the social activities and values that used to be at the heart of their cultural identity— including clan life and spiritual beliefs— the option of migration became the most attractive for the Dulong youth (Gros, 2014). By 2021, however, the Dulong have become a showcase of the Chinese system. Official news available from the Internet reports that poverty among the Dulong has been eradicated. Since 2018, the Dulong are said to have abandoned shifting cultivation, that their local livelihoods focus on producing a lucrative local crop for the market, and that a tunnel across a mountain connects the Dulong villages to the county capital in three hours rather than the three days needed before. The new prosperous village life (all homes with bathrooms, electricity, radio, TV and 4G coverage; paved roads; health insurance for all; free education from pre-school to high school) is featured in Chinese TV series that narrate the path of having 'overcome poverty' with the help of the Chinese system.

Some insist that local and traditional knowledge and mētis could be better conserved if they could be better valued in economic terms. In fact, the literature on the economic value of 'traditional knowledge' is abundant, and a good part of it focuses on ways of recognising the intellectual property rights of the peoples and communities that developed and maintained the knowledge itself.[304] Some initiatives have hailed the potential financial benefits of bioprospecting[305] and promised to procure direct returns to communities and countries of origin. Such initiatives were generally controversial, and some have now proved ineffectual.[306] It is rare, on the other hand, to encounter efforts at valuing local knowledge and mētis by securing and supporting a community's capacity to keep them alive in the territories where they were generated.[307] For the holders of knowledge and mētis, a necessary component of this would be the fact of **securing their governance of the territories**[308] where such knowledge and mētis were developed, where they still find their meaningful application and where they could be allowed to evolve.

Security of governance can be achieved in many and diverse ways. In countries where governance is nearly synonymous with legal land ownership, collective ownership of land is the first that comes to mind as in the case of the *Regole* of Italy (case example 7). But long-term leases may work as well, as may the respect of customary rights, secured under specific agreements and legislation. Even private ownership of contiguous land by individual landowners may secure 'collective governance' when the landowners agree on collaborating for common objectives— for instance, to maintain and add value to their traditional practices. This can even be supported by the establishment of a protected area, as shown by the Étivaz cooperative of Switzerland (case example 8). Secured on the very territories where they were generated, used and re-created, local knowledge and mētis support environmental governance institutions of unexpected innovation and creativity.

Bonds of collective identity and struggles for self-determination

Just as territories and commons are shaped by the peoples and institutions that govern them, peoples and institutions bend and adapt around their territories and commons. If this kind of co-evolution continues for decades or centuries, it naturally nourishes a sort of 'mutual adoption' by which the territories support the livelihoods of human communities and, in turn, the communities do their best to keep their territories productive and healthy. Through these protracted exchanges, the members of the community are likely to acquire the sense of **'belonging to a place'**. This adds to the feeling of security and self-worth that can go with being part of a group, appreciating shared cultural expressions, a language, a common history, and the very body of knowledge, capacities and rules that come to be applied to the territory through time.[309] We see here a possible act of community self-creation or, in other words, the development of a collective identity—[310] which some refer to as 'ethnicity'— directly related to a territory.[311] There may be flexibility and fluidity in the definition of the borders and other features of the territory— after all, identity is a symbolic meaning[312] more than a material reality— but the territory is crucial to ground that identity into a concrete 'entity' that connects people with their past and desired future.

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304   A discussion paper on some of the relevant issues is provided by Correa (2001). Despite the high importance attributed to this by the Convention on Biological Diversity, exceedingly few successful cases of equitable distribution of benefits from genetic diversity are described in the literature. It may also be considered simply unjust and unfair that traditional knowledge is 'extracted' for commercial purposes and eventual economic benefits are distributed to people who have little to do either with the production of that knowledge or with its conservation, re-creation and use.
305   Via intellectual property rights transformed into monetary compensation, which some clearly see as a neoliberal imposition (Escobar, 1998).
306   A case in point is the fate of the InBio enterprise in Costa Rica, which partnered with Merck pharmaceuticals.
307   This option to value intellectual property is highlighted in Oli *et al.*, 2010.
308   Security of governance will be further discussed in Part V.
309   Clifford (1993) speaks of 'local distinctiveness'.
310   Sajeva *et al.*, 2019.
311   See also Ray, 1999.
312   A symbolic meaning arises when cognitive processes assign to a given situation or object a connotation that goes beyond the instrumental uses that one can make of them.

Typically, the cultural and economic values embedded in a territory or in commons are collectively enjoyed by a specific community and cannot be easily, if at all, subdivided or sold. Contributing labour to care for them may or may not be valued in a monetary sense (salary or compensation) but it is generally valued as part of a sense of **'belonging' to the community**— a defining feature of social life. This does not mean that the productive systems related to the commons are necessarily old-fashioned, poorly productive or economically minor. On the contrary, the institutions governing commons can make excellent use of modern technologies and achieve impressive economic results.[313] Their **logic**, however, is **more complex than** the search for a mere **economic benefit**,[314] as they are frequently also motivated by a desire for **self-reliance**, some form of autonomy,[315] and the rich local exchanges of **reciprocity** that generate **solidarity**[316] and some form of **social morality** within the community itself. Uniquely, the commons may thus be both 'outside the market', as it may be impossible to sell the land, and economically crucial as they may offer indispensable renewable resources. While a discussion of social morality would take us too far, we'll mention that by 'social morality' we mean the capacity of a community to activate and inspire respect to a set of values that, with time, bind the community together[317] and become part of its identity.

Being self-reliant means having control over decisions (e.g. about managing the territory in flexible and adaptive ways) but also being self-sufficient, that is, capable of fulfilling the material needs of the community locally and autonomously. In turn, self-sufficiency relates to the maintenance of the productive capacity of the environment— what we earlier described as 'sustainability' and we will refer to in Part II as **'future-oriented' decisions** taken by governing institutions. This vital bond of self-sufficiency, often also related to a desire for independence and **autonomy**,[318] roots a community into the specific locality where it draws its food and livelihoods, it 'territorialises' its possibility to continue to exist as a community-of-place.[319] While a bond of shared identity cannot be separated from those of livelihoods and local knowledge, it adds to them the dimension of **self-consciousness**[320] and **consciousness of time** (e.g. conscious of 'being a community', having a common history, wanting to exist in the future, needing to fulfil common material and immaterial needs; conscious of whether the territory is able to meet those needs, whether the territory is under threat; conscious of the degree of cohesiveness of the community, of the vibrancy of the community social life, of whether that is or not satisfactory for the youth; etc.).

A sense of common identity and a desire for self-reliance and self-sufficiency bring to the fore a new set of questions, including: can the territory be managed as a meaningful 'landscape unit'? Does it possess **biophysical coherence**, like a watershed or an island that may be managed with a good level of independence from the behaviour of others?[321] Does it possess **social coherence**, like the ancestral domain of a nation that can be 'legitimately' governed by the descendants of the original settlers?[322] Is any **functioning governance institution** in charge of the territory? Does the territory show **ecological integrity** or signs of damage and weakening? What management interventions does it need? Does the community possess the human, technical and economic resources for that? Questions such as these vary greatly in different contexts and as part of diverse worldviews. It is remarkable, however, that the very fact of

313   See case examples 5, 7, 8, 18, 20, 26, among others.
314   Barkin & Sánchez, 2020.
315   From the Greek autos (self) and nomos (rules), 'autonomy' means being able to make the rules of the community— a clear political meaning. The term also implies a level of independence in assuring the conditions and necessities for life— a clear economic meaning. For some, only a level of autonomy at an appropriate social-ecological scale means freedom from the industrial system and its accompanying social-ecological disasters. In this sense, as mass production and distribution and total dependence on salaried work necessarily imply the political and economic control by the few over the many, only territories of life with a level of autonomy at local or regional scale would thus offer a chance for convivial governance by the custodians themselves (Berlain, 2021).
316   Molm, 2010.
317   See, for instance, Ellemers (2018).
318   Barkin, 2023.
319   Vergunst, 2002.
320   The poet Gary Snyder refers to it as 'deep local consciousness' (quoted in McGinnis et al., 1999).
321   McGinnis et al., 1999.
322   Murphree (1997) would also wonder whether there can be an effective marriage between the ecological and social topographies.

discussing them may strengthen a collective identity and provide renewed and powerful awareness of the territory itself, as happened for the Manobo of Soté people in the Philippines (case example 9).

An act of **reciprocity** within a community is a provision of support, help, advice, labour or material goods that is **not negotiated** and is **offered unilaterally**. Studies have shown that reciprocity is consistently associated with **trust**, the perception of fairness and **affective feelings**, and that widespread reciprocity within a community generates strong **integrative bonds**.[323] Interestingly, reciprocity can be *indirect*, meaning that exchanges do not need to take place to and from the same individuals (or possibly sub-groups), but may benefit third parties (or sub-groups) enlarging and multiplying a net of ties in the community.[324] A sense of clear, if **indirect**, **reciprocity** applies to the case of providing volunteer investment and care for a shared territory or commons. Examples of this may be rushing to help to put out a wildfire, investing personal time and materials to repair a damaged wildlife barrier, planting slow-growth trees, or actively participating in decision-making and demonstrations to protect the community territory from harm. Such non-negotiated and non-monetary exchanges within a group are expected when a territory is governed and managed by a community, and they provide its members with invaluable social benefits.

As the frequent occurrence of such acts of care nourishes reciprocity, it also generates **solidarity** within the community. The term 'solidarity' has roots in the Roman law of obligations that declared individual members of a family or community liable to pay debts incurred by other members (*obligatio in solidum*). This is another way of saying "of many we make one", we have a sense of **collective identity** and a sense of **shared responsibility**.[325] Importantly, solidarity does not diminish the value of diversity within a community, it rather enhances it, as a more diverse group of people is more likely to engage complementary capacities for the common good.

A typical situation where communities may rapidly develop a sense of solidarity is when they face an external threat. Many local institutions that emerged to govern a territory or commons have been relatively small and endowed with limited means. From national States to the modern globalised market system, the forces of **imperial history** have had formidable capacities and encountered few difficulties in overpowering such local governance institutions. Considering only the last centuries, we find historical phenomena such as the 'enclosure of the commons',[326] colonisation, colonial wars and neo-colonial relations,[327] the imposition of control by modern State administrations over forests and other 'natural resources' for development purposes,[328] green grabbing,[329] colonisation of nature[330] for 'conservation', and much more. All these phenomena— to which we will return in Part IV of this work— have engendered the **degradation** and at times the collapse **of many traditional governance institutions**, the majority of whose stories remain unrecorded and unknown.

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323   Molm, 2010.
324   Ibid. See also: Nowak & Sigmund, 2005.
325   Both are more related to symbolic meanings and shared moral values than to material realities or even specific elements of knowledge or beliefs. See Cary, 1993.
326   Polanyi, 1944.
327   The complexity of these phenomena is staggering, as are the possible references. Some entries may be provided by Ferro (1994), Fieldhouse (1981) and Arnold (2010).
328   Includes plantations, monocultures, livestock production, mining, oil and gas extraction, urbanisation, infrastructure, dams and other energy production facilities... See, for instance, Bromley, 1992 and Scott, 1998.
329   'Green grabbing' refers to "the appropriation of land and resources for environmental ends", including for "biodiversity conservation, biocarbon sequestration, biofuels, ecosystem services, ecotourism or 'offsets' related to any of these" (Fairhead *et al.*, 2012).
330   Adams & Mulligan, 2003.

Case example 9.

"On behalf of our ancestors and for the present and future generations, we, the Manobo of Soté (Mindanao, The Philippines), will conserve our territory of life"[331]

"We, the unified Manobo of Soté, Burboanan, Bislig City, with the support of other groups residing in the area, attest that our ancestors have occupied and utilized this domain since time immemorial. The mountains and forests are the sources of our livelihoods. We recognize their value and, hence, we are intent on the protection and conservation of everything that is found therein, the wild plants and animals that provide us with necessities— from food to herbal medicine and various items— and the land's watershed from which the community obtains water for various purposes. It is **on behalf of our ancestors** and **for the present and future generations** that we shall do anything necessary to meet this end.

The entry of the Paper Industry Corporation of the Philippines (PICOP) has paved the way for the gradual decline of the gifts of our forest. Armed PICOP men tried to force us out of our ancestral domain so that they could continue logging in the area near and around the grand Tinuy-an Falls and the nesting site of the Philippine Eagle, where a young eagle, later named after the falls, was found. They were relentless with their vexations. Our suffering was unfathomable. But we stood our ground, despite the fear and danger, and have been successful in halting the logging operations in our ancestral domain, for now.

We are strongly against the entry of the so-called developers into our ancestral domain. We are certain that, in their hands, the destruction of our forests will become inevitable. Let it be known that we will hold on to our rights to **manage, preserve, develop, and protect our ancestral domain** using our own traditional ways and with deep respect to our customary laws, as stipulated in the IPRA Law.[332]

Our rights to self-determination and self-governance should be respected. We will not be stripped of our rights. As proof of the authenticity and sincerity of this declaration of our **determined defence** of our right to our ancestral domain, we, the Manobo of this community, in harmony with our brother migrants who have lived with us for a long time now, are affixing our signatures below. We fervently hope that this declaration reaches the eyes and ears of the concerned government agencies."

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331   Statement developed and signed in Soté, Burboanan, Bislig City, Surigao del Sur (Mindanao, The Philippines) on 16 November 2009 (Datu Tinuy-an, personal communication, 2010). The picture of Datu Tinuy-an, leader of the Manobo of Soté, is courtesy of Grazia Borrini-Feyerabend.
332   Indigenous Peoples' Rights Act no. 8371.

Yet, the same historical phenomena that crushed many local institutions— and colonial wars in particular— also prompted struggles for national liberation[333] and created the conditions for new institutions to develop, or for old institutions to strengthen themselves in various forms of resistance and rebellion. In this sense, collective identity and internal reciprocity and solidarity fuel the desire and struggles of communities for **self-determination**—[334] the capacity to decide their own future and not be subjected to the decisions and interests of others. Many historical events were motivated in good part by that impulse. Despite frustration by military might, police, intelligence services and patterns of indoctrination, the urge for self-determination and against imposed domination and change has always nourished political movements, rebellions and revolutions throughout the world. The means have often been unconventional— like the **'weapons of the weak'**[335] of non-compliance, feigned ignorance, civil disobedience, boycott, strikes and sabotage— but on various occasions communities have also used violent means to protect their territories and their livelihoods.[336]

Engaging in struggles for self-determination[337] opens us to a full array of collective questions, including about **autonomy and sustainability**, about the difference between 'surviving' and **'living well'**,[338] and about the meaning of **environmental justice**.[339] It bolsters the connection of people with their territories and commons, creates new memories of collective efforts (including sacrifices and possibly also martyrs), and, in the best of cases, refreshes traditional institutions and injects new energy into their functioning modalities, as shown by the Cherán community of Mexico (case example 10). In a fundamental sense, all struggles for self-determination also call into question personal and collective attitudes towards self-assertion and the actual or possible exercise of violence to defend, liberate or 'prevent the loss' of one's land and community.

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333   E.g. awareness of the traps of the discourse of colonisers and of the diverse possible reactions to it, promoting acquiescence or rebellion and liberation struggles (Fanon, 1968).

334   In this work, see case examples 3, 7, 9, 10, 23 (part a. and part b.), 26 and 30. Noticeably, there are also dangers in self-determination, specifically when accompanied by a sense of separation from 'other communities', various forms of intolerance, xenophobia, fanatic nativism, racism, etc. (see Part III).

335   Scott, 1985.

336   See Merlo *et al.*, 1989 or case examples 10 and 30 in this work. Although not mentioned, weapons were also used to protect the territory in other cases mentioned in this work.

337   On legal backing of self-determination for Indigenous peoples, see United Nations Human Rights Council (2021a).

338   Fuchs *et al.* (2021) persuasively describe the 'good life' (eudemonia, buen vivir, ubuntu) as the capacity of meeting human needs coexisting with the autonomy necessary to pursue individual life plans within limits of minimum and maximum consumption. Only such 'consumption corridors' would allow us to respect our collective rights and responsibilities. In this sense, autonomy and self-sufficiency are the only real path to freedom (Berlain, 2021).

339   With reference to environmental governance, environmental justice is commonly understood to comprise the three interrelated dimensions of distribution of costs and benefits, decision-making procedures and recognition of the identity, values, knowledge systems and institutions of legitimate actors (Neil Dawson, personal communication, 2022). Schlosberg (2007) refers to it as "…equitable distribution of environmental risks and benefits integrated by procedural aspects, including recognition, capabilities, absence of oppression and meaningful participation in environmental decision-making and action". Innovative, rich ideas about environmental justice are collected and discussed in Coolsaet (2020), and W. Sachs (2023) discusses environmental justice also in terms of power asymmetries in the use of carbon.

Case example 10.

The Cherán community: an autonomous customary governance system conserves its ancient forest and maintains self-determination in Michoacán (Mexico)[340]

Cherán is a small mountain town surrounded by forests in the Mexican State of Michoacán. It is inhabited mostly by people of Purépecha ethnicity who, for centuries, governed and carefully managed their forests as a source of water, fuelwood, timber, medicinal plants and pasture for their animals. The community comprises about 20,000 individuals and its territory covers 270,000 ha. Not all residents speak Purépecha fluently, but the large majority are originally from Cherán and feel they 'belong' to the community. They share a distinctive style of clothing, eat traditional food and follow a similar lifestyle— a mix of agriculture and herding practices. The main small town is organised into four neighbourhoods (*barrios*) that are historically and socially meaningful, for instance, they have always had complementary roles in religious celebrations.

Like most other Mexican municipalities, by the early 2000s Cherán was dominated by elected political parties, who regularly abused their powers and engendered conflicts, corruption and crimes. **Organised crime** was aware of the great timber wealth that surrounded Cherán and— as soon as it obtained the tacit protection of local politicians— it began its large-scale illicit exploitation. More than 50% of the Cherán territory was originally covered by forests but, as loggers came in, the panorama changed rapidly. The hills began to resound with the noise of chainsaws, the water table fell, forest wildlife was decimated, and dozens of small trucks crossed the town daily, carrying timber away. Threats, extortion, kidnapping and murders became commonplace. By 2011, more than **70% of the municipal forest had been devastated** and the loggers were beginning to

reach some centenary trees close to water springs in the forest— an area that some residents considered 'sacred'. This was too much. On the morning of 15 April 2011— a date now well remembered by everyone in the community— a group of women coming out from morning Mass started throwing stones at the trucks loaded with timber. Called by the church bells, many other residents came to stop the trucks. Together, they overpowered the loggers and locked them in a chapel, where they remained for days. The truck was burned. The community spontaneously created barricades at all town entrances and re-established its traditional patrols[341] to survey the town and the forest. More than 200 bonfires (*paranguas*) were lit throughout the town, and kept going night and day for months, signalling the community's permanent alertness and determination to never again allow the indiscriminate destruction of their forest or the entry of criminals in their municipality.

The fight was not won immediately. People started to lack some necessities, as they could no longer go out of town to procure them (some who ventured out were kidnapped), residents who had migrated to the USA sent financial resources to help as they could… When two people in the forest patrol were assassinated, the community had to ask for the protection of the federal army (which came but was carefully kept outside town). Numerous petitions, demonstrations and meetings followed until it was decided, in the meetings at the *paranguas*, that the community had enough of political parties (the municipal president had been dismissed by the *paranguas* at the very beginning of the movement) and wanted to become an 'autonomous community'. It

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340   Case example compiled by Grazia Borrini-Feyerabend based on Salazar (2015), Escamilla (2016) and Agren (2018); and the videos: https://www.youtube.com/watch?v=AKVXlpIVkU8; https://www.youtube.com/watch?v=DnV_T4c_lKI both accessed 2024. The picture was taken during one of the hundreds of evening meetings around a bonfire (paranguas) that consolidated the will of the community of Cherán to self-govern in an autonomous way. The picture was freely available online and had no cited author. For some in-depth analyses of the case of Cheran see Gasparello (2021) and Calverio (2019). Thanks to David Barkin for recommending the inclusion of this case example.

341   These rondas comunitarias had been active until the 1930s.

took several months to move from the basic consensus about wanting 'security' to a **consensus about wanting 'autonomy and self-determination based on customary practices'**— a time needed for people to mature their decisions and for the politicians and outsiders to adjust to the shock of their demands. The federal authorities came several times and held rounds of confirmatory discussions in the *parangua* meetings and in the General Assembly, but the community remained adamant. When the time came, the *parangua* meetings of the four barrios selected— in their traditional ways— a customary Supreme K'eri Council composed of 12 wise people, three from each *barrio*.

Since then, more people from Cherán have been assassinated. But the forest has been largely restored, a community development plan is being implemented, two million trees have been planted in a local nursery, there are new economic activities, a community carpentry, the revival of an old resin collection enterprise and even a children's orchestra. Importantly, the fact that the community is now run according to its own customary practices means much more than electing a Supreme Council composed of wise elders. It means that everyone in the barrios participates in the decisions and activities that have to do with social life. In fact, the Supreme Council is not the supreme authority— the supreme authority is the General Assembly. So, everyone in Cherán, men and women alike, discusses issues in the *parangua*, then in the Barrio Assembly, and then in the General Assembly, in the main town square. The General Assembly also selects members for the various committees in charge of treasury, communal goods, social and cultural issues, health, justice, infrastructure, administration, etc.

The people who take a role in the committees receive only a modest compensation and are selected because they are hard-working and outstanding in participating in the chores of the barrio and contributing to festivities and civic activities. They also have to be widely recognised as honourable, respectable, having experience and knowledge of Purépecha culture, coming from an honest family and demonstrating a strong sense of belonging to the community.[342] In fact, it is possibly more difficult to say 'no' than 'yes' to taking on a public role in a committee, as the social pressure to serve can be strong. Another matter that has been important in Cherán since the very beginning of the new organisation is the community 'police force', which needs to act as watchdog for the village through patrols in town and in the forest. It is composed of community members from the four barrios, who intervene in the event of disorders and infractions. They were the ones who set up stop points at the four main entrances to the municipality and controlled the entry and exit of vehicles into and out of the village at the time of the rebellion against the destruction of the forest. Today, they have a small booth at the checkpoints and— now that the community is well organised and legally secured— are also armed and uniformed.

In 2014, a path-breaking legal case brought by local lawyers succeeded in getting Mexico's Supreme Court to recognise the community of Cherán's right to consultation each time legislative or administrative changes are proposed.[343] The decision implicitly confirmed that **Indigenous communities can self-govern and operate their own security forces in Mexico** based upon Mexico's Constitution[344] and adoption of the United Nations Declaration of the Rights of Indigenous Peoples.[345] By 2021, the Supreme K'eri Council has been renewed three times and the community has remained steadfast in its prohibition on allowing political parties to campaign in the municipality. Cheran's **direct democracy** has brought peace in the heart of one of the most violent States in Mexico (in 2017, the municipality had the lowest homicide rate in Michoacán). Cherán is also proudly restoring its forest, building the largest rainwater collection system in the country, and engaging in alternative media (videos, local radio programmes, social media pages, even a local TV station).

342   Local interviews reported by Escamilla (2016).

343   See Aragón Andrade (2020). This important article, and the book from which it is drawn, describe militant legal practices that can contribute significantly to the vitality of Indigenous governance.

344   Article 20 of the Mexican Constitution recognises and defines the constituent communities of an Indigenous people as distinct social, economic and cultural units, settled in a territory, which recognise their authorities in accordance with their traditional uses and customs. The Constitution notes that awareness of one's Indigenous identity is fundamental to being able to exercise autonomy and self-determination as part of the pluri-cultural Mexican nation. It affirms that Indigenous communities are permitted to decide their internal forms of social, economic, political and cultural coexistence and organisation.

345   Aragón Andrade, 2013. The community and its lawyers decided to adopt an instrumental use of the law— in the case that the Supreme Court had made an unfavourable judgement, the movement would have in all cases continued.

The Cherán community is not the first nor the only one to declare its autonomy in Mexico. The community of Ayutla de los Libres, in Guerrero, has established its own municipal government system.[346] The community of Capulálpam de Méndez has succeeded in liberating itself from disastrous experiences of timber and mining concessions granted by the federal government.[347] The Wixarika/Huichol people have positioned themselves vis-à-vis the State to defend their culture as an Indigenous community.[348] And the 46-year-old Union of Cooperatives among Indigenous Masewal and Totonaco people in the State of Puebla has brought together about 250,000 people, well aware of their common history and capable of planning together a common future.[349]

A larger phenomenon and a reference for the experience of Cherán and others is the uprising among mostly Mayan peasants in the state of Chiapas spurred by the Zapatista Army of National Liberation (*Ejército Zapatista de Liberación Nacional*, EZLN) in 1994. A reaction to the North American Free Trade Agreement, the EZLN movement merged elements of Indigenous rebellion, peasant demands, leftist political organising, and liberation theology,[350] achieving the *de facto* autonomy of approximately half of the land in the Mexican State of Chiapas.[351]

The movement[352] rejects all official (and non-official) aid, refuses to participate in the programmes of the federal government, has managed its own agrarian reform (including parcels for communal production) and gender liberation practices, runs an evolving customary judiciary, demonstrates uncommon creativity (e.g. tens of thousands of people organised impressive 'silent marches' through city centres in Chiapas) and has been skilfully making use of electronic communication, exemplifying a sort of 'post-modern revolution' with associated leftist folklore. Remarkably, the movement has also had a positive impact on local agrobiodiversity and food and seed sovereignty.[353]

While the experience of Cherán is more 'negotiated' and accommodating than that of the Zapatista communities, they all continue to exercise *de facto* autonomy, **shunning political parties,** and making **decisions by consensus** in general assemblies, under **rotating leadership** from within the communities.[354] Like all other communities, autonomous communities experience livelihood difficulties and struggle to find solutions. Yet, the active participation and solidarity that characterise them offer examples of how both local politics and territories can be differently governed.

346   Aguilar, 2020.
347   Bartra, 2013.
348   Liffman, 2011. See also: https://huicholesfilm.com/en/ accessed 2024.
349   Cobo *et al.*, 2018.
350   Washbrook, 2020.
351   Stephen, 1995.
352   See the recent sympathetic analysis by Stahler-Sholk (2019).
353   Hernández *et al.*, 2022.
354   In the 2018 Mexican electoral season, the Zapatista municipalities teamed up with the National Indigenous Congress to place on the presidential ballot the name of a traditional healer, an elder Nahua woman who did not ask for votes but "for the oppressed to organize themselves" (ibid).

...the sense of sacred, the curiosity and fear of the unknown, the awareness of the limitations and precariousness of all that is alive, of our desires and ideals. Of all this are made the sites we should conserve as universally valuable.

Pietro Laureano, 1993

Institutions governing protected areas

Compared with the centuries of experience of the institutions governing areas conserved *de facto* by communities, the institutions in charge of national parks and other official protected areas[355] generally have shorter and less 'unique' relationships[356] with the territories they govern. We discuss them here, however, for a variety of reasons. First, protected areas are the **most common institution trusted by State governments as they seek vitality** in governing territories and areas of environmental, socio-cultural and economic value. This is true regardless of the wide variety of stated and unstated motivations at the root of their establishment and justification in society (many of which, remarkably, have little to do with 'conserving biodiversity'). Second, the tremendous **expansion** of official protected areas **in virtually every corner of the world** is a clear indicator of their wide appeal, as the concept and practice bend to the needs of diverse cultures and socio-political circumstances. Some of today's protected area systems are large, powerful and enormously appreciated— a **ground for national identity** that enjoys consensus from the political standpoint and provides some countries with major revenues. Other protected areas are poorly managed and supported, and in disarray... but the very fact that they continue to exist signals that they are playing *some* role.

Diverse State governments have variously codified[357] and supported[358] the institutions expected to govern official 'protected areas' (e.g. those listed as part of national protected estates). We will briefly review below some of the stated or implicit motivations and main models adopted for establishing and running official protected areas, and we will consider some of the related costs, benefits, opportunities and risks. We will also review how it came to be appreciated that protected areas require— in addition to and as a prerequisite for **'effective management'**— some functioning **governance** that is **'appropriate' and 'good'**. The discovery of the importance of the governance dimension for protected areas has highlighted the value of clarifying their objectives and social meaning. It is also prompting interest in factors that may enhance the recognition and respect that society could offer to their governing institutions.

Diverse origins

In 1864, the Yosemite Valley of California was the first territory ever declared as a 'state park' in the United States of America (USA). In 1890, the watersheds around the valley were also designated as a 'national park' and, in

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355   We follow IUCN in using 'protected areas' to include national parks but also the other five management categories (Dudley, 2008). The IUCN and CBD definitions of 'protected area' are offered and commented on in Part IV of this work. 'Official' protected areas include areas legally 'gazetted' by State governments as part of their protected estate.

356   This applies to the structure of the institution, rules of functioning, financing, etc. Even the people who run protected areas— regardless of their great dedication and competence— are State employees performing a 'job'. They rarely feel that their survival depends on how well they manage the territory concerned.

357   This is usually done in specific protected area legislation, which applies nationally and rarely allows exceptions for local institutions to 'fit' the territories to be protected.

358   The support generally provided has been largely insufficient to accomplish the ambitious goals usually established. Some State governments have limited themselves to drawing lines on a map.

1906, the valley itself was added to the watersheds, recognising the emblematic role for the country of the entire ecosystem. This just missed the badge of first national park ever declared in the world as, in 1872, the geysers, lakes, forests, pastures and waterfalls of Wyoming's Yellowstone had already taken it.[359] In those years, some individuals and organisations did advocate for the protection of scenery and wildlife from extractive industrial development (mining, logging, large-scale commercial herding) and new settlements.[360] Yet, conserving nature was not the only reason for the establishment of the early State and national parks, and possibly not the most important. For instance, there were sizeable **economic reasons** at stake (the parks provided visible attractions for **tourism**, and the new **railways** needed tourism for their own development)[361] and for reasons of **rivalry with Europe** (in the young United States, only the magnificence of natural landscapes could stand comparison with the architecture and artworks of Europe).[362]

The establishment of parks was also a powerful project of **social engineering**. The territories had been inhabited for millennia by Native peoples ('Indians') who had shaped the landscapes, but park officials did their best to erase both ancient history and memory of recent conflicts alike.[363] As the Indians were forcefully moved to distant reservations, the young parks could be publicised as 'wilderness' untouched by humans.[364] This, combined with the fact that the park areas were first penetrated by the military and Yellowstone was directly managed by the US Army for decades, exerted a strong influence on all future park governance and management practices. In the words of Adams "...the Park Service that took control of Yellowstone in 1918 copied military uniforms for its own and hired former soldiers as rangers. Smokey the Bear had a strong **military heritage**."[365] Following similar models and practices, other national parks were soon to be declared in Australia,[366] Canada,[367] New Zealand[368] and other States in the USA. Shortly thereafter, Europe, Africa and Asia followed.

In many European countries, nature carries a strong imprint of the relationship with people. Around the beginning of the 20th century, there was hardly any large expanse of European land where many people had not already settled or could be easily expelled from. Some private associations started collecting funds and purchasing places of historical and aesthetic interest, or of natural value, in various countries. They tried to follow the US model of national parks— nature without resident people— but had to identify 'emblematic sites' much smaller than in the USA.[369] The first European State parks took inspiration from these earlier land

359   A rich account of the multi-millennia presence of Indian tribes in the Yellowstone area and of the issues, concerns and conflicts that arose after the national park declaration is available in Grant (2021). Grant discusses the possibility of healing that the descendants of original residents may experience from an appropriate recognition of their ancestors' presence on the land and their role as original custodians.
360   Stan Stevens (personal communication, 2021).
361   Colchester, 2003. This said, the early parks bore opportunity costs in terms of grazing and timber extraction, so some economic interests took priority over others.
362   Adams, 2004. Much other information about early protected areas in this section is also from this source.
363   In the words of Grant (2021): "To encourage tourism, park officials and local promoters played down the presence of Native Americans and circulated the falsehood that they were afraid of the geysers [...] conflicts with Native Americans were ongoing in the West at that time [...] Creating a massive park in tribal lands was a distinct political act [...]represent[ing] the idea that people are separate from nature. [...] To counteract the bad publicity generated by 'Indian wars', park officials launched marketing campaigns that sought to erase the history of Native American presence in the park [...]. Starting in 1886, the U.S. Cavalry patrolled the park for 32 years, to make tourists feel safer and discourage Native Americans from hunting and gathering in their old haunts."
364   Even the pictures that made many of the parks famous in the United States (e.g. by Ansel Adams in the 1920s) depict glorious landscapes devoid of people. Most tribes, however, had been displaced by treaties, wars and frontier dynamics from areas that were later declared parks. However, in the case of Yellowstone, Yosemite and Grand Canyon, displacement took place years or decades after park establishment (Stan Stevens, personal communication, 2021).
365   Adams, 2004, p. 80.
366   Royal National Park, established in 1879. In Australia, however, the Aboriginal peoples were never removed from an area specifically for the purpose of creating a national park (Poirier & Ostergren, 2002).
367   Banff National Park— established in 1885. After the park's establishment, the Indigenous residents (Stoney Nakoda First Nation) were forbidden from practising their traditional hunting and gathering. They were later moved to a reservation but called back to the park for the winter Carnival and 'Indian Days'— an important tourist attraction (see: www.whyte.org accessed 2024).
368   Tongariro National Park was established in 1894: "Te Heuheu Tukino IV, chief of the Ngati Tuwharetoa, feared that his sacred land would be divvied up and parceled out. But he had a solution: on September 23, 1887, he gave the peaks of Tongariro, Ruapehu and Ngauruhoe to the Crown and the people of New Zealand, on condition that the land become a protected area." (Sacred Land Film Project, https://sacredland.org/tongariro-national-park-new-zealand/ accessed 2024). It is more than remarkable that this idea of a 'protected area' was discovered by a Maori Chief just in time to allow the first national park to be established in New Zealand.
369   European Environment Agency, 2012.

purchases. Both in Sweden, which established its first national parks in 1909, and in Switzerland, which established its first and still only national park in 1914, the land set aside for the parks was State-owned. Among the motivations for establishing parks in these countries were the conservation of nature in general and of animal populations in particular— including for **restocking** neighbouring **hunting areas**.[370] With similar motivations, some high-mountain areas were declared as national parks in Spain in 1918[371] and in Italy in 1922.

In Germany and Italy, the impulse to create protected areas is associated by some with the national socialist and fascist regimes. Landry (2010) recalls how, in the early 20th century, Germany had generated a youth naturist movement that perceived nature as a necessary **antidote to the excesses of modernity**, opposed the industrial transformation of the landscape and nourished a passion for hiking, nudism in the countryside, and healthy lifestyles versus work alienation in cities. This *Wandervogel* movement was initially banned by the national socialist regime, but later cleverly assimilated by implanting it with a 'clean' view of nature that included **eugenics** and **masculinity** and a concept of **homeland** as **racially homogenous landscapes,** where communities were to merge a supposedly harmonious past with a technology-enhanced future. Remarkably, the national socialist regime embraced a vision of conservation that was centred, besides specific natural monuments, on the larger landscape.[372] They also elicited the favour of nature's advocates by expropriating land to create nature reserves: by 1936, 98 sites had been established as 'nature conservation areas'.[373] Yet, when economic development was seriously concerned, the regime demonstrated that its devotion to landscape conservation was mostly lip service.

As described by Armiero and von Hardenberg (2013), the Italian fascist regime stressed the capacity to refashion the relation between people and nature by blending ruralism, race and autarchic policies with reforestation and land reclamation[374] interventions. Fascism set out in earnest to **improve nature** by *taming* and *redeeming* it from marshes, malaria and unproductiveness. Conservation was to be reconciled with modernity, designing landscapes not to highlight and preserve unproductive wilderness but to bring to light the true 'Italian spirit/ race', preserving historical memories embedded in nature and linking people with the hardy spirit of the land (and the mountains in particular). An anthropocentric vision of nature was common throughout Europe, but the active **ruralism** embraced by the Mussolini regime stressed that rural Italian families are large families that work hard and are primary producers, and constitute a solid basis for the regime. The regime thus *cultivated* ruralism and, with that, a triad of **national memory, landscape and race**. This included a vision of women as part of nature— both to be *tamed* and *improved* through maternity and rehabilitation for 'productive use'. The narrative was powerful and convincing and, unlike the romantic narrative initially used by German national socialists, engaged identity and nature but also **modernity**. In this light, one sees that the first two national parks established by Italy in 1922–1923 (at the very beginning of the fascist period, incorporating prior royal hunting reserves) still aimed at species conservation (mostly game[375]) and tourism. But the next two national parks, established in 1934–1935 when fascism was most dominant, fit well with the fascist rhetoric of protected areas as symbols of a nation, highlighting **war memories** and **land reclamation**[376] rather than natural values alone.

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370   Adams, 2004, p. 82. Interestingly, land zoning and game restocking aims are also common for community conserved areas.
371   Casado and EUROPARC España (2009) note that the creation of Covadonga National Park was a response to Spanish nationalism but also to elitist, utopian, romantic and aesthetic concerns. Yet, the lake at the heart of this first protected area could be used by a British mining company for hydropower production and to dispose of mineral pollution.
372   Landry, 2010.
373   A hunting-obsessed minister played a major role here, wanting to keep habitats for endogenous and introduced fauna. See also Lozada (2021).
374   Mostly draining of wetlands with the double goal of fighting malaria (a scourge of the times) and to create new agricultural land that could support a smallholder economy.
375   An important reason was the protection and restocking of Capra ibex, which was decreasing in numbers in a royal hunting reserve (website of Parco Nazionale Gran Paradiso www.pngp.it accessed 2024).
376   The third national park of Italy, Parco del Circeo, protects the last portion of the so-called Pontine Marshes otherwise entirely reclaimed in that period. As such, it did highlight reclamation… while established to protect the natural ecosystem.

Protected areas in the United Kingdom (UK) were envisioned at the beginning of the 20th century as reservoirs for wildlife, capable of **restocking game** in hunting areas. By the 1950s, however, when the first national parks were established, the main objective and justification was offering countryside **solace and recreation** to off-duty workers and soldiers ("land fit for heroes").[377] While a system of nature reserves had also been established based on ecological considerations, the UK national parks included substantial settlements and human land uses from the start, as they still do today. The land also largely remains in private ownership. Rather than excluding habitation and commercial activities, the national parks' administration provides rules for them, emphasising the mix of cultural and natural heritage in the UK and the beauty of its human-shaped landscapes and seascapes. Since 1995, each park is governed by a special authority, run by partly local and partly national appointees, and expected to craft a balance between local sustainable use values and general conservation objectives.[378]

The experience of the UK, pursued in the following years by other European countries, offers a **model of protected areas** distant from that promoted by the United States but also far from the model promoted by some European colonisers and conservationists in countries of the Global South. It offers an example not of shunning but of **valuing the interactions between people and nature** that shaped landscapes and seascapes through centuries. The European Landscape Convention[379] and the very concept of IUCN Category V protected areas (**protected landscapes and seascapes**)[380] are based on this appreciation and on an understanding of the multiple values of the *quality* of people's living environments. Meanwhile, as more and more people live in cities, recreation in protected areas— of both the USA and UK variety— has become an essential escape from the alienation of modernity. For many, it offers one of the few available experiences of contact with nature. Nature in protected areas may be packaged, limited to small periods of the year, relatively tamed, and at times even Disneyfied... but today offers **healthy and irreplaceable experiences to millions of people**.

In Africa, the very first protected areas and national parks were established even earlier than in most of Europe, taking over the game reserves[381] from which people had often been excluded by the partitioning policies[382] imposed by colonialism. In post-colonial (and neo-colonial) times, autochthonous politicians continued their support for protected areas as they benefitted from tourism revenues and replenished game for hunting, trophy hunting included... but also because spectacular protected areas constituted a source of **pride for the new national States**, and possible support for the national **identities that needed to be created**.[383] Overall, however, African protected areas have been suffering from scarce or unreliable flows of financial resources, limited management effectiveness[384] and poor implementation of rules.[385] A later but similar pattern of establishing protected areas by **excluding and displacing the resident populations** was followed in Asia (e.g. in India,[386]

377   Adams, 2004.
378   The UK government has recently stressed 'restoration' among such objectives (Adrian Phillips, personal communication, 2022).
379   https://www.coe.int/en/web/landscape accessed 2024.
380   Phillips, 2002.
381   A reserve, smaller than the current day iSimangaliso Wetland Park that incorporated it, was first established in 1895 in the Hluhluwe-iMfolozi region of South Africa. Selous Game Reserve (Tanzania) was established by the British in 1922, based on some of the game reserves for white hunters created in 1906–1915 by German colonialists. It was subsequently expanded with further expulsions of resident peoples (Meroka & Haller, 2008). Krueger National Park, in South Africa, was established in 1926. Game reserves often went with a convenient narrative that portrayed urban whites as 'sportsmen' and 'guardians of wilderness' even as hunters (Adams, 2004; Galvin & Haller, 2008).
382   Murombedzi (2003) cites the work of MacKenzie and refers to the tripartite division of land use in colonial Africa: land for the whites, land for the blacks and land for game.
383   Nyerere's Arusha Manifesto may be recalled here.
384   In some cases, as in Tanzania, major efforts were nevertheless made at building a cadre of protected area managers.
385   A nefarious phenomenon is the substitution of local traditional governance with ineffective and/or unenforced park governance. In such de facto open access regimes, new types of destructive uses are introduced as soon as the original custodians are rendered illegal and unable to counter external users. In fact, undermining local custodians is inherently destructive as law enforcement is hardly ever able to replace them effectively, as discussed by Bromley and Cernea (1989) and Colchester (2003). Adverse ecological impacts of protected areas have also been noted because of new inappropriate rules, such as exclusion of fire or banning the hunting of certain species (West & Brechin, 1991).
386   Hailey National Park was created by British colonials in 1936 and partially overlapped a royal hunting reserve.

Nepal,[387] Indonesia[388]), often as part of local histories of colonialism and imposed displacement. While this has preserved some habitats for wildlife, it is impossible to say whether this was the 'only way' to achieve that goal. What is sure is that the forced displacements caused severe socio-economic consequences. Meanwhile, there are examples of excellent wildlife habitats outside or within official protected areas that have been maintained compatibly with the presence of resident communities who continued to gain their livelihoods from the land. Salween Peace Park in Burma/Myanmar (case example 3) and Sariska Tiger Reserve (Rajasthan, India) are cases in point.[389]

In the Soviet Union, a 1921 decree by Lenin initiated a system of protected areas that included many large, strict reserves (*zapovedniks*) dedicated to **research for the benefits of the revolution**.[390] These were later substantially reduced in size because of various interests at play. National parks were also foreseen but established only much later and, overall, they still cover a much smaller area today than the strict reserves. The original legislation contained **no reference to** the **self-determination rights** of Indigenous peoples, who were forced to relinquish their nomadic lifestyle and sedentarise in towns and cities, where they supposedly were to receive better services, and Indigenous women could have equitable access to such services. Allowances were made only for limited visitation to areas of cultural and spiritual value inside the *zapovedniks.* Matters changed after Russia established post-Soviet Union legislation. In 1995, the *zapovedniks* were opened to tourism and environmental education and, in 2001, traditional land rights and land uses by Indigenous peoples— such as reindeer herding, fishing and hunting— were recognised also within certain protected areas under the control of their managers. A case in point is Bikin National Park where, after years of advocacy and struggles by the Udege, Nanai and Orochi Indigenous peoples, the legislative framework governing the park evolved to explicitly protect customary rights to hunting, harvesting and the use of natural resources.[391] Traditional economic activities can today be practised in almost 60% of Bikin National Park, which was inscribed on the World Heritage List in 2018.

In China, a system of protected areas was developed beginning in 1956, initially having to struggle with problems of administrative authority, funding and professional capacities.[392] The first protected areas, such as Ba Da Ling Great Wall and Ming Shi San Ling, were designated only in 1982 but, since then, their number has grown steadily. Today there are about 12,000 protected areas, covering more than 18% of China's land surface and comprising strict nature reserves and multi-purpose national parks.[393] Local nature reserves are administered at the provincial, municipal and county level, while national protected areas have their independent administration and usually enjoy better funding and permanent staff.[394] If in the early days the management objectives tended to balance conservation of biodiversity and recreation, protected areas were soon also understood as **nodes of economic growth**. They have, in fact, played an important role in explicit plans to promote internal tourism as part of the centrally determined objective of income and employment generation to lift millions out

387   For a long time, Chitwan had been a hunting playground for the aristocracy and was gazetted as a park in 1970 to stem the poaching of rare species that followed the opening of the area to agricultural settlements. Violent expulsion of settled communities, involving severe human rights abuses, took place before and after park establishment (Stan Stevens, personal communication, 2021).
388   In Indonesia, the Dutch colonial power started establishing nature reserves in the 1920s, the beginning of what later became a system of protected areas. The painful impact of such conservation policy is recounted 'from the grassroots' by Gustave and Hidayat (2008).
389   See POH KAO, 2018. In the third millennium, awareness of the multiple benefits of integrating local knowledge and management practices in official protected areas has been increasing. For instance, in Manas Wildlife Sanctuary— a World Heritage Site and Biosphere Reserve of India, there is now full appreciation of the century-old traditional knowledge of the Indigenous communities. The communities channel the seasonal Himalayan rivers by building micro dams and small canals, a practice that reduces soil erosion, prevents the severe floods that easily take place in the local rocky environment and ensures the availability of irrigation and drinking water in an otherwise water deficient region (Dudley *et al.*, 2015).
390   Poirier & Ostergren, 2002. The following statements on zapovedniks are drawn from this same reference.
391   Report of the Special Rapporteur on the rights of Indigenous peoples to the UN Assembly, 2022.
392   Zhou & Grumbine, 2011.
393   While already in 2017 protected areas covered more than 15% of the Chinese land area and 3% of the sea areas (Xu *et al.*, 2017), in 2020, they had already surpassed 18% of the land areas (Binbin & Pimm, 2020).
394   Ibid.

of poverty.[395] More recently, the management emphasis appears to be shifting to the **preservation of ecosystem functions**.[396]

In Latin America, protected areas exhibit peculiar conditions, including the fact that most of them have **Indigenous peoples** living in them, who aspire to conserve their governance and management roles over their ancestral territories. Some might be ready to collaborate in governance and management with State governments… but often face the multiple contradictions of State-imposed visions and institutions.[397] The first national park in South America was the Parque Nacional del Sur, in Argentina, established in 1922 based on a large land donation by a scientist, and expanded in 1934 as Nahuel Huapi National Park.[398] The park provided a good way to delimit and pacify an area that **marks the frontier** with Chile, which had recently been summarily agreed. It also created a **tourism development pole**, attracting locally more immigrants from Europe. It is said that the scientist who initiated the process that led to establishing the park had good relations with the Indigenous Mapuche and Tehuelche peoples. This is admirable as, up until the early 20th century, the encounters between the Indigenous residents of Patagonia and passing sailors and colonial settlers had been nothing short of horrific, leading to the extinction of entire ethnic groups.[399] Even with the 'good intentions' of conservation, however, the ultimate result of encounters between Indigenous peoples and European settlers was that even those Indigenous people who escaped genocide… lost a great part of their lands.[400]

Possibly the first 'official conservation' efforts in Brazil date to 1861, when it was decided that the Tijuca Massif that backs Rio de Janeiro was to be fully reforested with native tree species in order to prevent erosion and **bring back water to the city**. In 1961, Tijuca National Park was established to commemorate the 100th anniversary of the decision.[401] Many other types of protected areas were later developed in Brazil, including the 'extractive reserves' where rubber tappers derive their livelihoods while protecting the forests— one of the fist examples of State-recognised community conserved areas.[402] In 1940, Mexico had more national parks than any other country in the world, as a socialist government created them as part of a policy designed to **offer to poor working Mexicans places to relax** and new tourism-based livelihoods.[403] This was fitting for the so-called Mexican Revolution period (1910–1940), which sought to empower the Mexican poor in general and, coherently, established **parks "emphatically designed for people"** and "in service of the vulnerable".[404] By the 1960s and 1970s, most Latin American and Caribbean countries— usually with the encouragement of powerful conservation advocates—[405] had started or expanded their protected area programmes. The process went on for decades, with a particular boost in the years following the 1992 Earth Summit in Rio de Janeiro, when bilateral and multilateral cooperation agencies, foundations and conservation NGOs became major drivers.

395   Xiao-Long *et al.*, 2009.
396   Xu *et al.*, 2017
397   Galvin & Haller, 2008. See also the early work by Amend & Amend (1995).
398   Miniconi & Guyot, 2010.
399   Holdgate, undated.
400   That loss is still hotly contested today, as discussed by Miniconi and Guyot (ibid). A general disrespect of the human rights of Indigenous peoples in the Southern Cone has been a much larger problem than the establishment of any protected area.
401   The Tijuca forests were cleared in the 18th century to make room for coffee plantations. As a result, the rivers and streams became silted and in the succeeding years the city suffered severe droughts. By 1861, the situation had become so serious that Emperor Pedro II ordered the expropriation of all Tijuca's farms and the complete reforestation of the area. Manuel Gomes Archer, who was given the task, was an amateur botanist and used native species for reforestation (Dudley & Stolton, 2003). Several other forests had been declared national parks before Tijuca, some possibly following nationalistic ideas and trying to imitate what was happening in the United States (Howkins *et al.*, 2016).
402   The early extractive reserves were devised by cooperatives of rubber tappers in the Amazon region and their allies—including anthropologists and environmentalists. The first ever established, in 1990, was named after Chico Mendes, a rubber tapper activist who was killed for his conservation work (more on him and the Brazilian Amazon region in Part IV). In a broad sense, an extractive reserve is an area of land, generally State-owned, where access and sustainable use rights are allocated to local groups or communities. Extractive reserves exist today on land and at sea in diverse regions of Brazil.
403   Information about protected areas in Latin America noted here also draws from Wakild (2015).
404   Ibid.
405   An important role was played by advocates from US universities who fostered networks of Latino and US park enthusiasts and set up training programmes for managers (Adrian Phillips, personal communication, 2022).

Alto Fragua-Indi-Wasi: governing a national park amidst violent conflicts in the Amazon region of Colombia[406]

The Alto Fragua-Indi-Wasi National Park— named after the headwaters of the Fragua River and the Ingano term *Indiwasi* (House of the Sun)— was formally established in 2002 in the southern piedmont of the Colombian Amazon, a region harbouring high levels of **biodiversity** and the rich **culture** of the Ingano people. A good part of the territory under official protection today is considered by the Indigenous residents as 'sacred land'. The area is also at the heart of a region affected by **violent conflicts since the 1980s**, when **coca crop**s were first introduced.[407] Since then, many impoverished farmers were attracted to this remote region from other parts of Colombia and settled in the forest close to, or inside of, what was to become the protected area. The farmers cleared land for planting coca and **cocaine production and trafficking** quickly became well-established, along with **armed disputes** for the control of drug-related activities. The area saw the influx of armed leftist guerrillas like the Revolutionary Armed Forces of Colombia (*Fuerzas Armadas Revolucionarias de Colombia*— FARC), but also rightist paramilitary organisations with ties to the Colombian armed forces and the regional and national political and economic elites. The paramilitary organisations focused on driving out FARC by imposing local curfews, assassinating social leaders, 'disappearing' alleged guerrilla sympathisers and forcing the displacement of entire communities.

The park was created under the impulse of Colombian ethnobiologist Germán Zuluaga, who promoted negotiations involving the Colombian government, the Association of Indigenous Ingano Councils as well as Colombian and international NGOs. In 1999, a Memorandum of Understanding was signed and a **first meeting of traditional shamans** (*taitas*) of seven Indigenous groups of the Amazon piedmont took place with the participation of 40 shamans and their spouses and children. A traditional *maloca*, the ancestral long-house used by Indigenous communities of the Amazon, was built for the special purpose of the meeting. The *taitas* had in mind an intercultural dialogue towards the full reappropriation of the ancestral heritage of the Ingano people, and the discussion brought to light the idea that the park could be created as an innovative strategy to do exactly that. The then director of Colombian Protected Areas, Juan Carlos Riascos, fully participated in the intercultural dialogue and ritual ceremonies.

The work to identify the territory of the national park followed this 'bicultural' process and included a new understanding of the real ancestors of the Ingano as the Andaquí (not the Incas as noted in official accounts). It truly seemed that a new respectful beginning would be possible for Indigenous peoples with ancient local roots, as the protected area was to recognise the traditional rights of the Ingano over the designated territory as part of a **joint management regime**. Along with the declaration of the park, an agreement between the National Park Team and the Ingano was also signed, establishing a Steering Committee with four Ingano representatives and four representatives of the National Parks Agency. The Steering Committee was to agree on a Special Management Regime and action plan for the park, monitor the situation, resolve conflicts, etc. Work started earnestly with a diagnostic study, the recognition of possible conservation objectives and a zoning proposal. The intention was to formalise a jointly agreed management plan by 2007.

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406   Case example compiled by Grazia Borrini-Feyerabend based extensively (and in part verbatim) on Gorricho (2018) and Gorricho and Schultze-Kraft (2021), as well as personal communications by Germán Zuluaga and Carolina Amaya, 2021. The picture was taken during one of the meetings that led to the Union of Indigenous Yagé Medics of the Colombia Amazon (Umiyac), comprising men and women of the Ingano, Siona, Cofán, Kamentzá, Coreguaje, Carijona and Tukano people. Only the taitas Ingano later participated in the dialogue that established the Alto-Fragua-Indi-Wasi National Park. The picture is courtesy of the Archive of the Ethnobiology Institute of Colombia.
407   Gorricho & Schultze-Kraft, 2021.

Since the 1980s, however, the region and its urban centres of Belén de los Andaquíes and San José del Fragua had been suffering from the intimidation of civilians and public officers through **targeted killings and kidnappings**, restrictions on mobility and curfews. Even anti-personnel mines were used in the territory. FARC and paramilitaries alike sought to implement their own rules that locals needed to obey. The frequent armed clashes between guerrilla groups, paramilitaries and the army had destroyed Indigenous villages (including the traditional schools revitalised as part of the park's activities) and accelerated the **loss of Ingano traditional culture**. Many Indigenous peoples had been displaced or lost their connection with their traditions and their territory. Some had joined the guerrilla forces, others grew coca. To set the Alto Fragua-Indi-Wasi National Park in this context it is enough to note that, just four days after the park was established, the Colombian president ended peace negotiations with FARC and issued military orders for the reappropriation of territories.

408   The toxic herbicide glyphosate was commonly used.

Only in 2006, an agreement with the government led many of Colombia's paramilitary organisations to demobilise. After that, security improved slightly, but new power struggles soon resumed over the control of drug-trafficking activities between FARC and the new criminal gangs that emerged in the wake of the paramilitaries. The authority of the National Park Team was also seriously challenged, as they had limited capacity to manage the park and even access certain areas. With US support, the Colombian government promoted harsh counter-drug measures, including **aerial spraying** under the so-called Plan Colombia, which fuelled controversies and caused ecological and health impacts,[408] but did not stem the demand-driven cocaine industry.

By 2007, almost all farmers on the southern slope of the national park were cultivating coca, implying ongoing deforestation, ecosystem fragmentation and armed disputes. It was then that the Tandachiridu

Inganokuna— the association of the Ingano authorities of the region— **decided to withdraw from all park activities**. The reasons centred on some severe **legal and bureaucratic misunderstandings** with the National Park Team, which impeded any effective dialogue and agreement (and had plagued the negotiations for some time). The park team had failed to pursue the modification of national environmental regulations that they had promised in their original memorandum and **lost the trust** of the Ingano. The team even ended up unilaterally adopting management guidelines that rendered illegal the activities essential for the life of the Indigenous communities, fracturing the collaborative spirit that had been at the root of the protected area.

From this abysmal point, however, the situation seemed to improve. The Ingano had been motivated by the recovery of their traditional culture that was encouraged in the inception phase of the national park. They engaged again in valuing their own local knowledge, use of medicinal plants and practice of traditional ceremonies. Young **Indigenous leaders have since emerged, and traditional shamans have returned to guide the community's spiritual life**. After withdrawing from any form of governance and management of the national park, the Ingano have continued working on the implementation of their own Life Plan, prioritising work on the Indigenous school curriculum, buying land to enlarge their territory, and valuing such territory because it is sacred rather than because it is 'protected' by the State. Abandoned by the Ingano, the **National Park Team sought new allies in local farmers**. Some local farmers in and around the park had to start activities from scratch in 2009, after some government efforts were finally successful at eradicating coca crops. The park team decided to work with the farmer families who remained in the area, helping them to initiate sustainable livelihoods initiatives that would **provide a barrier to deforestation in the park**. The 300 families that agreed to participate received inputs to improve their farming (e.g. electric fences for cattle, construction supplies) and accepted a local plan designating key areas within each farm to protect the native ecosystems. All this has been successful in terms of reducing deforestation in the park and maintaining water sources.

The National Park Team took inspiration for this programme from what had happened during the civil war in the Belén municipality, where **local communities had kept their land free of coca growing** as they wanted to conserve it for direct local benefits (water retention for irrigation of local crops). The local NGO Tierra Viva, founded in the 1990s by local people, was dedicated to keeping the municipality's rivers flowing and clean, and succeeded even throughout the acute phases of the armed conflict. When Alto Fragua-Indi-Wasi National Park was established, Tierra Viva was already administering **nine municipal protected areas**. These were not adjacent to the park (only one was in the immediate vicinity) but the land they protected was almost equivalent to the more than 72,000 ha covered by the park. This offered a powerful lesson to the National Park Team.

In summary, Alto Fragua-Indi-Wasi National Park has not had an easy time in its brief life… but is now seeing its local communities— Indigenous and non-Indigenous— re-energised and active. It is also seeing a renewed understanding by the National Park Agency that governing the protected area must happen *with* its communities. Remarkably, even under extremely adverse circumstances, **a minimum of support by enlightened individuals and organisations can help communities to empower themselves**. It can rekindle their capacity to live with and care for the local environment, be creative, resist violence and, hopefully, build peace.

Benefits, costs, opportunities and risks

Throughout the 20th century and in the early decades of the 21st century, protected areas have multiplied throughout the world, promoted and supported in the North and in the South, by democracies and dictatorships, in rich and poor countries alike. As briefly seen in the preceding section, a spectrum of motivations was at the root of their establishment— from game hunting to nationalistic or romantic uplifting, from tourism and other economic interests to biodiversity conservation, from border pacification to securing water for urban areas and ecosystem functions more generally. The evolution of protected areas towards their current focus as visible **core of the modern movement for the conservation of nature** drew from all of these and more.[409] Beyond the pioneer national parks, the expansion in coverage of protected areas started after the end of World War II and remained strong for decades, with renewed impulse after the Rio Summit of 1992. The expansion was fostered by dedicated national ministries and agencies, non-governmental organisations, conservation alliances, bilateral and multilateral donors, and international conventions. Their development embraced diverse approaches— some used the term 'paradigms'—[410] regarding the interaction of protected areas with society... from clear separation to positive integration. Among recent developments, marine protected areas, long relatively neglected compared to terrestrial ones, have enhanced their coverage to more than 8% of global sea area. [411] Both terrestrial and marine coverage received a further boost in the CBD Kunming-Montreal Global Biodiversity Framework of 2022.[412]

The **benefits** derived from protected areas are **many and important**. Besides **nature conservation** *per se* (e.g. safeguarding habitats, species, landscapes/seascapes) and supporting recreation and **tourism**, which is a major economic factor in many countries,[413] modern protected areas are established to secure **water** for cities and industries,[414] to **prevent disasters,** to ensure the sustainable use of **forest products** and **fisheries**, to promote preventive and primary **health** care, and to mitigate and adapt to **climate change**.[415] While all these benefits are well recognised, a less discussed incentive for State governments to establish protected areas is **national security** and counterinsurgency— a motivation that has become apparent only recently.[416] Today, some protected areas are integrated with strategic approaches to counter terrorism (e.g. to stop "ivory as the white gold of Jihad") and to secure access to strategic resources. Naturally, all this has significant implications for conservation practices.[417] In addition, many protected areas lie close to national borders, which are usually remote from main cities and infrastructure and 'less developed' than other regions. Their presence tends to minimise trans-frontier contacts and conflicts and could hope to placate border disputes, including in post-conflict settings ('peace parks' and 'conservation diplomacy'). As many national borders were not drawn

409 See Holdgate (1999) in particular regarding the International Union for Conservation of Nature— IUCN; West and Brechin (1991) focusing on the relation between protected areas and resident peoples; Adams (2004); and Stevens (2014) focusing on the impact on Indigenous peoples. The CBD Secretariat has produced volumes that summarise global issues concerning protected areas (see, for instance, SCBD, 2004a). IUCN and other conservation organisations have publication series focusing on technical aspects of protected areas. A main tome on governing and managing protected areas (Worboys *et al.*, 2015) was produced just after the IUCN World Parks Congress of Sydney 2014. See also: https://www.iccaconsortium.org/2016/03/01/the-heart-of-a-stream/ accessed 2024.

410 Phillips, 2003. Phillips described a 'paradigm change' that mostly remained on paper... but his article is pivotal to distinguish different approaches towards establishing and governing protected areas.

411 See https://www.protectedplanet.net/en/thematic-areas/marine-protected-areas accessed 2024. Recent increases are due in good part to the establishment of a few, very extensive marine protected areas (larger than 10 million ha).

412 Target 3 of the Framework states that by 2030 a system of protected areas and other effective area-based conservation measures should "expand to at least 30% of terrestrial and inland water areas and of marine and coastal areas" (CBD, 2022).

413 Because of their unique tourism attractiveness, countries like Rwanda and Ecuador see in their national parks some of their largest sources of income.

414 Dudley & Stolton, 2003.

415 Dudley & Stolton, 2010.

416 Duffy, 2016.

417 Ibid. Duffy discusses how military training and weapons are provided to rangers, national armies are deployed in protected areas, and shoot-to-kill policies are being legitimised by the "transnational conservation community" that insists on the ivory-crime linkage with terrorism. On the other hand, militias may base themselves in protected areas to draw livelihoods from nature and be able to raid, loot, spread their messages and hide, as observed in Kivu in the eastern region of the Democratic Republic of Congo (DRC) (Rainer, 2013)

based on ecological or socio-cultural considerations, there is also a potential to establish transboundary protected areas[418] and manage them in a collaborative way, with both ecological and socio-political benefits.[419]

Unique in terms of socio-political benefits is the Antarctic continent— where a network of protected areas does exist[420] providing examples of land and oceans dedicated to wilderness, peace and scientific cooperation. At the opposite pole of the globe, the Arctic zone has only a few, but truly huge, protected areas, including the world's largest marine protected area in northern Greenland (97.2 million ha, mainly of inland ice and fjords) and Tuvaijuittuq ("the place where the ice never melts" in the Inuktut language, covering 31.9 million ha), also officially listed as a marine protected area in Nunavut/Canada. As mentioned, the awareness of the importance of marine protected areas for the conservation of biodiversity has taken time to grow. And the debate is still heated regarding the value and effectiveness of huge, no-take marine protected areas versus smaller sustainable use areas, such as the hundreds of Locally Managed Marine Areas (LMMAs) that exist in the Pacific Ocean.[421] Specific ecosystems such as seagrass beds, inter-tidal saltmarshes and mangroves are generally acknowledged as essential for fisheries and human livelihoods, including for coastal protection, but also as carbon sinks (at times called '**blue carbon**') contributing to climate change mitigation.[422]

In the rush to establish the first wave of protected areas, it was common to ignore pre-existing customary land rights or traditional patterns of custodianship and care, especially when areas were remote, and the rights were collectively held and enjoyed by Indigenous residents in customary ways. In such cases, valuable landscapes and ecological values were simply **superimposed by new governance institutions and management objectives**, meant to protect the valuable characteristics and/or create new values. The costs for the Indigenous and local communities in terms of livelihoods and cultural values[423] were considered acceptable and rarely compensated. Even worse was the treatment of other dimensions of environmental justice, such as fair inclusion in decision-making and due consideration of local knowledge, values and institutions. As mentioned, however, this was not the only model for establishing protected areas. A different model was applied in the countryside of the UK and in some other European countries, where governance structures and management practices developed in ways that were, at least in part, respectful of existing land ownership, economic activities and social aspirations. Even in such cases, however, the approach remained focused on professional expertise rather than the capacities and aspirations of residents. Or at least this was so until the beginning of the new millennium,[424]when we can trace what we are about to describe as "the discovery of governance".

Across diverse continents and models, a common feature of the early wave of official protected areas has been the **enabling of State control over nature**— through cartography, inventories, evictions, restriction of access, and imposition of plans, rules, surveillance programmes and 'professional' managers (regardless of their knowledge of the specific territory). This is accompanied with specific images, concepts and narratives about values and priorities— views that in many situations became hegemonic. In many countries, but not in all, politicians and technocrats considered that these priorities have justified **displacing original residents** from the areas to be protected

418   Sandwith *et al.*, 2001.
419   Transboundary conservation may also counter informal and criminal activities (smuggling, poaching, illegal immigration, drug trade), which usually benefit from the permeability of frontiers (Duffy, 2001).
420   By virtue of the Antarctic Treaty some consider that the entire Antarctica is a 'protected area'. Most people, however, consider protected areas to be only those specific sites declared and maintained under the surveillance of specific States.
421   Govan *et al.*, 2009b.
422   Simard *et al.*, 2016.
423   See below for references on this. These costs do not belong to the past and continue to be felt today (see the Report of the Special Rapporteur on the rights of Indigenous peoples to the UN Assembly, 2022).
424   See Phillips, 2003.

("wilderness had to be created before it could be protected"[425]) or **limiting their access and harvesting rights.**[426] Such eviction practices have caused severe socio-cultural and economic impacts, deprived millions of access to their native lands, wildlife and livelihoods, and created many enemies for the conservation efforts of governments.[427] At times, these sacrifices were even useless, or negative, for the territories concerned,[428] in particular when pre-existing governance regimes were transformed into unenforced park governance, such as *de facto* open access. Importantly, the establishment of protected areas has never been the sole or the most destructive avenue by which States gained control of land and nature, as 'economic development' and 'national security' generally took the lion's share.

For some commentators, the magnitude of human eviction and suffering caused by conservation goals is comparable to that caused by mega-development projects, 'high modernist' State interventions, and civil wars.[429] Indeed the very *presence* of protected areas may have contributed to social disruption and violence.[430] As mentioned, in light of the enormous use of land, water and other gifts of nature for 'development' and 'security' purposes throughout the world, this comparison seems exaggerated. Yet, the calculus of pain[431] and the calculus of (loss of) meaning related to the establishment of protected areas have hardly been made. Some see displacement for protected areas as an important factor in the production of the **inequalities** and **contradictions** that characterise modern societies.[432] This said, the impact of protected areas should be seen in the larger context of the immense environmental and human costs imposed by modernisation, extractive and industrial 'development', wars and 'security operations', and centralised economic and political power. Further, if the *conservation* discourse is slowly but surely becoming aware of the various dimensions of environmental justice,[433] the 'calculus of pain' in the *development* discourse has been kept at the margins of the mainstream, despite the existence of insightful critical analyses.[434]

Remarkably, the relation between the world of nature conservation and the world of **business**, **extractive industry** and **development** in general have 'evolved' to become much less confrontational than the early conservationists might have ever imagined or desired. In the decades since the turn of the millennium, global economic output, the use of 'natural resources', and the alteration of natural habitats and anthropogenic causes of climate change have steadily expanded. So have the **financial resources** allocated to conservation,[435] the number of **public-private partnerships** for conservation[436] and the **coverage of official protected areas.** At the time of writing, that coverage is just about 16% of the terrestrial planetary surface and above 8% of the

425   Neumann, 1996 and original reference therein.
426   See Cernea, 2006.
427   See Ghimire & Pimbert, 1997; Chatty & Colchester, 2002; Brockington & Igoe, 2006. The evocative terms of 'conservation refugees' (Geisler, 2003; Dowie, 2011) and 'fortress conservation' (Brockington, 2002) have come to popularise the issues.
428   Bromley and Cernea (1989, p. 25) describe examples of "continued degradation of resources under the tolerant eye of government agencies" created by "the appearance of environmental management through the establishment of government agencies, and the aura of coherent policy by issuance of decrees prohibiting entry to, and harvesting from, State property".
429   Redford & Fearn, 2007.
430   Rainer, 2013.
431   Berger, 1976.
432   West & Brechin, 1991; Brockington *et al.*, 2010.
433   See Martin *et al.*, 2016 and Coolsaet, 2020.
434   See Berger, 1980. Apart from the authors cited and discussed in Part IV, many voices have powerfully argued for major change in patterns of governing nature and the world economy, and ensuring global security (see Raskin *et al.*, 2002; Sachs, J. D., 2020).
435   Financing conservation has become a discipline, encompassing a wide variety of mechanisms and strategies (Meyers *et al.*, 2020).
436   Brockington *et al.*, 2010.

marine surface.[437] If business and conservation pursue opposite agendas *de facto*, since the 1980s **business corporations** have become welcome **sponsors of conservation** organisations and initiatives, including by establishing territorial **'offsets'**[438] and investing in managing protected areas.[439] No wonder some see the establishment of protected areas as one of the faces of neoliberalism, a process that has evolved into the large-scale **control** and **commodification of nature**,[440] and is now taking steps towards its full-fledged financialisation.[441]

Today, the translation of environmental values into economic values is normally discussed and portrayed as one of the crucial pathways that need to be embraced to 'save the planet'. The 2020 Dasgupta Review[442] states: "Nature needs to enter economic and finance decision-making in the same way buildings, machines, roads, and skills do. [...] Introducing natural capital into national accounting systems would be a critical step towards making inclusive wealth our measure of progress." The review also states that: "Expanding and improving the management of protected areas has an essential role to play..." and that "...a system of payments to nations for protecting the ecosystems on which we all rely should be explored".[443] Without doubting the excellent intentions of these efforts and without entering into the complexity of putting these ideas into practice, we see that a process is underway to **evaluate the entire natural heritage— and specifically protected areas— in narrow economic terms**.[444] This is bound to have enormous implications in terms of decision-making, access, fruition, exchanges, trade-offs and worldviews.

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437 See actualised data here: https://www.protectedplanet.net/en accessed 2024. Recently, such coverage expansion was highlighted as one of the few successful components of the Action Plan of the Convention on Biological Diversity in the decade 2010–2020 (SCBD, 2020). Since that Action Plan was agreed, in 2010, it has become common to consider protected areas in tandem with other 'effectively conserved' areas. The Convention on Biological Diversity's Aichi Target 11 (ibid) uses 'protected areas and other effective area-based conservation measures'. The expression 'protected and conserved areas' first surfaced in the final statements of the IUCN *World* Parks *Congress* 2014 in *Sydney*, Australia. Since then, calls have intensified to expand coverage to 30% if not 50% of the terrestrial surface of the planet (see the Avaaz proposal https://www.cbd.int/doc/strategic-plan/Post2020/postsbi/avaaz.pdf and the Marseille Manifesto https://www.iucncongress2020.org/programme/marseille-manifesto both accessed 2024). There are cogent rebuttals to such proposals (see, for instance: https://www.resilience.org/stories/2021-01-12/an-open-letter-to-the-lead-authors-of-protecting-30-of-the-planet-for-nature-costs-benefits-and-implications/ accessed 2024).

438 Offsets may be the ultimate offence to custodian communities, as their relationships with the land and the gifts of nature are assumed to have no value whatsoever, even as biodiversity is 'compensated' elsewhere. See, for instance, Tupala *et al.* (2022).

439 Holdgate, 1999, pp. 221–222. See also SCBD, 2004a; OECD, 2016.

440 Igoe & Brockington, 2007.

441 See Part IV of this work.

442 Quotes from the headline messages of Dasgupta (2021).

443 The Review continues: "For ecosystems that lie outside national boundaries (e.g. the oceans), imposing charges, or rents, for their use (for example, ocean traffic and ocean fisheries) and prohibiting their use in ecologically sensitive areas should be instituted".

444 As beautifully expressed by Christine von Weizsäcker (personal communication, 2021): "... the Dasgupta Review on Biodiversity is seen by many as the biodiversity-correlate of the Stern Review on Climate Change, which [...] taken as a warning against business-as-usual, was generally considered to be very useful [but not equally acceptable] when taken as the invitation for a complete commodification of climate and CO2-offsetting. Taken as a warning against business-as-usual, [the Dasgupta Review] has its qualities. [But] subjecting ecosystems to economic approaches may even be more controversial. In climate change you have CO2 molecules, driven by winds around the globe [...] not historically, geographically, and culturally contextualized. They have not co-evolved into ecosystems. But biodiversity is and has. Ecosystems are contextualized, unique and irreplaceable. So, even less appropriate for commodification, which relies on offsetting and interchangeability. Again, great warning, but even less appropriate for solutions."

For how long will the dragon fly? Will inclusion on the IUCN Green List prevent 'development' from closing in on a natural reserve in Viet Nam?[445]

Van Long Nature Reserve is situated in Gia Vien district, straddling seven communes in the heartland of densely populated northeast Viet Nam. The reserve covers a modest 3,000 ha, comprising a wetland and freshwater system of canals, lakes and streams wending around an island-like landscape of karst limestone— a steep hill that harbours the **only viable population of Delacour's langurs** (*Trachypithecus delacouri*) left in the world, listed as **critically endangered** by IUCN. Within the reserve itself live approximately 1,700 people, mostly Kinh (the largest ethnic group in Viet Nam) whose livelihood is based on paddy rice and fish farming and who traditionally also relied on the nearby forests for food, charcoal and medicinal plants. The name Van Long means 'dragon flying in clouds' and dates back centuries, signalling the **longstanding cultural significance of the place**.

At the end of the brutal war that devastated the country in the second half of the 20th century, Viet Nam was poor and chaotic. The one-party socialist regime that had won the war implemented a series of reforms that, through time, managed to improve the national literacy rate and health indicators. But the shattered economy had few chances of surviving the international hostility it continued to face even after the end of the war. The government thus decided to operate a series of market reforms called *doi moi* (renovation) that allowed capital gains and foreign investments. The reforms led to considerable growth of the economy, but also allowed personal enrichment and corruption.[446] The population has generally seen reforms favourably[447] but, since then,

inequality has grown, the labour laws have weakened, and ecological problems have piled up.

In the early 1990s, as the Delacour's langurs were being 'discovered' by researchers from the Frankfurt Zoological Society, the demand for forest and freshwater products— particularly fish, timber and wildlife— was increasing exponentially in Viet Nam and beginning to impact Van Long. Additionally, the demand for cement was huge, spurring a boom in limestone quarrying. In a few years, the nearby hills of Ninh Binh province were being blasted into an unrecognisable landscape. Van Long was then under some form of local government by the seven communes affected by the wetland, which tried to protect it to conserve its tourism value. External attention had in fact generated a stream of visitors, which was steadily growing. To protect the wetland, the Vietnamese government introduced a payment system based on watershed and forest 'protection contracts', which evolved into a forest restoration mechanism. Certain areas of Van Long were allocated to individual households to 'protect' in return for an annual payment per hectare. This was a key moment in the process of **monetising the relation between the residents and the wetland**. In parallel, several small projects were financed to provide training, equipment, technical advice and infrastructure to enhance the local tourism capacities.

In 2001, the government declared Van Long a 'Nature Reserve', to be governed by a multi-stakeholder institution— a Management Board including representatives from the seven communes. The official

445   Case example compiled by Grazia Borrini-Feyerabend based on Kelleher (2021) and Nguyen (2008). The picture of traditional practices in Van Long is courtesy of James Hardcastle.
446   https://www.theguardian.com/news/2015/apr/22/vietnam-40-years-on-how-communist-victory-gave-way-to-capitalist-corruption accessed 2024.
447   https://asiapacificcurriculum.ca/learning-module/vietnam-after-war accessed 2024.

recognition of the area was welcomed by these representatives, and the Management Board agreed upon a negotiated five-year management plan, including a ranger programme, where local individuals were paid a stipend to patrol and assist in management activities. In general, the Management Board formalised the existing local management effort and added a legal framework that was missing from the prior situation as *de facto* 'community conserved area' (for example, rule violators could now be legally apprehended). It was clear, however, that much decision-making power for the reserve was in the hands of the Provincial Forest Protection Department.

Through time, the presence of the Delacour's langur has made Van Long an **extremely popular destination for eco-tourists**, in particular as the capital Hanoi is conveniently close (1.5-hour drive). The Management Board of the Reserve initially managed to keep the impact of tourism in check (e.g. trails and routes were made to avoid the sensitive restoration areas and core habitats, and boats were taken only in the late afternoon to view the langurs as they returned along the waterside cliffs to their sleeping caves on the upper crags). The local communes—spearheaded by Gia Vien, which is the main tourist arrival point— appreciated having some control over the tourism operations and benefitted from their income, trainings, etc. Yet, the Management Board soon realised that a great part of the tourism revenues was collected and controlled by the Province Tourism Department. In addition, besides the hotels that sprung up in Gia Vien, plenty of fringe tourism enterprises involved non-local companies and external investors. Land prices were also rising, villagers were selling agricultural plots to developers and started working full-time for tourism services. In all, the very success of tourism in Van Long has brought economic improvements but also **new conflicts**. Importantly, it has profoundly **changed** the **lifestyles and values** that had conserved Van Long for centuries.

A major threat to Van Long Reserve is the **proliferation of cement factories** located next to the reserve. These factories use the limestone from the neighbouring karst hill range and work non-stop, disfiguring the landscape. The scenic hills surrounded by wet rice fields that used to provide a background to Van Long are almost fully destroyed. The everyday blasting of dynamite in the hills has scared off the Delacour's langur from the eastern range of their habitat. The dust discharged and the noise from the factories severely impact the health of the residents and the nature reserve in general. There are days when the smoke from the factories completely covers the reserve, the visibility is almost zero and it is difficult to breathe. Invasive species and pesticides are also a threat for the wetland ecosystem whose impact has not yet been fully assessed.

Whilst Van Long appears to be a **successful example of a marriage between tourism development and species and habitat conservation**— and for this reason it has been accepted on the international IUCN Green List of Conserved and Protected Areas— the communes that evolved with Van Long for centuries are being closed in by **destructive forces of 'development'** and are also experiencing **disillusion and conflicts**. The conflicts may not surface openly in the Vietnamese political environment, but they may fester and destroy the long-term capacity to care for the wetland and conserve its unique habitat. Facing all this, a positive development is the recent establishment of a Van Long Cooperative that includes residents from the seven communes, women's groups and farmers' groups and focuses specifically on the promotion of equity in the sharing of benefits from tourism operations.

The members of the Van Long Cooperative meet every month and keep in touch with both the Van Long Management Board and the Tourism and Forest authorities at provincial level. They also maintain a wealth of informal exchanges with the residents of the diverse communes, to keep informed about the fast-evolving situation. The cooperative could play a crucial role in continuously assessing the balance between competing interests and promoting a fair and equitable sharing of economic benefits among all concerned parties. In fact, much hope for the feasibility of maintaining the IUCN Green List status rests on the effectiveness of this cooperative. Will it manage to influence the Management Board and provincial authorities? Will the seven communes **diversify their livelihoods** and avoid the total dependence on tourism that is bound to render the reserve fragile and unsustainable? Will the reserve governance **rein in the development initiatives** in the overall landscape, which negatively affect the local environmental efforts and hopes? Will some inspiring cultural values **nourish a sense of custodianship** in the local communities, beyond the monetary value of the reserve? The answers to these questions will determine the future of the protected area and the Delacour's langur, but also of the livelihoods and wellbeing of all Van Long residents.

Governance discovered

While efforts at professionalising the *management* of protected areas developed in earnest in the second half of the 20th century,[448] interest in the **governance of protected areas** only emerged in the early 2000s.[449] In 2003, the IUCN World Parks Congress in Durban, South Africa, witnessed the early definition of the governance concept[450] and a first discussion of governance quality— what 'good governance' may mean for protected areas. The Congress also ushered in an understanding of the four main 'types' of governance that could be identified in practice, one of which— governance by Indigenous peoples and local communities— was initially opposed by some as 'unscientific'[451] and required special advocacy before being accepted.[452] Private governance was also highlighted, following the major expansion of land bought by conservation NGOs or designated by land-owners for the purpose of conserving nature and/or benefitting from tourism.[453] The lion's share of protected areas— especially in Asia, Africa and North America— were still categorised as governed by governmental agencies, but cases of shared governance arrangements (initially referred to as 'collaborative management'[454] or co-management[455]) were also identified in continental Europe, Latin America and Australia.[456]

In 2004, just a few months after the IUCN World Parks Congress in Durban, the Convention on Biological Diversity approved its Programme of Work on Protected Areas, which promotes "governance diversity and equity".[457] In 2008, as IUCN formally adopted a new definition of 'protected area', it made explicit reference to quality criteria (for 'equity') and to four governance types (for 'diversity').[458] By then, official protected areas had been expanding throughout the world under government authorities at various levels.[459] A further impulse to their expansion was thus provided by governance exercised by local communities and Indigenous peoples, by private landowners and by a variety of mixed boards. This was certainly appreciated,[460] although 'community governance of protected areas' remains, even at the time of writing, an option that is poorly recognised and rarely promoted in conservation circles. A table that came to be referred to as the 'IUCN Matrix for protected areas' synthesises the possible combinations of management category (I to VI) and governance type (A to D) and is reproduced in Part VI of this work (Table 8).

One of the crucial differences between protected area governance of type A (by governmental agencies at various levels) and B (shared by governmental agencies and other actors) and protected area governance of type C (private, by landowners) and D (by concerned Indigenous peoples and local communities) is the fact that while the former (types A and B) must be **'established'** by governments, the latter (types C and D) exist on their own as more or less effective 'conserved areas'[461] and are eventually **'recognised'** by governments as

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448   Hockings *et al.*, 2000; Bruner *et al.*, 2001.
449   For the distinction between management and governance and the IUCN Matrix, see Part VI of this work.
450   Borrini-Feyerabend *et al.*, 2002; Graham *et al.*, 2003; IUCN, 2005.
451   Terborgh, 2004.
452   Borrini-Feyerabend *et al.*, 2004a.
453   In South Africa, for instance, land under private conservancies is about 35% of the total land area dedicated to conservation (Mitchell *et al.*, 2018). Today, incentives to private conservation include carbon credits.
454   Borrini-Feyerabend, 1996.
455   Borrini-Feyerabend *et al.*, 2004a and 2004b.
456   See Ross *et al.*, 2009; De Pourcq *et al.*, 2015. Africa and Asia remained less capable of effectively innovating their protected area governance practices, despite a few notable exceptions (Borrini-Feyerabend & Sandwith, 2003; Chowdhury *et al.*, 2009).
457   It took over ten years for the CBD Parties to develop an agreement on a subject as sensitive as 'protected areas' (https://www.cbd.int/protected/pow/learnmore/intro/ accessed 2024). All the more remarkable, then, that Element 2— absent from the initial formulation of the Programme of Work on Protected Areas— was added with the title "Governance, Participation, Equity and Benefit Sharing" as a direct response to the Durban Congress.
458   See the chapter on governance (pp. 25–32) of Dudley (2008), further developed in Borrini-Feyerabend *et al.* (2013).
459   See some examples in Lausche (2011).
460   In Madagascar, for instance, only the possibility of diversifying governance type and management category allowed achieving the presidential vision of an ambitious expansion of protected areas (tripling the original coverage, up to 6 million ha). Besides a large amount of field work, this required a reform of the national Protected Area Code (see Borrini-Feyerabend *et al.*, 2013, pp. 94–95).
461   See Part VI of this work for a definition of 'conserved area'.

part of their official protected estates. Some governments see that difference as endangering their authority, as it would allow other actors to take original decisions over assigning land to conservation purposes. Such decisions might in principle be accepted for private landowners but are considered sensitive for Indigenous peoples and communities possessing customary rights, as they may offer grounds for refusing State-decided initiatives antithetical to conservation, such as major infrastructure development,[462]military activities, or concessions for mining or timber extraction. This is a risk that few governments are willing to incur.

In fact, protected areas of type C and D are typically not envisioned in many national legislations and, where they are, they remain a *de facto* exception. It is remarkable how few countries have substantially reformed their legislation regarding governance of protected areas following the Programme of Work they agreed to implement as CBD Parties. Only a handful of countries, for instance, are able to fully recognise protected areas under governance type D.[463] And, while several countries have changed the governance of some protected areas from type A to type B, very few were changed from type A to type D.[464] Indigenous peoples and local communities have consistently noted that even protected areas of type B often do not share power *effectively* or integrate their knowledge and worldviews in governance and management practices.[465]

Decision-making for protected areas under governance type B (shared governance) is generally carried out by management boards that include, among others, local representatives. Many such representatives are professional politicians (e.g. mayors of concerned municipalities) who tend to depend on short- and medium-term party and/or personal perspectives more than on long-term relationships with the territory (see the examples of corruption in Cambodia described in case example 4 and in Mexico, described in case example 10, before the Cherán rebellion). The boards are often assisted by professional managers, but even their time perspective often coincides with the span of their contract. Decisions may be 'negotiated', but political representatives and professional managers rarely have as a main goal the idea of weaving strong bonds between the protected areas and the concerned communities or broader society. More commonly, they pursue results in terms of socio-economic development or ecological management.[466] This is particularly clear when protected areas embrace a model based on the assumption of **incompatibility of traditional livelihoods** (pastoralism, shifting cultivation, agroforestry, small-scale agriculture and fisheries, local crafts) **with nature conservation**.

Such a 'modern' model amounts to a radical departure from the history of relations between communities and their natural environments, a fact that has jeopardised many such relations, including in ecologically well-conserved sites such as Virachey National Park of Cambodia (case example 4). The understanding of the conservation value of governance by Indigenous peoples and local communities (type D, also referred to as 'ICCAs' or 'territories of life' as we will later describe them) is surprisingly recent,[467] and its full recognition and consequences are only beginning to be realised.[468] Meanwhile, many protected areas have **weakened**

462   Promoting the declaration of their land as a protected area is exactly how the community of the Regole of Italy (case example 7 in this work) avoided a major freeway and military exercises on their land. At the time of writing, the custodians of the mountain pasture of Sinjajevina (Montenegro) are trying the same route to prevent the use of their land as ground for NATO military exercises (see footnote 600).

463   Madagascar and Italy, just mentioned in the preceding notes, offer two examples. Other countries that include some form of recognition of type D in legislation or policy include Mexico (see Camacho *et al.*, 2007), Namibia (community conservancies), Ethiopia (legislation on community conserved areas has been drafted with field initiatives ongoing), and the Philippines and Ecuador (legislation under development while communities self-recognise their 'conserved areas'). Canada is in the process of recognising 'Indigenous Protected Conserved Areas' (see also later in this work). Several countries (e.g. India, Senegal) recognise the possibility that local government levels recognise village forests, community reserves, etc. A non-automatic step after formal recognition is effective implementation, with coordination and support as part of a national protected area system.

464   Stan Stevens, personal communication, 2021.

465   See Stevens, 2014.

466   See, for instance, the websites of French National Parks http://www.parcsnationaux.fr/en accessed 2022.

467   Corrigan *et al.*, 2018; Garnett *et al.*, 2018; Kyle *et al.*, 2019; Fa *et al.*, 2020; Tran *et al.*, 2020; RRI, 2020; ICCA Consortium, 2021 ; WWF International *et al.*, 2021; Asia Indigenous Peoples Pact *et al.*, 2022.

468   Orihuela, 2020; Kothari, 2021. See also the section 'The discovery of community conservation' in Part IV of this work and Table 1 in particular.

the **bonds** between the communities and their territories, if not imposed a full separation between the two, accompanied by the demise of traditional governance institutions.

The fact that many protected areas have taken over pre-existing biodiversity rich territories governed by local traditional institutions,[469] and that nature is often more negatively impacted by development activities for the non-resident wealthy than by livelihoods activities for the resident poor[470] is still rarely acknowledged. An exception, likely prompted by the increased realisation of global biological diversity loss at the beginning of the third millennium,[471] has been the 2014 IUCN World Parks Congress of Sydney (Australia). The Congress embraced the consideration of both protected and *conserved* **areas**, called for renewed action on governance diversity and quality, and began the ongoing process of understanding governance vitality— to which this work hopes to contribute.[472] In a nutshell, the recognition of the value of *conserved areas* broke away from the bottlenecks constraining protected areas and, directly following the new conservation vision of CBD COP 10,[473] prompted the idea that **area-based conservation happens, and should be supported**, also *outside* the national protected estate, including **in the territories and areas governed and managed by people**. In due course, the CBD Parties will return to matters of governance of protected and conserved areas. In 2018, they reviewed a document of voluntary guidance (CBD, 2018a) that recommends enhancing governance diversity ("a key pathway to appropriate governance") and governance quality ("a key pathway to effective and equitable 'good' governance). In the same voluntary guidance, 'equity' is well described as encompassing the three dimensions of environmental justice— recognition, procedure and distribution, with important governance implications. Although the CBD Parties formally welcomed the voluntary guidance (CBD, 2018b), they have generally dealt with equity issues as if they concern the distribution of economic benefits *only*.[474]

Based on our rapid and inevitably simplified review of their diverse origins, motivations and development, can we derive any insights about the vitality of governance institutions in charge of official protected areas? While there is a truly broad spectrum of experiences in diverse countries, a few general observations can be derived. On the one hand, most examples are relatively **recent**, very few spanning more than a century. We hope that they will all withstand the current crises and those that are likely in the not-so-distant future, but this is all to be demonstrated. On the other hand, the concept of protected area is **politically attractive** and very **adaptable**— it has been adopted all over the world and, as we have seen, the coverage continues to expand. Moreover, most protected areas are now part of **well consolidated** systems. The managers, researchers, tourism entrepreneurs and many other professionals and businesses associated with protected areas have established agencies, training operations, university programmes and structures, partnerships and networks. All this has realised sizeable budgetary allocations, and is generating, in particular via tourism and water companies, large financial flows, including from outside the relevant countries. In all, protected areas represent **sizeable niches of capacities and interests in society**, quite unlikely to fade barring major global events such as epidemics, catastrophes and wars.

Protected areas, however, require sizeable investments, a fact that brings them under the dependency of the political will of decision-makers, and in competition with other priorities. A few of them do 'pay for themselves'

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469   Stevens *et al.*, 2016a; Stevens *et al.*, 2016b; Stevens *et al.*, 2024b.
470   IUCN CEESP, 2006. See also Berkes & Farvar, 1989.
471   SCBD, 2010.
472   Andersen & Enkerlin Hoeflich, 2015. See also Borrini-Feyerabend *et al.*, 2013 and Part VI for the definition of 'protected area' and 'conserved area'. Three short movies produced shortly after the Sydney Congress explore the meaning of 'governance for the conservation of nature' and the insights of the Congress' governance stream: https://www.iccaconsortium.org/2016/03/01/the-heart-of-a-stream/ accessed 2024.
473   The IUCN World Parks Congress in Sydney was the first to take place after the approval of the CBD Aichi Targets (CBD, 2010). Aichi Biodiversity Target 11 includes the expression 'other effective area-based conservation measures', which found an appropriate echo and interpretation in the 'conserved areas' of the Sydney Congress.
474   Neil Dawson, personal communication, 2022.

by benefitting from tourism, selling water rights and levying taxes on trophy hunting or other activities.[475] But the majority still **depend on financial support** from the government and/or sponsors and patrons,[476] a relative disadvantage compared with the support by custodian communities to their conserved areas, as external support may be short-lived and subject to abrupt changes. Yet, as mentioned, even the residents of protected areas, those who traditionally thrived and depended on the health of their local environment, increasingly relate to non-local economies and see their **bonds with their territories** progressively **reduced**. As young people migrate to find livelihoods far from their land of birth— no matter how precious and 'protected'—their local knowledge and mētis, and the worldviews, languages, concepts, ceremonies and institutions that successfully governed and managed the relevant ecosystems are eroded and diminished. True, a **professional class of local environmental managers and decision-makers** becomes ever more sophisticated and powerful. But, are they capable of exhibiting the same profound and affective attachment to the territory that characterised many of their predecessors?

Much is to be gained in 'shared governance' situations where a diversity of social actors and institutions pull together diverse perspectives and capacities for broadly shared aims. As exhaustively described elsewhere, much experience has been gathered through processes, institutions and policies that aim at sharing power in governing protected areas and/or other territories and gifts of nature.[477] This may likely become crucial for the viability and functioning of the protected areas themselves.[478] Yet, the ongoing **specialisation, standardisation and commodification of all relations between people and nature** present serious concerns. Will economic values and professional decisions *alone* manage to secure the long-term future of biocultural diversity, ecological functions and the multiple gifts of nature? What kind of power sharing and social values will they ultimately promote? Will they ever manage to curb the social and environmental injustices[479] that are both cause and consequence of many of today's planetary crises?

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475   This is less simple than one may imagine, as national protected area authorities usually require that returns generated by individual protected areas are redistributed to support the entire system.

476   Some are bilateral and multilateral agencies, others are banks, conservation NGOs and philanthropic organisations... See also the estimated sources of conservation income in Meyers *et al.* (2020, p. 7).

477   Borrini-Feyerabend, 1996; Borrini-Feyerabend *et al.*, 2004b.

478   A comprehensive review is offered by Oldekop *et al.* (2016). As an example, regional environmental authorities had to integrate the ecological understandings of traditional fisherfolk to set up viable new protected areas in the Pantanal region of Brazil. As recounted by Chiaravalloti (2016), regional authorities wanted to establish new protected areas to conserve the local biodiversity and were already setting fixed boundaries for such areas. Soon, however, traditional fishers let them know that this was incompatible with both the ever-changing nature of the Pantanal and the needs of local fishers, who must continuously adapt to flood pulses and fish movements. Working together, modern and traditional institutions later reached a better ecological understanding and protection system than either alone. In 2019, however, the fishing communities were still seeking official recognition (Chiaravalloti, 2019).

479   See Burger *et al.*, 2020.

Case example 13.

Riding Mountain National Park (Canada): towards effective integration of a national park in the wider landscape[480]

Described as a 'wilderness island' in the middle of a sea of farmland, Riding Mountain National Park, in Manitoba, is one of the earliest established in Canada. Relatively small by Canadian standards,[481] and with modest elevation (600 m above sea level), it has nevertheless been long recognised by Indigenous peoples for its rich forests, prairies and lakes, all abundant with game and fish. Archaeological evidence suggests that the area has been inhabited for about 6,000 years. In the 18th century, the Cree First Nation used to live in the highlands, and their Assiniboine allies roamed the surrounding prairies in pursuit of the bison. When they moved west, following the bison herds, they were replaced by the Ojibway (Keeseekoowenin) who still live in the area today. The Ojibway maintained a traditional lifestyle of fishing and hunting and saw the mountain as sacred because of its abundant water. The mountain also used to be an exceptionally rich hunting ground.

For 150 years, the mammals of Riding Mountain were heavily exploited for their fur (species like the otter and marten were driven to local extinction). People of European descent collaborated with the Ojibway in the fur trade. As the Canadian Pacific Railways developed, more people settled in the surrounding plains and used the highlands as a source of timber for building, railroads, firewood and wild meat. The Ojibway had signed a treaty with the Government of Canada in the 1870s and a small fishing reserve for them was agreed on the shores of Clear Lake, in what is now the national park (this reserve was later revoked by the park and then again returned; other claims are still active). The Ojibway and other First Nation communities can be found today around the park.

The need for some form of management of Riding Mountain was recognised by the end of the 19th century, when a forest reserve was established to regulate the supply of timber and fuelwood to surrounding farms and communities. A few portable sawmills were in operation at that time and a system of permits was put in place to lease land and build cottages. The national park was only conceived in the late 1920s and officially opened in 1933. It is fair to say that the decision was a result of competing pressures from politicians, bureaucrats, interest groups, aboriginal groups, scientists, legal authorities and the public at large... and that it had little to do with conservation aims. As officially stated, the park was for the "benefit, education, and enjoyment of the people of Canada"— a pragmatic desire to make the best possible use of "natural resources". Regardless, the park also contributed to feeding some of the myths that still forge Canadian identity (e.g. 'wilderness', the Canadian Railways, etc.).[482]

For Riding Mountain, **recreational purposes, timber and fish** resources and **water for nearby urban areas** were paramount concerns. Sandlos (2008) stresses that the eviction of the Ojibway from the reserve within the park boundary in 1936 was a response designed to boost local and departmental tourism, by those who hoped to create an attraction for automobile travellers from within the province and from the United States. The Department of Indian Affairs also supported the removal of the Ojibway from a rich hunting and fishing ground because such a move would help to assimilate 'Native peoples' through immersion in the 'more civilised' occupation of agriculture. The expulsion of the Ojibway from Riding Mountain National Park proceeded with almost no reference to the protection of wilderness values. More likely, it was related to State-driven and

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480   Case example compiled by Grazia Borrini-Feyerabend based on the official website of Parks Canada https://www.pc.gc.ca/en/pn-np/mb/riding accessed 2021, and Fay, 1981; Lothian, 1987; Edge & McAllister, 2009. The picture of a lake in Riding Mountain National Park is courtesy of Melanie Robinson.
481   Almost 300,000 ha, which is relatively small compared to many other protected areas in Canada.
482   Francis, 1997.

popular conceptions of **race hierarchy, social progress** and **economic development** within the broader Riding Mountain region.[483]

During the Great Depression of the 1930s, the park supported a large work camp, and many of its recreational facilities were constructed at that time. It was still possible to harvest timber for domestic uses, cut hay and graze livestock in the park. During the Second World War, Riding Mountain saw plenty of tree cutting for fuelwood, including to contribute to the war effort. The labour force was in part provided by German prisoners, thousands of whom were interned in a 'minimum security' camp in the park from 1943 to 1945. The prisoners worked (apparently not very effectively) under the supervision of park wardens. The further

development of recreational facilities, limitations to tree cutting and the expansion of the park boundaries to improve water catchment properties had to wait until the end of the war. With that, it became clear that better cooperation between Parks Canada and various actors in the surrounding environment was crucially needed to foster regional integration. The phasing out of many consumptive activities in the park was not helping, but the decision to limit development in the park, combined with a general increase in the demand for recreational facilities and support services, was a positive factor.

The desired regional integration was developed in a re-active and piecemeal fashion. One noteworthy effort saw the creation, in 1968, of the Riding Mountain National Park Periphery Committee, comprising representatives

483   Sandlos, 2008.

from Parks Canada and provincial government departments. The committee was very engaged in discussions... but not much action came from it. Possibly this is because it did not include representatives from the municipalities around the park. In the 1960s and 1970s it was too early to wish for a 'landscape planning culture', from the point of view of both regional planners and Parks Canada.[484] There was no expectation of public involvement in park governance and the model of public engagement remained one of mere consultation. In 1986, however, the municipal councils, provincial government and park agency submitted together a successful application to UNESCO to designate Riding Mountain as a **biosphere reserve**.[485] The core area of the reserve was the national park and the surrounding much larger 'area of cooperation' comprised the 11 rural municipalities, four 'Indian Reserves' and several jurisdictions that maintain a rural agricultural economy supplemented by the tourism associated with the park. With that, considerable coordination, and negotiation among actors in the public, private and voluntary sectors became necessary. The pre-existing Liaison Committee was enlarged to include representatives of the park-adjacent municipalities and a sub-committee was created for the biosphere reserve. No overall land management plan was created across the reserve due to the divided jurisdictions and private land ownership, but some priorities were clarified, including enhancing agricultural production and socio-economic benefits outside the park while maintaining the region's ecological integrity— within the park and beyond.

Ecological integrity requires the support of everyone, in particular because of the movements of water and wildlife. Many areas beyond the park's boundaries are useful as wildlife habitat and corridors, but there are challenges with landowners because of wildlife depredation of crops, transmission of disease between domestic and wild animals,[486] and flooding caused by beavers. Ecological integrity is threatened by the introduction of non-native species and pollutants in intensive agriculture plots. And wildlife venturing beyond park boundaries can be hunted and trapped. Resolving issues such as those just mentioned requires **continuous cooperation** amongst government officials, land managers, private landowners and citizens. The existing committees offer a forum for addressing issues, provide outreach, information and education services to residents and decision-makers, organise conferences and monitoring programmes, forge alliances, identify collective interests and promote some cooperation initiatives. Yet, funding is limited, and there is a heavy reliance on a **small number of dedicated participants**, including local officials who may variably 'fit'[487] the ecological and socio-economic circumstances in which they operate. **Appointment by municipal councils** is the only way for an individual to formally participate in the committees, and this implies strong ties to the municipal governments and the political interests represented within it. Some stress that this is not entirely fair, and that less powerful members of society and First Nations communities should have a way to be better represented.[488]

484   Fay, 1981.
485   Edge & McAllister, 2009.
486   E.g. bovine tuberculosis, as happened in the decades around the turn of the millennium.
487   See Reed *et al.*, 2013.
488   Edge & McAllister, 2009.
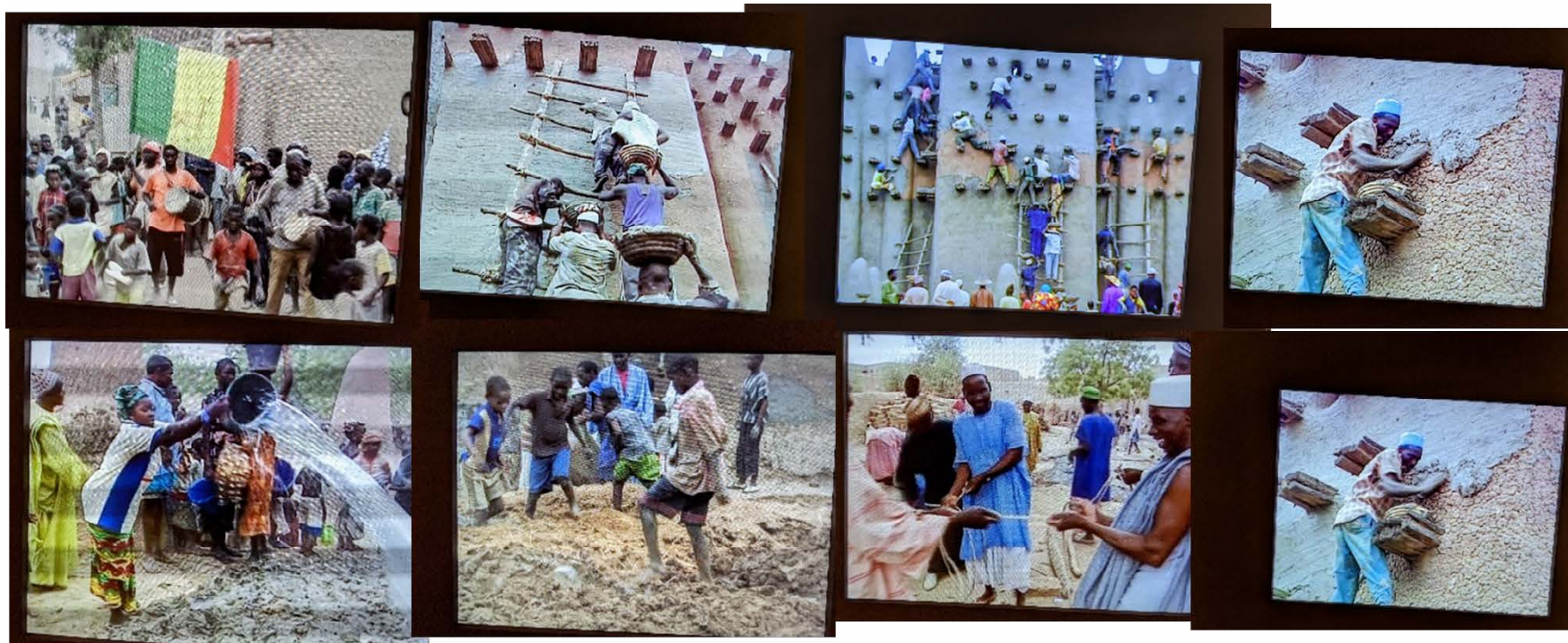
Vitality interlude

"...In Mali, traditional architecture is either made of mud or plastered over with mud, which is the case for the Great Mosque of Djenne, a large and imposing building. Once a year, the people of Djenne, (men, women, children, young and old) gather mud from the Niger River, carry it in baskets and re-plaster by hand the great Mosque. The whole community goes at it together, nobody bosses anybody else around, there is no one 'in charge'... they simply do it together. And this is both beautiful and incredibly disciplined and joyous. They work together like a hive... they climb the surface like gentle human insects... [I was touched by] the sensuousness and tactile way in which they use their hands as the only tools, the fact that the Mosque is alive for them, and they take care of it like a family member, with their hands...".[489]

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489   The shots are from a movie screened at the Metropolitan Museum of Art in New York (NY, USA) as part of the fall of 2020 exhibition 'Sahel: Art and Empires on the Shores of the Sahara'. The words and pictures are courtesy of Alessandro Cassin. Actual date of construction of the Great Mosque of Djenne is unknown but estimates range between 1200 and 1330 CE.

Part II:
What makes a difference?

...for readers intrigued by correlations and analogies, patterns and possible explanations...

All art includes vitality— it is about giving shape to what is impossible to comprehend.

<div align="right">Peter Stamm, 2021</div>

Five characteristics associated with vitality

Some governance institutions have a long life and function for periods that span many generations. What enables them to endure, to keep responding adequately to the inevitable change that affects them? Can we identify any properties they possess that may reveal, or possibly explain, their remarkable capacity? We are about to explore more examples of governance institutions for conserved and protected areas and identify five characteristics that seem to be associated with *maintaining* their functioning and *evolving* positively through time. For ease of description, we will discuss such characteristics one by one, but they are often connected and interdependent, and merge into one another. They are also to be understood as **frequent attributes** rather than as necessary ingredients for the vitality of an institution, which they are not, as they matter to a differing extent across ages and contexts.[490] Moreover, as our working definition of governance vitality rests on the capacity to keep functioning *through time*, time itself may become a factor in generating the characteristics that, in turn, sustain vitality (for instance, 'wisdom from local experience' develops only through time…).

The first three characteristics we will describe are in direct analogy with properties of living beings, while the last two relate directly to functioning *fully* and *in inspiring ways*, that is, functioning *well*, in ways that both achieve the objectives associated with conserved or protected areas and generate *social respect* and *voluntary adherence* to rules.

Strategic adaptability

"Life on earth is more like a verb. It repairs, maintains, recreates, and outdoes itself. [...] it is a marvel of inventions, for cooling and warming, collecting and dispersing, eating and evading, wooing and deceiving […] a nexus of increased sensitivity and complexity."

<div align="right">Margulis & Sagan, 1995.</div>

Like a bacterium, a plant or a vertebrate, a governance institution functioning through time changes, maintains and reproduces itself with **responsiveness** to a given environment, which likewise is never static.[491] Just to maintain basic functioning, vitality implies **being 'alert'** to environmental conditions, including emerging threats, disruptions and opportunities— a prerequisite for any type of response. For a governance institution, this starts by understanding the potential dangers. Which threats are impossible to confront and must be avoided? Which ones can be addressed and overcome? When and how is it important to bend to avoid breaking? When and how must change be embraced, and when does governance need new ideas, activities and people?

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490   The context plays a crucial role not only in securing the survival of governance institutions (see Part III), but also in determining which intrinsic institutional characteristics are important.

491   The fine-scale linkages between peoples and places over millennia can be expressed as 'co-evolution' of biocultural diversity (Rosemary Hill, personal communication, 2020).

Case example 14.

The traditional governance of Enguserosambu Forest in Tanzania: facing multiple challenges by making decisions right where the consequences are felt[492]

Located close to the homonymous village in Ngorongoro District, the montane forest of Enguserosambu[493] forms an important catchment area and is the source of rivers flowing into Lake Natron, the Ngorongoro Conservation Area, Serengeti National Park and their larger transboundary ecosystem spanning southern Kenya and northern Tanzania. The forest, including glades for grazing, covers more than 7,000 ha. The area is hilly, with forest patches interspersed by grazing land, agricultural fields, settlements, water sources, streams and cattle tracks.

The Maasai people who inhabit the Enguserosambu Forest are bound to it for their livelihoods (water, firewood, honey, edible plants...) but also for cultural reasons. The forest is also their 'church and hospital'. They famously refer to it as *endim ang' nanyorr* (our beloved forest), as the forest includes sacred places where they perform rituals and is a source of the herbal medicines that all women take after childbirth. The connection between the forest and the Maasai starts at birth, as newborn boys and girls are washed in water in which the leaves of different trees from the forest have been boiled. Many ceremonies are celebrated in the forest, such as the circumcision of boys, the transitioning of warriors to elders and the *Olpul gathering*, where soup with meat and forest medicine is shared to build strength and boost resistance against diseases. *Alamal*— a treatment for infertile women— is also ceremonially offered in the forest.

Land uses in the Enguserosambu Forest and related areas have been decided by several institutions and actors, which evolved their roles and relationships through time. Today, the traditional actors— the women who collect firewood, the elders harvesting medicinal plants, the customary leaders, the warriors and the local militia— are still all very much there. But so are the politicians elected in the Village Council, the Village Assembly (comprising all men and women older than 18 and established under former President Nyerere's leadership in the early 1970s),[494] a more recently created Forest Trust, and others.

The *Ilaigwanak* (customary leaders) and *Morani* (warriors) are community leaders entrusted with important social tasks. For example, the *Ilaigwanak* deal with peer (age-related) decisions. A member of the *Ilaigwanak* is chosen by elders among three nominated younger men with unblemished status within the community. The *Morani* are young men who, after circumcision, serve as *Jeshi* (community force). They are responsible for protecting their communities against external threats, but also to take care of the gifts of nature. They patrol the forest and, if they find any damage, they inform the *Ilaigwanak*, who decide on appropriate punishments. If some culprits are stubborn, the *Mgambo* (local militia) are sent to bring them to justice. The work of traditional groups is voluntary and brings no pay. The relationship among the groups is strong as, **to function properly, each group must involve another one**. For example, the *Morani* are not allowed to punish anyone on their own and must report to *the Ilaigwanak* for anything that requires punishment.

The long-term tradition of wise use of the gifts of nature and the **extensive discussions** that take place in a **multiplicity of traditional and modern bodies** have been able to secure, so far, the respect of management

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492 Case example compiled by Grazia Borrini-Feyerabend based on information provided by Emmanuel Sulle, Robert Kamakia and Cassian Sianga in 2020. For more information on this case, see Mittal and Fraser (2018).

493 A visual account of the Enguserosambu Forest, with description in Kiswahili, is found in this informative short movie: https://www.youtube.com/watch?v=vJY4vePQ-0Y accessed 2024.

494 The 1970s villagisation processes under President Nyerere were an important factor of local institutional change that, in many ways, affected the traditional Maasai lifestyles and systems of self-governance.

decisions. Such decisions are usually communicated orally— although forest and village maps do exist, and some key decisions are written down during village assembly meetings. The responsible leaders— including representatives of the *Ilaigwanak, Morani* and *Mgambo*, and the Village Council— meet twice to three times a month to review issues together. The Village Council comprises 25 members (one third must be women) and is formed by representatives of political parties. Although some tension exists between the traditional and modern structures, the Maasai traditional institutions maintain an unusually significant influence in local governance, in particular for all that concerns the natural environment.

Once a decision is made by leaders, an appointed delegation *(Okiaama)* informs the people in the concerned area and leaves some time for its implementation. After a few months, the communities review the decision to see whether it can be maintained, or it needs adjustments. In this way, the forest and other land uses, especially livestock grazing which is the major livelihood activity of the Maasai, are based on traditional decision-making and management practices that rely on **common knowledge, continuously developed, tested, and exchanged among the communities and their leaders**. In fact, even when management plans do exist, they are used to strengthen and not to thwart what seems right *in practice*. In all, this **inclusive and rapidly adaptive** forest **management system**[495] has stood the test of time and demonstrated its effectiveness.

After centuries of living in and with the forest, the Maasai today need to respond to growing demands for agricultural land, timber and charcoal.[496] Before the 1990s, cultivation in the area was limited, but agriculture has recently become dominant. The land is, and has always been, fertile, and with sufficient rainfall. Government policies at district level, however, have been encouraging maize cultivation, which has increased the competition over land currently used for grazing and forest, and multiplied human-wildlife conflicts. The need for timber for the

modern houses promoted by the national government over the past twenty years is also having a significant impact. Possibly related to these local land-use changes, the forest, which used to be moist for the larger part of the year, is today subjected to changes in rainfall pattern, declining water levels in streams, and long periods of drought.[497] Its vulnerability to forest fire has increased.

In areas where the forest is being depleted, the traditional governance and the Village Councils have decided to separate land uses as clearly as possible, for instance cultivation and settlements are on one side of the main road, and only grazing of livestock is permitted on the other side. During the dry season and in times of serious droughts, livestock is also allowed to move to the glades between forest areas and to the dry season grazing areas bordering Serengeti National Park. However, the government's decision to allocate 150,000 ha[498] to Ortello Business Corporation— a trophy hunting company from the United Arab Emirates— has strongly reduced the Maasai's grazing land adjacent to Serengeti National Park. Conflicts between the company and residents have continued for nearly 30 years, during which the Village Councils, traditional elders and Pastoral Women's Council have taken a variety of actions to defend their land and resource rights, including via lawsuits and various advocacy initiatives. So far, the Maasai communities have remained united to conserve their forest, and their **governance system** has remained **close to where management decisions are tested and adopted** and has shown **strategic adaptability** in resisting multiple challenges. It may need further strengthening, however, for the biological and cultural diversity of the Enguserosambu Forest to remain alive and prosper in the future.

495   Silisyene, 2018.
496   Ibid.
497   Ibid.
498   Mittal and Fraser (2018) report that in 1992, Ortello Business Corporation was granted a hunting licence over 400,000 ha, home to more than 50,000 Maasai. Community resistance over more than 20 years led the government to reduce the area to 150,000 ha (still well over 20 times larger than the Enguserosambu Forest). The government has apparently revoked the licence in 2017 but, since then, the situation has been unclear and open conflict has re-emerged in 2022 (see: https://www.iccaconsortium.org/index.php/2022/06/12/tanzania-maasai-loliondo-ngorongoro-conservation-eviction/ accessed 2024)

A well-functioning governance institution must be **timely,** and it must be **flexible**. This is particularly important for the types of social-ecological systems where there is little margin for error, uncertainties abound, and multiple institutions are concerned, such as mobile pastoralism in drylands. In such cases it seems that effective governance is complex, fuzzy, allows plenty of overlaps and ensures the flexibility of negotiating timing, partial access and a variety of hybrid solutions in an ongoing way.[499] In such conditions, as seen in the case of the Borana of Ethiopia (case example 6) and the Abolhassani of Iran (case example 18), the capacity to be strategically adaptive is crucial.

Timeliness and flexibility can be achieved in various ways. In some situations, management decisions, customs and rules can be adjusted quickly to changing conditions because the **decision-makers** are **directly in touch with where the challenges operate and impact**. In such cases, consultation takes place as quickly and as often as needs arise— a condition related to **subsidiarity**— as exemplified by the traditional governance of Enguserosambu Forest of Tanzania (case example 14) and further discussed in Part V of this work.

When ecosystems are very large and many more people need to be involved in management decisions, the kind of ongoing direct consultations described for the Enguserosambu Forest of Tanzania (case example 14) becomes cumbersome and slow. Decisions are thus often **delegated** to an institution where the peoples and communities close to nature have **representatives**. Ideally, the representatives are perceived as legitimate and deserving trust, and a combination of approaches is maintained, such as the delegated representatives regularly report to their communities, review their positions, and strengthen themselves in **direct consultation** with them, as in the *Maha Gram Sabha* of India described in case example 15.[500]

Responsiveness, timeliness and flexibility are most beneficial when accompanied by **learning**— specifically, the capacity to treasure and internalise experience to become better prepared to respond to future problems or to embrace future opportunities. It is by combining learning and adaptation[501] that an institution develops its strategic capacities, weighing diverse options based on experience. This may be part of cultural learning,[502] involving changes in worldviews, attitudes, values, beliefs and norms of conduct of the larger society. We describe as **strategic adaptability** the capacity to change in ways that improve functioning, reduce conflicts and enhance effectiveness— and possibly also efficiency and equity— in solving problems.

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499   Robinson (2019) uses the term "complex mosaic regimes" to characterise these systems of heterogeneous resources and interests with a high potential for rapid and critical changes. The systems are far from the ideal common property systems that may follow the principles identified by Ostrom (1990). The "agreed, stable boundaries of territories and well-defined user groups" are, in these cases, replaced by strategically flexible patterns of "emergent self-organization among groups". See also Mehta *et al.*, 1999.

500   For instance, this takes place in those political systems, such as Switzerland, where topical referendums are relatively easily and regularly carried out.

501   Pahl-Wostl, 2009.

502   Lautensach, 2021.

Case example 15.

Lessons on strategic adaptability from the *Maha Gram Sabha* governing tribal territories in Maharashtra (India)[503]

For centuries, the forests of Central India have been at the heart of conflict. Their tribal residents have had to resist pre-colonial, colonial and post-colonial rulers and governments who have all attempted to take control of their territories of life for land, water, timber and minerals in ways perceived as violent and socially and environmentally unjust. In Korchi Taluka of Gadchiroli District, **resistance** has coalesced around **opposition to dams and mining** operations but, remarkably, it has managed to **avoid connection with party politics**.[504] A federation of 90 village assemblies (*gram sabhas*) has emerged in Korchi and, along with a collective of local women's self-help groups called *Mahila Parisar Sangh*, is committed to direct democracy in local territorial governance.

At the root of this transformation are processes towards revitalising and strengthening the *gram sabhas* that gained legal empowerment under the Panchayat (Extension to Scheduled Areas) Act (PESA) of 1996 (which became operational in 2014) and the Forest Rights Act (FRA) of 2006. The FRA allowed the Korchi *gram sabha* federation (called *Maha Gram Sabha*, abbreviated to MGS) to file, in 2009, a successful petition for collective land and forest rights. Besides the important new legislation, the empowerment and gain in collective rights were made possible by a local history of resistance and grassroots study circles and by the presence of supportive civil society organisations and independent (i.e. non-party-affiliated) leaders. None of these factors might have been decisive on its own but, together, they generated a broad transformation that has **fused elements of customary governance** (consensus decision-making, inclusive and communal actions, community solidarity) **with more modern and contemporary ideas** (situation analyses drawing from political economy and human ecology, seeking social and environmental justice, seeking gender and 'caste equity' in decision-making, etc.).

As in any society, in Korchi there are diverse and at times contradictory views and conceptions about what constitutes wellbeing and a desirable future. While some adhere to a capitalist and extractive economic model, others believe in the interconnectedness of all beings, an ethics of sharing, direct democracy, localised economies that nourish diversity, reciprocity, respect for all (including nature), non-violence, and valuing contentment (sense of 'having enough'). Some of these values are articulated in the rules and regulations of the MGS, but most are inherent in their functioning. For instance, the *gram sabhas* at the level of each hamlet and village ensure that all adult women and men participate in decision-making and are fully aware and informed. The *gram sabhas* then select men and women to represent them in cluster meetings and the MGS, but such representatives cannot take decisions on behalf of the *gram sabhas*: their role is only to convey the villagers' concerns and carry back messages from the MGS. To increase inclusiveness, the MGS ensures that monthly meetings are held in different clusters.

Strategic adaptability is espoused throughout the functioning of the *Maha Gram Sabha*, as **values and principles** are **not written down** and remain dependent on the **wisdom** of the actors involved and the **values** entrenched in the local culture. Its members **change at regular intervals**, **but leaders** are requested to stay **associated in an advisory capacity** to guide the process and share in longer-term responsibility. In

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503   Case example compiled by Grazia Borrini-Feyerabend based on: an interview by Jessica Campese with Neema Pathak Broome; Neema Pathak-Broome, personal communication, 2020; and Pathak Broome *et al.*, 2022. More information is now available from https://beyonddevelopment.net/on-the-cusp-reframing-democracy-and-well-being-in-korchi-india/ accessed 2024. The picture of one of the many meetings in Korchi, in 2018, is courtesy of Neema Pathak Broome.

504   The long local resistance to the State's practices and policies has included both loud and visible as well as quiet and hardly visible means. Some have focused on reform change. Others found themselves enmeshed in armed struggles.

addition, **no specific theory of change is articulated anywhere**. For any decision, the assembly reviews and evaluates the consequences and effects of past decisions and drafts afresh a new and specific course of action. Governance of '*jal, jungal aur jameen*' (water, forest and land) is never a fixed situation; at no point can it be said that the communities have overcome all obstacles and transformation has been completely achieved.

Among the many lessons from Korchi are that the **governance process must consciously remain active, agile and responsive to emergent issues**. The processes of decision-making need to adapt constantly and respond to internal issues and external threats. And the ongoing local threats are many: education that alienates the youth from their communities and environment;

constant struggles between political ideologies; ongoing harassment and State interventions against 'extremists'; and dependence on the cash economy and external markets for many inputs. While **governance experimentation** has led to the establishment of the *Maha Gram Sabha* and its relative stability and success, the MGS itself appears vulnerable. For instance, the local *perception* of the wellbeing of people and forests appears crucial. Moreover, village societies are sustained in many ways by trade in non-timber forest products (e.g. *tendu* leaves and bamboo) that are the economic mainstay in the region. Market failures could have serious social, and not only economic, impacts. It is to be hoped that the strategic adaptability embedded in the *Maha Gram Sabha* will allow it to respond to the many challenges that are bound to come.

The strategic adaptability of a governance institution involves timely changes in management practices responding to changes in environmental conditions, namely, **adaptive management**. For instance, in the case of the Enguserosambu Forest of Tanzania (case example 14), the customary institution has devised new rules to respond to the increasing demands for land and explored lawsuits and other forms of resistance and political advocacy as new approaches to maintain control over the territory. As climate change is fast altering ecological conditions, all environmental governance institutions— from agricultural businesses to municipalities, from protected area managers to mobile pastoralists— need to adapt their management practices to the new conditions. For instance, as an adaptive management response to climate change, some pastoralist communities are switching from cattle to camels (see Picture 5). Camels require less water, eat a wider variety of vegetation (including invasive, deleterious species such as *Prosopis juliflora*), and produce up to six times more milk than some cattle species, boosting livelihoods and food security. In other cases, however, a change concerning management practices only is not sufficient and the governing institution needs to become more appropriate to its context, better appreciated and respected, and more effective overall. For this, change may be needed in the *way of* taking and implementing decisions (quality of governance) and/or in the *who* is taking and implementing such decisions (diversity of governance). Such change may be referred to as **adaptive governance**, and an illustration is offered by the *Maha Gram Sabha* in India (case example 15), which established itself and continues to evolve its own rules of functioning over time.

If governance changes are relatively modest, they may be tried out in a **reversible and experimental way** and adopted more permanently only after proving their value. If changes are demanding and affect the organisational culture, they may require help and support from outside to overcome the inertia of the *status quo*. Many customary institutions create a "living, constantly negotiated tissue of practices" whose "plasticity is a source of micro-adjustments", [505] which cannot be constrained without killing the system itself. This observation spells out one of the main differences between adaptive customary institutions and formal State administrations, as the latter adopt rules, indicators, and systems of enforcement and retribution rarely designed to fit the

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505   Scott, 1996.

specific context of adoption and use.[506] The rigidity of State systems is compounded by the fact of imposing rules by legality (legal authority) rather than seeking to have rules adopted voluntarily because of recognised usefulness and **legitimacy**.

Changes that are particularly challenging for traditional governing institutions involve *sudden* and largely *new* demands. An example may be situations requiring representation, delegation of powers and interactions with distant authorities by societies that evolved for millennia as small, largely non-stratified groups in direct interaction with one another. Societies that take decisions by consensus based upon extensive face-to-face discussions may be resentful of any request for 'representatives' that would necessarily shortcut or sideline their internal processes.[507] Another example more than likely to generate resentments is the top-down establishment of a protected area, regardless of the economic incentives that may accompany it. In such cases of major change requested from, or even imposed upon, traditional societies, the same governance institutions that demonstrate an extraordinary capacity to adapt to challenging environmental conditions may find it truly difficult to transform behaviours ingrained in their historical knowledge, experience and values. A telling example is that of the Ju/'hoan San people of Namibia (case example 16), which prompts reflection on a variety of cultural clashes between traditions endowed with different levels of political and economic power.

Nearly invariably, the 'more powerful' try to convince or coerce the 'less powerful' to accept the terms of any eventual cooperation, asking the 'less powerful' to transform themselves and adopt some features, behaviours, attitudes and values of the others, including "for their own good". When the 'less powerful' strongly **resist undesired change**, we may wonder whether this is a sign of institutional weakness… or rather of a deeper, and uncompromisingly strategic, vitality.

The socio-cultural and ecological context of a governance institution may, at times, change so substantially that only an equally substantial change in the institution itself can keep it functioning. In such situations, some institutions are overpowered and crushed. Others manage to partially adapt by stretching their behaviours and resources. Still others rebound from adversity and shocks and find themselves profoundly transformed— we could say 'evolved'— in the process. This institutional 'capacity to adapt and rebound' is a sign of **resilience**.[508] Yet, strategic adaptability can go beyond resilience and achieve **metamorphosis**,[509] the capacity to become 'a different institution', possibly unrecognisable in terms of structures and rules or even interests, values and narratives, but still functioning and maintaining meaningful relations among the people and with the territory. This profound capacity to change, and the open dilemmas that accompany it, are illustrated by the current situation of the Mijikenda people of Kenya (case example 27).

For eons, living beings have been engaging in evolution, and some also in institutional metamorphosis, on our planet. This capacity describes human institutions extremely well,[510] and it is bound to contribute to their vitality. As we discuss in Part V, strategic adaptability also fits our *systemic and dynamic* understanding of vitality of governance for a conserved or protected area— a process of maintaining the health of nature and the livelihoods and wellbeing of people, regardless of the specific organisation and rules in place at any given time.

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506   Ibid.
507   Brian Jones, personal communication, 2020.
508   For the discussion of this point see the section 'Is vitality related to other concepts?' in Part V of this work.
509   Here we understand the term as a "striking alteration in appearance or character". Interestingly, when an insect or amphibian undergoes a metamorphosis, it retains its DNA. A governance institution should retain its capacity to organise a flourishing (vital) relation between people and nature.
510   Graeber and Wengrow (2021) note that institutional flexibility is at the heart of political vitality, as it brings with itself the "capacity to step outside the boundaries of any given structure and reflect, make and unmake the political worlds we live in". They describe how, in many cultures, seasonality brought festivities (e.g. harvest time, midwinter festivals, carnivals, May Day parties, bacchanalian chaos) when "values and forms of organisation reverse themselves and dissolve norms of hierarchy and propriety of government". These special times "kept alive some form of political self-consciousness, allowed people to imagine that other social arrangements are possible".

Case example 16.

Could resistance to change be a sign of deep vitality? The case of the Ju/'hoan San people of Namibia[511]

The Ju/'hoan San people of what is today north-eastern Namibia are a **strongly egalitarian society** that evolved without any hierarchy of headmen and chiefs and is structured in clans.[512] Each clan has a **decision-making institution at the level of the *n!ore* (clan territory)** but the clans never adhered to a leadership structure beyond that level. This has posed problems for the Ju/'hoansi in their relations with government and other outsiders, who 'require' some sort of representative authority to include them in negotiations, decision-making and policy advice.[513] As this lack of representation has often been used to take advantage of them, an NGO founded to support the Ju/'hoansi— the Bushman Foundation—[514] encouraged them to form an organisation.[515] The Ju/Wa Farmers' Union was thus formed in 1986. Its objectives were not limited to farming matters. The overall vision of the Union was to affect the political, social and economic future of the Ju/'hoansi; to develop a mixed subsistence economy; and to acquire a voice in national forums of relevance to land and other political issues. In the late 1980s, the Farmers' Union was formalised in a set of statutes and offered membership to all Ju/'hoan speakers, all who called themselves Ju/'hoansi, and all who had lived in their territory (about 900,000 ha) for more than ten years.

The main body of the union was a Representative Council, consisting of two representatives (known for historical reasons as *rada*) from every clan community in eastern Bushmanland,[516] but also from large settlements such as Tsumkwe. The Council was expected to meet at least once every six months. In turn, the Council selected an Executive Committee including individuals from each district. During the 1990s, the Union renamed itself the Nyae Nyae Farmers' Cooperative (NNFC), taking the name of the geographical area of Nyae Nyae, which had formerly encompassed Ju/'hoan territory. Its governance structure continued to evolve, and the positions of manager, assistant manager and president were added to the Executive or Management Committee. The district representatives were initially dropped but then re-instituted to strengthen local engagement. Also, more frequent meetings of the management committees were re-established. In time, a Management Board emerged with two representatives for each district— a sort of executive arm of the *rada*, which still met once a year to discuss issues affecting the entire area and needing broad agreements.

Throughout its history, the NNFC struggled between the contrasting needs of outsiders demanding leaders who could speak on behalf of their communities and those very communities who were critical of personal ambitions, diminished responsiveness to local needs and fewer direct consultations and feedbacks.[517] The initial **facilitation and management role** of the Management Board became more **blurred** with a representative role, and in ways not appreciated by all.[518] With time, *Rada* members also provided **poorer feedback** to their villages and **fewer consultations** before attending Council meetings, which made Ju/'hoan individuals less and less keen to recognise them as speaking on their

511   Case example compiled by Grazia Borrini-Feyerabend based on material provided by Brian Jones in 2020. The picture portrays some members of the Nyae Nyae Conservancy listening attentively to the presentation of the new budget at a Conservancy Annual General Meeting, September in 2009. The picture is courtesy of Brian Jones.
512   Biesele, 1994; Hitchcock, 1992.
513   Jones, 1996.
514   Later, the Nyae Nyae Development Foundation of Namibia.
515   Cole, 2020.
516   Bushmanland was established in the late 1940s as one of the apartheid 'Bantustans' of South Africa and South West Africa (now Namibia).
517   Hitchcock, 1992.
518   Wyckoff-Baird, 1995.

behalf.[519] In 1994, a sympathetic observer noted that the institutional design of the Nyae Nyae Cooperative was somehow parachuted from outside and did not resemble anything intrinsic to the Ju/'hoan San culture and, in particular, their consensus decision-making processes.[520] In addition, Western advisors added complexity to the issues, as the gender and individual rights espoused by them were not close to the key concerns of Ju/'hoan San society.[521]

The Ju/'hoansi had to move very quickly from decision-making that was vested at the local clan level to coping with multi-layered representation. The most important process of decision-making remained at the clan level, where each clan's *n!ore kxaosi*— elder men and women stewards of both their natural and settled areas— coordinated with the *n!ore kxaosi* of other clans via a balanced and strategic giving and withholding of access to environmental areas. Overlaid upon this, layers of *rada* and district representatives came to discuss broader and not necessarily well coordinated issues, about which they were also interacting with distant NGOs, donors, government and powerful outsiders, and an Environmental Planning Committee that included many of them together.[522] On the one hand, the NNFC had the trust of the people, on the other hand, the very demands of the new institution could not be compatible with the Ju/'hoan culture as there was a **deeply entrenched gap in acceptable processes of decision-making and accountability**.

The tension between participatory and representative decision-making continued when the Ju/'hoansi decided to take advantage of government legislation that enabled them to form a communal area conservancy, giving them rights over wildlife and tourism on their land. To do this, they needed to respond to a legal requirement to establish a representative committee and, after considerable debate, they created a committee comprising men and women, some formally educated

and some not, and a number of people with experience of serving on the NNFC.[523] Describing this, the words of /'Angn!ao /'un, the first chairperson of the Nyae Nyae Conservancy are telling: "If you are going to make plans for the future, then it is very important to know where you have come from, so that we don't lose our culture… Change is slow, one needs to know where you come from to know where to go".[524]

Today, the Ju/'hoansi San are still trying to find a governance approach that meets their requirements for consensus decision-making while adapting to external pressures for a body that respects gender equality, includes numerate and literate office bearers, and can quickly speak on their behalf. In a world prone to catastrophic socio-environmental change, will the former or the latter characteristics prove more useful, in the long term, for their territorial governance institution? The question is clearly not settled. In fact, the **resistance to change** of the Ju/'hoan San people may even be a sign of deeper vitality than an easy capacity to accommodate to formats and systems historically and culturally alien to them.[525]

519   Ibid.
520   Biesele, 1994.
521   Ibid, p. 16.
522   Ibid.
523   Biesele & Hitchcock, 2011.
524   Cole, 2020.
525   There is also the concrete possibility that the decision-making level more consequential for the livelihoods desired by the Ju/'hoansi San may indeed be the level of the clan… rather than any larger and less directly relevant level.

Creativity and empowerment

> *"Life produces autopoietically[526] and reproduces itself [...] [but]*
> *all autopoietic beings have two lives, as the country song goes,*
> *the life we are given and the one we make. [...]*
> *At even the most primordial level, living seems to entail*
> *sensation, choosing, mind."*
>
> Margulis & Sagan, 1995.

Beyond the capacity to react to outside phenomena— which we have chosen to call strategic adaptability— is the capacity of living beings to be autonomously active, to choose and seize, and even create, new opportunities towards meaningful goals. This most exciting and intriguing property of life has generated all sorts of theories of vitalism[527] but also the understanding of organisms as beings characterised by **self-organisation and self-motivation**.[528] Self-organisation can be conceived at multiple levels, including the living planet of which we are part.[529] For individuals, self-motivation is often described as essential for happiness, wellbeing and sense of meaning in life.[530] For a governance institution, we may express this fundamental characteristic as demonstrating conscious autonomous agency, possessing a **self-adopted purpose** to guide functioning, and, in the best of cases, giving a **self-defined meaning** to one's action and desired results. An excellent illustration of this is offered by the Wampís Nation of Peru that, in 2015, self-proclaimed governance rights and responsibility to its customary territory (see case example 30).

Autonomous agency may start from **curiosity and playfulness**,[531] a spontaneous desire to become aware of issues and thereby identify threats and opportunities and experiment with new ways of interacting with changing contexts. The autonomous capacity and motivation to play, try something new, 'do more', 'do differently', distinguish oneself and excel has evident parallels in the biological realm, where animals, insects, fungi and plants show an incredible capacity to attain the most striking colours, perfumes or dancing patterns to be attractive to mates and pollinators, as well as the most imposing and menacing looks, or camouflaging low-profile looks, to warn off or confuse competitors and predators. We see vitality in this **capacity to try something new**— blending into the background or emerging and standing out, joining with others to appear more imposing or finding survival in an obscure and inhospitable niche— while recognising the inherent risks, and the need to balance curiosity and novelties with prudence and judgement.[532]

In the realm of governance institutions, a parallel to biological curiosity, playfulness and capacity to try something new can be found in behaviours that go beyond what is normally required and expected, seeking **new**

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526   The term autopoiesis refers to the innate capacity of an entity/system to maintain itself and continually reproduce its own elements (Maturana & Varela, 1980). All systems depend on an exchange of energy and matter with their environment, but autopoietic systems determine when, what and through what channels energy or matter is exchanged. Autopoiesis depends on the relations among the 'elements of the system' (their 'organisation') and on the system being distinguished from the background— the system being a unity, an entity or 'being'. For that distinction, some form of *boundary* must exist (e.g. a cellular membrane) and delimit the system while being part of it. Maturana and Varela (ibid) refer to this capacity for simultaneous (interactional) openness and (operative) closure of autopoietic systems as a 'process of cognition', somehow responsible for the 'autonomy of the living'.

527   Vitalist theories assume living beings are imbued with some non-physical/ metaphysical element that creates the properties of life.

528   Bateson, 1972.

529   "...early after life began it acquired control of the planetary environment and this homeostasis by and for the biosphere has persisted ever since." (*Lovelock & Margulis, 1974).*

530   Chirkov *et al.*, 2011.

531   Graeber, 2014.

532   Evolution takes care of offering both rewards and sanctions.

answers to questions and new solutions to problems. Through creative behaviours, institutions seek and develop **new knowledge**. The history of science shows that many fortunate discoveries depended on trials, curiosity and creativity, including to be able to build upon the uncertainties of research— the unforeseen outcomes, the surprises and novelties, the innovations that emerge when experiments unexpectedly fail. It shows that discoveries may be based on the capacity to recognise suggestive details out of context, and to build upon serendipity. We use the term 'creativity' to describe behaviours that engage our capacity to resist the lure of the simplistic,[533] recognise contingencies,[534] and **embrace the complexities of scientific practice**.[535]

In this light, a value 'naturally' associated with creativity appears to be **pluralism**— the open appreciation and fostering of a **multiplicity of perspectives, methods, sources of knowledge and solutions** to approach the same situation or problem.[536] This can be intentionally embraced to counteract group conformity and the tendency of power to entrench and sclerotise, which emerges quasi-physiologically in institutions. A pluralistic governance institution would be aware of multiple levels and types of agency and organisational cultures. It would appreciate multiple sources and systems of knowledge. It would understand the values of separating powers. Further, it would keep welcoming new ideas and contributions, be ready to investigate new phenomena that may affect the future of the local environment and communities and see changes also as opportunities. This also means welcoming **new people in governance roles**— inviting all concerned parties to express their advice on decisions, offering to many the opportunity to serve, and making sure that the formal positions of power rotate as frequently as appropriate.

The relatively frequent rotation of individuals in positions of power is exemplified in traditional institutions as diverse as the *Gadaa* of Ethiopia, the *Regole* of Italy, and the community governance of Cherán in Mexico (case examples 6, 7 and 10). Certain contemporary institutions intentionally nourish innovation and creativity at the very heart of their management and governance practices (see the Tasmanian Land Conservancy, case example 17 below) but customary organisations can also be champions of innovation in solving problems and using scarce resources[537] (see the Abolhassani Tribal Conservancy of Iran, case example 18). For some scholars, the lack of a pluralist perspective on conservation is the crucial factor responsible for the contemporary lack of progress in reversing the global trend of declining biodiversity.[538]

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533   Dupré, 2002.
534   I.e uncertainties, phenomena that are interdependent with other phenomena...
535   Feyerabend, 1987.
536   Some would refer here to epistemic justice, i.e. the capacity and willingness to recognise diverse knowledge systems, ways of knowing, being, doing and 'being wise' (Neil Dawson, personal communication, 2022). 'Redundancy' of processes and solutions is also implied in plurality, helping to face environmental risks and to enhance institutional options (Low *et al.*, 2003).
537   Barkin & Lemus, 2016.
538   Pascual *et al.*, 2021.

Case example 17.

Empowering creativity and innovation in the Tasmanian Land Conservancy (Australia)[539]

The Tasmanian Land Conservancy (TLC) is a non-governmental organisation that raises funds from the public to purchase or otherwise secure land of high biodiversity value and manage it for conservation. At times, land is not purchased outright but specific agreements are established for its long-term custodianship by taking advantage of specific funds and policies. And TLC also sells land, when the new owners agree to sign a legally-binding agreement under the *Tasmanian Nature Conservation Act*. As of 2022, TLC owned and/or managed a network of 26 reserves in Tasmania, covering more than 65,000 hectares. The organisation started in 2001 with a board of dedicated volunteers who were trying out and adjusting their own rules. From then on, it evolved into a formal member-based organisation. It still takes decisions by consensus in its General Assembly but also has a governing board that meets six times a year and a CEO that manages all routine affairs and hires office and field staff.

Over time, the organisation has adapted its statutes and structure to respond to changing priorities and opportunities, while maintaining basic values of mutual respect, tolerance, creativity and innovation. Remarkably, the organisation has progressed— slowly but clearly— by separating its governance (strategic decisions taken by the board) from its management (implementation of decisions in the work programme under the CEO's supervision). It has also created a Science Council, which provides conservation advice, and a Property Committee, which provides advice in relation to acquisitions and sales of land, and other similar issues.

TLC has developed a statement of basic values to which all its members adhere, and as a part of this, there is an explicit focus on **creativity and innovation**, reflected in the strategic plan and supported by the leadership. The organisation encourages people to "**be brave and have ideas…** experiment with **freedom of thought and innovation**… and [nourish] **enthusiasm**". All the staff are asked to **be inquisitive** and ask questions about why things are done the way they are. Everyone has the freedom to try new things, and the **permission to fail**. When a decision is made to adopt an innovation, however, guidance is provided to ensure that experimentation is reasonable, productive and positive. There is no rigid 'set process' for innovation and there isn't yet a set way of *measuring* it within the organisation. Rather, learning is enabled through a high degree of **transparent** and **detailed information sharing** across the organisation, including frequent discussion about what is being tried out. For example, there is a brief, dedicated time during each staff meeting (every two weeks) for people to share innovations or new ideas. If an idea sparks interest, a small group of people takes it forward, possibly with staff working jointly or in communication with advisors and board members. Such reflection groups are allowed a great amount of freedom to figure out how best to implement the new ideas and other elements of the strategic plan.

The fluid way in which TLC takes management decisions is balanced by **full transparency** and the practice of **good record keeping**. For instance, notes are kept about all governance and management innovations that go into effect and about whether and how each of these succeeds. The notes are complemented by an assessment of whether the practice shows overall positive results and should be continued. Most often, however, it is not the reading of the notes but the open discussion of ideas and experiences that helps the organisation to make good sense of innovations.

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539   Case example initially compiled by Jessica Campese based on an in-depth interview carried out by Michael Lockwood in 2017. More information from the Tasmanian Land Conservancy website https://tasland.org.au/ accessed 2024.

Innovation and creativity are crucial properties of vital institutions but can become destructive when not balanced by a respectful **sense of history**— a full understanding of where the institution comes from and where society wants it to go— and adequate forms of **transparency** and **discipline**. As well expressed by Carl Folke and colleagues: "creativity needs to be framed" and "the frame is the history, the accumulated experience and memory of the systems".[540] An institution may seek and adopt change in management practices, as for the Enguerosambu Forest of Tanzania (case example 14) or change in structure and rules to anticipate and prevent governance problems, as done by the *Maha Gram Sabha* of India (case example 15), but such change should always be *appropriate*, that is, rooted in local knowledge and experience. For the concerned individuals, qualities like **thoughtfulness**, **humility**, self-restraint and a sense of one's own limits are also important to ground innovation and frame creativity.

When could we say that a governance institution for a conserved or protected area is **empowered**? Possibly when it is conscious, autonomous, capable of a healthy level of **self-determination** in deciding matters and advancing its conservation and wellbeing objectives. In this light, examples of behaviours that demonstrate empowerment include: adapting old rules no longer useful for the relevant territory or area; creating new sets of rules matching locally evolved perspectives and values; pursuing local objectives while, as necessary, embracing or resisting interventions towards externally defined 'development' and 'conservation' goals; embracing tolerance and pluralism; and recognising that uncertainty is the norm... while remaining able to act with decisiveness, as needs arise.

Genuine self-determination needs to be accompanied by a strong sense of **governance responsibility**— demonstrated by the willingness to **do all that is possible to achieve the desired results**, honour commitments and remain accountable for the consequences of decisions and action. A demonstrated sense of governance responsibility is a mature characteristic associated with a governance institution. It is the characteristic that fuels and reveals vitality in difficult conditions.[541] The capacity for self-determination, however, is contentious, as what is self-determination for some, may be interpreted by others as stubbornness, ignorance, or destructive and undue behaviour. Many institutions are curtailed in their capacity and desire to exercise self-determination by other organisations, which do not recognise their willingness, rights and capacities to decide about land, water and other gifts of nature.[542] For instance, in the tropical island of Palawan, in the Philippines, the governor ordered the arrest and jailing of some Indigenous peoples who had started burning their fields to prepare for planting in 2016. Such obstacles are very effective in preventing self-determination. The governor issued the arrests ostensibly to prevent deforestation,[543] but he failed to stop newly arrived entrepreneurs from deforesting land for mining and oil palm plantations.

Any governance institution interacts with other institutions and must confront their power in the form of organisations, policies and rules at diverse levels. A key condition that supports the self-determination of a local governance institution is the respect of its **Free, Prior and Informed Consent** (FPIC) to any intervention that affects the territory or area it governs and manages, or the wellbeing of its inhabitants. So far, FPIC has been articulated in detail and internationally recognised (although rarely respected) for the customary

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540   Folke *et al.*, 2003.

541   Particularly hard environmental conditions tend to nourish a strong sense of responsibility, and honour in accomplishing daunting tasks. For instance, a very important concept for Inuit people is expressed by a word in Inuktitut: ajuinnata, meaning "promise to never give up", offering an unshakeable commitment to action. See also case examples 3, 7, 9, 10, 23 (part a. and part b.), 26 and 30 in this work.

542   We refer here explicitly to the 'right to govern' rather than to land ownership rights as the two do not coincide, and the second is not needed for self-determination to be possible.

543   Dario Novellino, personal communication, 2016. The arrests took place despite shifting cultivation being essential for the livelihood of Indigenous peoples and, in the right conditions, known to be conducive to enhanced species richness (see Cairns, 2015).

territories of Indigenous peoples.[544] Relevant national instruments include: legal codes defining the rights and duties of landowners (private, collective and corporate); codes recognising the territorial and cultural rights of Indigenous peoples;[545] and policies that recognise Indigenous peoples' and local communities' various forms of customary tenure and/or give proper support to their capacity to conserve biodiversity.[546] Policies of administrative decentralisation also define the spaces and limits of self-determination of various local organisations.

In summary, the empowerment capacity of an institution depends on both the sense of self-determined purpose, energy and determination of the institution itself and on the room for manoeuvre offered by the political context. As mentioned in the preceding section, some institutions also empower themselves by using the **'weapons of the weak'**—[547] lying low, not complying when asked to identify representatives, like the Ju/'hoan San of Namibia in case example 16, and possibly even becoming dormant under various forms of repressive powers, waiting for more propitious conditions to resurface. This latter case is illustrated by the Abolhassani Tribal Confederacy of Iran (case example 18).

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544   See: ILO, 1989; United Nations, 2007; Expert Mechanism on the Rights of Indigenous Peoples, 2018. The practical application of FPIC is complex, and an 'FPIC process' may be more equitable and appropriate than 'FPIC decisions', especially when the consequences of different choices can hardly be anticipated.
545   See: United Nations, 2007.
546   See: Stevens, 1997; Sajeva *et al.*, 2019.
547   Scott, 1985.

Case example 18.

The re-established customary governance of the Abolhassani Tribal Confederacy (Iran) takes responsibility for re-designing the livelihoods of its community[548]

For centuries, the mobile Indigenous Abolhassani tribes have lived and seasonally migrated with their herds in an area surrounding the Touran Central Desert of Iran. Despite its harsh climate, the area has a remarkably high animal and plant diversity. An estimated 800 plant species have been identified there, more than 20% of which are endemic. There is also an exceptional diversity of wildlife, including the critically endangered Asiatic cheetah, Persian leopard, Houbara bustard and Persian gazelles, among others. Like most traditional pastoralists around the world, the Abolhassani rarely hunt wildlife and respect a division of water sources between wildlife and livestock. Their ancestral territory is ring-shaped and covers about 74,000 ha of dryland— an ecosystem uniquely suited (and likely also *only* suited) to mobile pastoral livelihoods. In 1963, as part of a vast campaign of nationalisation of land by the regime of the Shah, the Abolhassani territory was declared State property. In parallel, tribal organisations— and especially those of mobile Indigenous peoples, known to be not easily controllable— were declared illegal and brutally suppressed. Many tribal chiefs were imprisoned, some executed, and many others forced into exile. Campaigns to sedentarise mobile pastoralists were implemented by successive regimes. The twelve Abholassani tribes were severely **impoverished** and only **survived by lying low**.

The political climate across the turn of the millennium did not mark any major change of attitude regarding the mobile lifestyles of Indigenous pastoralists. Yet, with the support of a visionary civil society organisation that assisted throughout the process,[549] the Abolhassani Tribal Confederacy was able to re-constitute itself and re-affirm its responsibility to govern its territory. Today, each one of the twelve tribes in the Confederacy is represented by two trusted elders in the Council of Elders in charge of governing the territory (e.g. deciding when to start migration and how many should go). The Council of Elders and its Women's Committee are the voice and governing institution of the Tribal Confederacy. All major decisions affecting the territory are discussed in the Council of Elders and approved only after consultation with each of the twelve tribes. The **restoration, strengthening and official registration of the customary tribal system** have been key for its re-empowerment and to provide the basis for a system of participatory and deliberative democracy.

Since the beginning of the new millennium, the territory of the Abholassani tribes has been subject to frequent and severe droughts, a sign that many have interpreted as part of global climate change. Recent oral poetry and lore testify to the almost total outmigration of the population, rendered desperate by its being deprived of its normal way of life and sources of livelihoods. The small Tribal Confederacy, however, has found a way to react. Drawing from its own collective knowledge and traditional resourcefulness, it has developed and implemented a composite and remarkably successful adaptation strategy. It has done so by fully relying on the capacity and willingness of its customary governance system to conceive and implement needed **innovations in the tribal livelihoods pattern**.

The innovations include the re-institution of a pastoralist tradition called *hanar*— watering the animals once every two days, instead of every day, during the cooler

548   Case example compiled by Grazia Borrini-Feyerabend based on a 2014 presentation by M. Taghi Farvar and personal communications by Ghanimat Azhdari and Ali Razmkhah in 2019. The picture of participatory mapping of land uses in the Abolhassani territory of life is courtesy of CENESTA (see footnote 549).
549   Centre for Sustainable Development and Environment (CENESTA), www.cenesta.org

autumn and winter seasons. This has also required the reintroduction of some drought-tolerant indigenous breeds to the herds, which allows the animals to go twice as far from the water sources, relieving pressure on natural rangelands due to better distribution of grazing (incidentally, this has also facilitated the sharing of available water sources between livestock and wild-life). *Hanar* has been combined with some 're-invented' local agriculture, as the Abholassani took up new crops or reallocated them to supplement the feeding of the herds. With some help from the government, they also developed some irrigation *via* the traditional under-ground water management system (*qanats*) and built new water storage units. Instead of depending only on rain-fed wheat and barley, this allowed them to also cultivate pistachios, cotton, watermelon and sunflower seeds— all used for both direct sale and to improve the feeding of sheep, goats and draught animals. The new garden vegetables and fruit trees also support better community nutrition and food security.

The Abolhassani continue to migrate according to their traditional seasonal pattern, but the *hanar* and supple-mentary crops have reduced the grazing pressure on natural rangelands. While they were deciding on and implementing these livelihoods changes, the Tribal Confederacy also adopted a microcredit programme and re-instituted the traditional intertribal **mutual aid and solidarity agreement** for sharing rangelands among

drought-affected tribes— a practice that had been forbidden by governmental agencies. The microcredit programme is proving a strong element in support of the customary governance system. The sustainable live-lihoods fund (*sanduq*) ensures the collective ownership of all tribal assets and initiatives. Men and women bene-fit by receiving credit for diversified livelihood activities (e.g. sustainable collection of non-timber products from forests and rangelands, handicrafts, dairy production). The community— now stronger because it is once again well organised— has also managed to exert pressure on the government for better services for education and health care, and obtained small-scale piped water for drinking, public electricity and telephone coverage.

The Abolhassani may have succeeded in empowering themselves as their land is relatively marginal and seemingly did not attract the powerful appetites for wa-ter, oil and other precious minerals that have destroyed many other territories. They affirm, however, that the crucial condition for their self-strengthening process has been their relatively recent **re-organisation along traditional lines**, and, with that, the **capacity to gov-ern and manage their territory of life** as they see fit. They are sharing their experience with other tribes and encouraging them to join the Federation of Indigenous Nomadic Tribes of Iran (UNINOMAD) to take control of their own affairs and govern their migration territories according to their own knowledge and skills.

Connectivity and collaboration

> *"All living beings continuously exchange*
> *matter and energy with their surroundings*
> *in a process called metabolism*
> *[which is] the earthly manifestation of autopoiesis,*
> *a property of life since it began."*
>
> Margulis & Sagan, 1995.

As all living beings do, governance institutions for conserved and protected areas can be regarded as possessing a 'natural metabolism'— they are compelled to **acquire, generate, circulate and use goods** and **information,** as relevant to their context.[550] For instance, governance institutions require **material and economic**[551] **resources** (e.g. for organising meetings and exchanges, procuring the inputs necessary for management activities, carrying out the surveillance of the relevant territory, etc.).[552] They also require **technical support,** and various forms of **political backing**[553] to ensure the respect of rules. And they require a tremendous amount of **information** about the *local* socio-cultural and ecological situation, from historical times to the present, but also *non-local* data at various levels, from planetary climate to regional market prices. In fact, at least three types of information seem paramount for the institutions governing conserved and protected areas: information derived from **local knowledge,** accumulated through time and passed on across generations; information about **phenomena** that may have significant local impacts (including distant forces **that act via telecoupling**[554] processes); and information from relevant **research** and **technological innovations**[555] (including via sophisticated means, such as DNA research, satellite-based observations of geo-spatial change, climate effects, drone-revealed resource extraction in remote areas, etc.).

How can these resources and information be made to flow freely and be best used? We can easily imagine that a sound 'institutional metabolism' demands excellent **connectivity**— that is, meaningful and frequent **interactions** among actors, institutions and sectors that act in diverse spaces and at diverse levels in society. In this sense, a vital governance institution connects with others and finds its role as part of larger **networks and nested system**(**s**).[556] In such systems, every actor communicates, offers and receives recognition and support at multiple levels, and keeps alive the flow of information and political, technical and material support needed for individual and overall metabolism. It is true that strong connectivity makes it possible that negative events— such as a financial crisis or an infectious disease— spread at a more rapid and dangerous pace. It also allows, however, a rapid flow of support when that may be needed, avoiding fragmented and sectoral

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550   Fuente-Carrasco *et al.* (2019) describe a phenomenon of 'social metabolism'— a concept more complex and articulated than the simple exchange of resources and information we are describing here.

551   As aptly pointed out by Ashish Kothari (Personal communication, 2022) this does not necessarily mean financial resources, as financial resources can be substituted by physical and social equivalents.

552   A larger issue regards the material resources necessary for the lives of rural custodians of natural environments. This broader discussion is well addressed by Barkin (2000) focusing on diversity, food self-sufficiency and the direct engagement of the rural poor in conceiving and carrying out productive initiatives.

553   E.g. a judicial system that does not counter the rules of the concerned governance institution; see also the section 'Culture and politics' in Part III of this work.

554   The concepts of telecoupling and metacoupling describe those phenomena that, in a globalised world, produce powerful impacts in specific locations distant from where the phenomena originate (Liu *et al.*, 2013; Liu, 2017; Hull & Liu, 2018). Examples include trade and market speculations, labour demands, species invasion, transfer of pollutants and waste, foreign investments and concessions for extractive industries, agricultural industries, energy and infrastructure development, etc.

555   This is clearly fundamental regarding climate change and other global change impacts.

556   Some speak in terms of polycentric systems (Ostrom, 2010; Aligica & Tarko, 2011) and nested institutions (Ostrom, 1990).

approaches to management issues. Connectivity also facilitates the sharing of authority and responsibility for the conserved or protected areas[557] and hopefully promotes mutual trust and various positive forms of collaboration.[558] Leaders and charismatic figures play a major role in this.[559]

Connectivity is particularly important at the time of the creation of an institution (the conditions of its establishment) as it may generate a broadly diffused **sense of ownership and legitimacy** in society, also referred to as **constitutionality**.[560] In turn, the sense of legitimacy is likely to relate to the purpose of the governance institution, enhancing its **motivation and energy** to function. A governance institution usually receives a strong burst of motivation and energy when its establishment has strong backing and support from society… but that backing needs to remain beyond the time of establishment during its normal operations. In a well-functioning system, connectivity, legitimacy and trust are continuously renewed, as metabolism never stops. For instance, a major multi-country review of the conditions that support community management of wildlife[561] identified as important both the self-confidence to coordinate and negotiate with neighbours, government officials and external institutions and the capacity to create alliances at various levels. All this proves crucial when allies are needed to face new challenges, as for the Penan of Sarawak over the last few decades (case example 19).

The actors in a system face important choices in connectivity, and none is more important than whether to **compete or collaborate**[562] with other actors in the same ecosystem when the option of 'live and let live' is not easily practicable. As an example, two communities may face this choice regarding a source of water needed to irrigate their fields. It is easy to imagine that success in competition for that limited water could be seen as beneficial, if not essential, for one or the other community.[563] In the long run, however, and in situations of scarce resources, a victory in competition may be less positive and beneficial than collaboration. Joining forces between the communities may generate capacities that neither of them, alone, could possess (synergy).[564] In fact, communities that joined forces to **secure** their **water supply** have developed extremely ingenious ways to obtain abundant water for all. Individually, hardly any community would have been capable of gathering water, at times from the very mouth of glaciers, conveying it along and across valleys and rock cliffs, in underground caves and across deserts, dividing it into fair parts and providing it, year after year, to the many users in need. Communities with a capacity to collaborate, however, have done exactly that, for generation after generation… and, in the process, they have also woven many other beneficial relationships.[565]

557   Pahl-Wostl, 2009.
558   Some scientists have stressed the survival and ethical values of collaboration (Kropotkin, 1902). Others have highlighted how collaboration promotes the development of 'social capital' (Brondízio *et al.*, 2009) and how an institutionalised cooperative culture promotes happiness (Bruni *et al.*, 2019).
559   Folke *et al.*, 2007.
560   For a discussion of this, see the section 'Is vitality related to other concepts?' in Part V of this work.
561   Roe *et al.*, 2000.
562   Remarkably, Ridley (1997, p. 264) stresses that "…the roots of social order are in our heads, where we possess the instinctive capacity for creating […] a better society than we have at present."
563   We are again reminded of Darwin's "struggle for existence", the need to fight "red in tooth and claw" to secure a niche of resources among species or within the same species, taken to extreme consequences by T. H. Huxley (1888) in its messianic advocacy of the "business of industrial life". And yet, despite the "self-assertion of individuals glorified from time immemorial", Peter Kropotkin (1902, reprinted 1955, p. 300) finds strong biological and historical evidence that "in the ethical progress of man, mutual support— not mutual struggle— has had the leading part". This early insight is echoed by modern evolutionary biology, as the natural phenomena that rely on cooperation are ubiquitous among genes, bacteria, fungi, plants and animals (Silvertown, 2024).
564   Again, according to Kropotkin (op. cit.), the tendency for internal collaboration within a species is most needed when the environmental conditions are harsh and extreme. In such cases, organisations (or individual humans) may find it more appropriate to learn from one another and become stronger together, reserving competition for non-hostile fields, such as beauty, generosity or ingenuity.
565   Intra and inter-community collaboration for the gathering, management and fair sharing of water is a most common feature of human cultures, from the water channels in the Andes to the bisses et rus of the Western Alps, from the subak of Bali to the zanjeras of the Philippines and qanat of Central Asia. See Laureano, 2013 and Megdiche-Kharrat *et al.*, 2020.

Case example 19.

The Penan find many allies to protect their territory of life in Sarawak's forests (Malaysia)[566]

Few people in the world are today as critically threatened in their way of life as the Penan— traditional hunter-gatherers in the once deep forests of Sarawak, the largest of the thirteen States in the Malaysian Federation and one of the two Malaysian States on Borneo Island. Their livelihoods and ways of life, which are directly dependent on the forests where they have thrived for generations, are in serious jeopardy in a country where palm oil plantations and the extraction of precious timber provide for two out of the three top commodity industries in the country. In fact, less than 10% of Sarawak's original forests are still standing today and for some decades the Penan have courageously fought to defend as much as they could of their territory of life. In 2008, it was revealed that the Malaysian government, supported by powerful national and international actors, had plans to build several dams. The dams would flood the Penan's territory just like the territories of other Indigenous peoples had previously been flooded. Unexpectedly, however, the Penan managed to regain hope. Today, the planned 1,200 MW dam on the Baram River has been "indefinitely put on-hold [...] because of strong opposition from local communities"[567] and the Penan seek to secure their territory as part of a larger Baram Peace Park. How did they achieve this unexpected feat? Alone, their resistance and voice may not have been sufficient to halt external forces from invading and destroying their forests. But they strengthened themselves by **developing alliances in all possible ways**.

First and most importantly, these alliances had long been developed **among themselves**— that is, among all Penan communities. Villages were repeatedly visited by Penan leaders to develop a common understanding and commitment, which had to be strong, as the fight started with road blockades in the 1980s that risked the lives of all those involved. The initial awareness of impending threats for the Penan was facilitated by the presence of a Swiss national called Bruno Manser who had come to live with them and share their way of life. Bruno Manser knew about the ways of 'development processes' and could use that knowledge to defend the Penan. Alliances were then built **with other local ethnic groups**, for mutual support, and **with environment, development and human rights organisations and media— nationally and in other countries**. As part of this extended process, the Penan also founded an association, called Keruan, to make their voice heard outside the forest.

Through time, many allies have stood with the Penan and provided them with various types of support as they fought for their survival. One practical and concerted effort has been the idea of setting up a Penan Peace Park. The original idea was conceived by the Penan in 2009, deriving from their strong sense of attachment to the natural landscape, called *tawai*. The word *tawai* expresses fondness and longing based on memories that may be positive or negative, important or inconsequential, about group activities or life in general, about times of plenty, or times of hunger and pain. Regardless of specifics, *tawai* binds the individual to the group, to the landscape, and to a collective ancient origin. *Tawai* is told and retold in narratives and songs from generation to generation. The Penan Peace Park idea was initially rejected by the government. But the Penan and others did not abandon it. The idea was rather broadened to include many villages of Penan, and the Kenyah, Sa'ban and Kelabit peoples as part of a much larger **Baram Peace Park**, with an overall area of 280,000 ha. In 2015, the Sarawak government expressed interest in the idea

566   Case example compiled by Grazia Borrini-Feyerabend based on: the website of the Bruno Manser Fund (https://bmf.ch/en accessed 2024); the film Bruno Manser— the Voice of the Rainforest (seemingly available only in Switzerland); Annina Aaberli, personal communication, 2020; Cristina Eghenter, personal communication, 2020 (citing personal exchanges with Jayl Langub, 2012). The term 'territory of life' is used because the Penan people and their allies have joined efforts with the ICCA Consortium.

567   https://www.theborneopost.com/2015/11/19/baram-dam-project-halted-indefinitely/ accessed 2024.

and, in the early 2020s, financial support was obtained for its implementation.

An important resource in envisioning and advocating for the Peace Park has been a set of 23 highly detailed maps, based on **15 years of mapping work** with technical support from the Bruno Manser Fund of Switzerland. The maps include the territories of 63 Penan villages—almost 1 million hectares of rainforest, 7,000 bodies of water and 1,800 hills. They show the location of cultural sites, salt springs, and a variety of utilised plant types, including the precise locations of 800 arrow-poison trees. All these features and gifts of nature are listed under their Indigenous names. After the disappearance of Bruno Manser himself in the year 2000, unsolved to this day, the Bruno Manser Fund has been actively supporting the Penan for decades, including for their self-organisation, their negotiations with the government, for local initiatives, such as a tree nursery for restoration activities, and for negotiating and obtaining funding for the Baram Peace Park. More recently, another organisation called The Borneo Project has trained Penan individuals to carry out social-ecological surveys and supported them to gather information to take the maps to the next level. Their forest monitoring data is being used for land-use planning and advocacy also related to the Baram Peace Park.

SAVE Rivers, a local NGO that emerged from the struggle against the government-proposed dams, has been another powerful ally, including in helping to support local organising and studies, specifically about the **environmental impact** of the proposed dams, independent **studies** of the value of the energy to be produced by the dams, and the vested interests of the consultant companies that produced the original studies. Support has been crucial to promote **local exchange visits** (e.g. to Sarawak villages relocated because of dams built in the past) and to inform the communities about the strategies often employed by companies interested in their land and resources, such as seeking to generate internal divisions besides engaging in outright corrupt practices. Various organisations mobilised **international solidarity** (including through **hunger strikes** and media reports) and promoted social and environmental criteria to regulate timber export practices. Dedicated **radio programmes** in Malaysia and abroad raised the international visibility of political corruption in Sarawak and the disrespect of the collective rights of Indigenous peoples. **Legal support** has also been helpful for nearly 300 court cases in which local communities have disputed government land-use practices in Sarawak.

For decades, many allies have worked together with the Penan and other peoples, amplifying their stories and supporting them as they resist the destruction of their territory of life. And new allies keep coming. In 2019, the ICCA Consortium linked the communities promoting Baram Peace Park with communities in similar situations in other countries, such as the Burmese Karen communities that established and govern their Salween Peace Park. The problems of the Penan are far from being solved and the Baram Peace Park is still an initiative in the making.[568] But the Penan have learned that allies bring support in many ways, and that every ally counts!

568   Updates available here: https://borneoproject.org/baram-peace-park/ accessed 2024.

Similar patterns of cooperation are even known to have created oases in desert areas. Some peoples started capturing water by sophisticated harvesting techniques, such as stone constructions built facing the wind on waterless islands, or depressions and tunnels excavated and shaded in the desert, creating microenvironments and condensing vapour from the air. Others used the water to plant date palms or grapevines, which generate sugary fruits and attract insects. Other people learned to prune and hand-pollinate the palms, so that their trunks grew, producing shade and more abundant fruits. More plants, shade, fruits and insects created humus, promoting the fertility of the soil and attracting other people, who brought the seeds of more plant species and more insects. Through time, many mobile human groups and animals came and enhanced the fertility and diversity of the land. When trees became numerous enough, they absorbed more water from the air and became capable of producing their own rain. Ultimately, the people *created* **the oases** by cooperating with nature, and with one another, across time.[569]

Similarly, communities that occupy diverse ecological niches at different elevations on the same mountain have traditionally established systems of cooperation and **exchange** that provided more balanced and secure diets for everyone.[570] Even pastoralists and agriculturalists— in situations not dominated by market forces and induced scarcity— are known to collaborate, exchange products and mutually enrich their lives.[571] And exchanges easily merge into **trade**... For centuries, guano from near-shore islands has been used to fertilise Andean fields, while salt from the Himalayas has been adding flavour to food throughout India, and minerals, grains, wine, oils, spices, wool, textiles, animals and a variety of luxury products have always fostered cooperative relations across mountains and between distant shores.

'Modern', official institutions also need to choose whether to compete or collaborate. For instance, the governing bodies of neighbouring conserved and protected areas may decide to compete for tourism visibility or donor funding, and particularly so when they find themselves in a transboundary situation. If they choose to collaborate, however, they may offer richer and more diverse tourism experiences and secure ecological connectivity in the landscape/seascape... and be more effective and achieve more in the long term. True enough, the capacity to compete and overpower others may secure some immediate wins. But we posit that long-term vital governance is likely more often associated with **collaboration and reciprocity** than with competition among institutions... or at least with the capacity to compete *but also* collaborate, as necessary.

Outright hostility and violent competition are a crucial part of a spectrum of tools employed by institutions to secure their survival and prominence.[572] But non-hostile competition may also be beneficial and lead towards curiosity, intelligent imitation, learning and self-improvement. Somewhat close to cooperative behaviour, **playful competition**— at times clearly ritualised— is safer than hostile and violent competition for all actors involved.[573] It avoids the damages consequent to a fight, and it stimulates institutions to become more capable and find ways to achieve excellent results.[574] All this is more easily understood when actors share a local

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569   Laureano, 2018.
570   Sanchez Parga *et al.*, 1984.
571   Davidheiser & Luna, 2008.
572   Colonialism in all its manifestations provides the key reference here (Veracini, 2022), including when violence is not directly exercised by State institutions. As convincingly argued by Brett (2015), the colonial processes and mentality played a role even in emblematic instances of genocidal violence between Indigenous peoples. For instance, in the early 19th century, the Moriori Tribe that inhabited the Rēkohu (Chatham) Islands— for whom non-violence was a cultural imperative— was all but wiped out by invading violent Tribes from mainland Aotearoa (New Zealand). For Brett (ibid) "the context of warfare and population movement and the introduced ideas and language of racial hierarchy" were determinant to enable the Moriori genocide.
573   The Olympics are an obvious example.
574   We are reminded here of the Guilds of Florence in the Renaissance. A given corporation, let us say silk weavers, used to agree on the basic rules of their trade and fix the market price for a metre of fabric. Only the members of the Guild could sell woven silk in Florence, so they could control the market and decide on the price to guarantee themselves a decent living. They did compete, however, to make the best quality silk brocade, which would sell first. In the process, all silk weavers were stimulated and provided incentives to become excellent artisans. This is the opposite of the price competition in today's so-called free markets, where competition is mostly about lowering the price (including by unfair dumping). This necessarily promotes low quality products and poor working conditions for the producers.

environment and enjoy or suffer together the consequences of their action. One of the consequences of today's globalisation,[575] however, is the fact that distant and anonymous actors can 'compete' over resources that are as far from the environment they live in as they are from their consciousness— providing them with undue and undeserved advantages.

The connectivity analogy between institutions and living beings extends beyond basic metabolism. One of the most momentous discoveries in biology is the essential role of **symbiosis** in the evolution of life on Earth.[576] There is not a single being on our planet that exists without teaming up symbiotically with others. Even when the benefits are not direct or obvious for individuals (e.g. in the case of a predator-prey relationship) they may be important at the species' population and community level. No plant, animal or human being would be alive without its inseparable and indispensable companion bacteria, fungi and other beings that live on it, in it, and with it. In fact, even human beings are increasingly understood as 'holobionts' rather than single organisms.[577] At the macroscopic level, human beings continuously need plants, and possibly animals, for food, and oxygen from the atmosphere. In turn, the atmosphere contains oxygen because the plants continuously absorb, transform and emit chemical substances. And the plants cannot do that without the indispensable assistance of fungi and microorganisms in soil…

In analogy, governance institutions exist in a world of inevitable multiple and unique interactions with other institutions. They may be threatened and damaged by them, but they may also benefit from collaborating and establishing alliances. Two of the cases described in this document show this particularly well: that of the Penan struggling to conserve their territory of life in Sarawak, Malaysia (case example 19) and the one that follows, describing the communities caring for Al-Shoulf Cedar Reserve in Lebanon (case example 20). Scholars have also described well-integrated, polycentric and 'nested' institutional systems,[578] which they consider to be most effective in tackling 'collective-action problems' at multiple scales.

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575   An enormous field of inquiry and research, rich in diverse schools of thought, nuanced concepts and interpretations.

576   Margulis, 1981. The term 'symbiosis' ('living together') describes a long-term interaction between organisms of the same or of different species. The relation can be obligatory or optional and it spans from mutualistic (beneficial to all) to commensal (beneficial to some) and parasitic (negative to some, beneficial to others). *Symbiotic relationships exist for all living organisms* and are necessary to life.

577   A '*holobiont*' comprises a host organism and its associated communities of microorganisms in their full range of interactions. While the types of relations among them (e.g. between certain algae and fungi or certain bacteria and plants) may remain the same, each holobiont involves enormous numbers of diverse microorganisms, i.e. each holobiont is unique. Holobionts (and their associated 'hologenomes') are increasingly understood— in biology, ecology and evolution— as crucial and ubiquitous (Simon *et al.*, 2019). It is in this sense that they can be understood as 'building blocks of life'.

578   Ostrom, 2000 and 2010.

Case example 20.

The Al-Shouf Cedar Reserve (Lebanon): a collaboration laboratory among diverse cultures and peoples[579]

The Al-Shouf Cedar Reserve occupies the ancient limestone landscape at the southern reaches of Mount Lebanon, where the last remaining naturally regenerating cedar forests (*Cedrus libani*) grow. Fabled in history, these are among the oldest documented forests on Earth, mentioned in biblical writings, used to build temples and Phoenician trading ships, attracting generations of occupants who made a living from their use and even featured today on Lebanon's national flag. A range of peoples and faiths have been connected to the land of the cedars through the centuries, often clashing violently, as happened between Druze and Maronite Christian communities in the 19th century and during the Lebanese Civil War in the 1980s. In 2001, a reconciliation process, centred on the establishment of the Al Shouf Cedars Nature Reserve, ushered in a renewed peace in the heartland of one of the most religiously diverse regions in Lebanon, involving Druze, Sunni Muslim and Maronite and Greek Christian communities.

Prior to its legal proclamation, the area that now forms the reserve was under the *de facto* control of the municipalities that surround it, and its protection was secured by local leaders, recently including Walid Jumblatt, a descendant of the Druze Emir Shakib Arslan. In 1996, Walid Jumblatt happened also to be the leader of the national Progressive Socialist Party. Once established, the reserve was to be governed by the Al Shouf Cedar Society, an NGO that would respond directly to the Lebanese Ministry of the Environment, then recently established. Walid Jumblatt became the first president of the Society.

The committee in charge of management decisions for the reserve includes the mayors of the nine municipalities as well as strategic advisors. It is appointed by the Al Shouf Cedar Society but is also increasingly responding to the Ministry of Environment. In fact, the **shared governance of the reserve** is a peculiar blend of **national to local authorities** as well as **customary community leaders** and an **NGO**. One cannot discount the strong and committed personal involvement that has persisted since its inception and enabled the governance to be resolute, adaptive and accommodating of the wider political realities of Lebanon. Remarkably, for instance, the local mayors have managed to curb the power of individual landowners via urban plans and zonation schemes. They could do this because of the flow of benefits from the development and employment opportunities promoted by the reserve. Currently, the extended Al Shouf Biosphere Reserve encompasses 22 villages. Although relatively young, the reserve defines an ancient landscape, occupied for millennia. Having to collaborate in the governance of the reserve— a complex and not always harmonious process— has nevertheless nourished a **sense of collective identity** among 'the villages of the Reserve'. In many ways this has renewed the links between the residents and their ancestors and the sense of collective responsibility for their territory and its gifts, the cedar trees.

The collaboration among diverse actors in the reserve has been tested by the long crisis brought about by the Syrian civil war, when a **large influx of Syrian refugees** entered Lebanon and some of them settled in the villages of the reserve. For the reserve's governance institution this has represented an unprecedented challenge, but also an important occasion to collaborate towards collective solutions. The refugees from Syria who settled in the 22 villages of the reserve were given access to work to **restore the ancient agricultural terraces** through an initiative funded by the World Food Programme. The proportion of Lebanese employed (**70%**) to Syrians (**30%**) mitigated against criticism and allowed for greater

integration, while the newly acquired entrepreneurial and technical skills enabled many Syrians to return home and continue their lives. Syrian and Lebanese teachers were also engaged to manage joint education programmes, where Syrian and Lebanese children from an early age were also taken for walks in the reserve for **shared experiences of nature** and friendship. Restoring the traditional agricultural terraces and related semi-natural habitats has improved water regulation and soil fertility and sustained high-value, diversified crops of wild culinary plants and local fruit varieties. In turn, the promotion of sustainable agriculture and a suite of foods from Shouf Biosphere Reserve in restaurants and tourism products have enabled the expansion of the local economy, buffering the community against the recent economic and financial challenges.

The COVID-19 epidemics stopped access to the reserve in 2020, but the communities remained in touch on-line and continued to monitor the biodiversity recovery promoted by specific reserve projects. The Al-Shouf Cedars Reserve is offering many local rightsholders and stakeholders the opportunity to explore a shared identity as governing partners of a landscape of immense cultural and symbolic significance to Lebanon. The private, communal, non-governmental, and national and local government actors involved in the governance institution constantly face new challenges, none of which can be solved without their collective capacities and will to collaborate. There is no alternative to exploring how everyone's interests, powers and hopes for the future can coexist in **intelligent and creative forms of collaboration**. In this light, the governance institution of the protected area seems nothing less than an **exceptional laboratory**, a research facility bringing to light the ingredients and insights of governance vitality for all Lebanese people, their neighbours and their rich multiple cultures.

Wisdom from local experience

Deep narrative and ancient rituals. [...]
our complex being-in-the-world is composed (like music)
of layering of ancient forms and imaginative inventions.

Stephen Muecke, 2004.

Mētis is the term chosen by James Scott to describe a body of **practical knowledge** developed through experience within a local environment accumulated over time.[580] Such knowledge and know-how are particularly relevant in situations that are similar but never precisely identical to situations experienced before. These situations require responses that, through practice, become a sort of second nature to the respondents… but resist any form of simplification and codifications. Mētis, in other words, cannot be learned and transmitted through books and abstract discussions, but only through engaged local practice. Decisions about human interactions with nature— for instance rules of conduct towards environments far from equilibrium conditions and subject to all sorts of dynamic phenomena— are excellent grounds for the application of mētis. Through mētis, an institution implicitly interprets social-ecological history which comes to bear on decisions and action. Moving beyond[581] direct analogies with living systems, how could we characterise this feature of governance that becomes visible only as applied, insightful local knowledge? We propose to say that institutions that exhibit it exemplify **wisdom[582] from local experience**.

When could we say that a governance institution is, in the sense just described, *wise*? Let us consider some specific examples. The avoidable conflicts and sad human losses that took place in Keoladeo National Park of Rajasthan in India (case example 21) show that there is a clear problem when an organisation develops rules and regulations for a given ecosystem without fully taking on board its **local, social-ecological history**. That very history should be the basis of all decisions, customs and rules for them to be effective and respectful for both nature and people. Some valuable history may be embedded in the governance institution itself or in the collective memory of relevant people. Much may be an unconscious part of local culture or preserved in folklore and storytelling[583] (e.g. "…well, when this sort of things happens, this is how we respond."). More could be documented in formal records and studies. Some believe that history and knowledge are also embedded in, and intrinsic to, nature itself.[584] No matter where and how that social-ecological history is kept, wise governance institutions consciously value it, seek it, maintain it, use it, enrich it and transmit it to others.

Understanding and building upon local history and mētis may be necessary but is not a sufficient condition to support the vitality of a governance institution. Also, it is important to combine an understanding of phenomena that possibly were never observed before locally but are likely to become relevant in the future. When discussing the necessary acquisition of information for an institution's metabolism, we mentioned phenomena that originate far away but have significant local impacts via **telecoupling**, as well as new research findings and technological innovation.

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580   Scott, 1998. See also Scott (1996, p. 75, emphasis added): "The failures, both human and technical of many high modernist experiments in social engineering occur not merely because they are bureaucratic and inflexible but because they ignore or violate knowledge embedded in local practice."
581   Some biologists may not fully agree with this statement, as they consider all life in some way 'conscious'. See also Graeber, 2014.
582   Aristotle describes practical wisdom (phronesis) as knowledge gained by being mentored and through experience, the capacity to choose the right action in the right context, balancing options towards justice and wellbeing. As the right action cannot be determined by a rigid set of rules, Aristotle implies that only older people, who have cultivated learning and accumulated experience, can achieve phronesis (Sachs, 2021).
583   Fernández-Llamazares & Cabeza, 2018.
584   Pollinators have knowledge and authority and the land itself speaks to the Aboriginal people of Australia (Rosemary Hill, personal communication, 2020; see also Hill *et al.*, 2019) as plants speak to the Indigenous healers of the Amazon region (Germán Zuluaga, personal communication, 2009).

Case example 21.

Why should we care about local social-ecological history? Lessons from Keoladeo National Park (Rajasthan, India)[585]

Keoladeo National Park is a natural depression redesigned about 250 years ago by local Rajasthani maharajas (e.g. using small dams) to enrich its wealth of wetlands and attract as many birds as possible. Throughout long and careful water management, the site— named after a local temple dedicated to Keoladeo (Shiva)— became a mosaic of dry grasslands, woodlands, woodland swamps and wetlands. Thousands of migratory waterfowl visit it seasonally every year to overwinter and breed. During the dry season, water remains only in some depressions and this alternate wetting and drying creates a perfect habitat for water birds. For centuries, local villagers also used the area for buffalo and cattle grazing.

Over 230 species of birds can be found in Keoladeo, and it was praised and loved by princes and their colonial visitors, who used it as an exceptional hunting ground (thousands of birds could be shot by a single hunting party). After the last big shoot by the Maharaja of Bharatpur, in 1964, the depression was declared a bird sanctuary. Cattle grazing could continue, and it was indeed crucial for local peasants who could not access other land for their economically crucial milk production and who agreed to pay a symbolic token for its use.[586] In 1981, however, the status of the sanctuary was upgraded to 'national park' and, consequent to park regulations, grazing and all other local uses in the Keoladeo depression were banned with immediate effect.[587] This was decided and enforced without consideration of the history of the place and without consulting or compensating the local communities, who saw their long-standing pattern of access and use suddenly banned as damaging and illegal. Violent clashes between local farmers and park guards ensued and, in the worst incidents of 7 November 1982, seven villagers protesting against the ban were killed and many others injured, beaten and imprisoned.[588] This violent beginning was followed by years of conflicts, non-cooperation and passive resistance.

Soon the park became internationally famous and began attracting more and more tourists. To favour tourism even more, the Indian government constructed a wall topped with barbed wire all around the park, to prevent grazing and other types of access and uses by local people. The damage to local livelihoods was real and it was strongly resisted and resented. With time, however, it was also observed that the number and variety of birds inside the park seemed to decline. A case in point was the Siberian crane, a critically endangered species that used to winter in large numbers in the sanctuary and was steadily declining to zero.[589] An in-depth study was thus commissioned to study the phenomenon. The study revealed that buffalo and cattle grazing had been an integral part of the ecosystem, helping to counter the tendency of the wetlands to turn into grassland,[590] and the **grazing ban** in the protected area had **adversely affected the birds' habitat**, including for the Siberian crane. Concerning the Siberian cranes, the grazing ban was not the *only* cause of diminishing numbers, as there were also problems of hunting along the migratory route in central Asia and diminished water supply and modified flow in the ecosystem because of the upstream Panchna Dam, in operation since 2004. But it was a contributing cause.

Crucially, the decision to ban grazing was taken because it was assumed that grazing *must* be damaging the

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585   Case example compiled by Grazia Borrini-Feyerabend based on Pimbert and Gujja (1997) and personal communications by Biksham Gujja in 2000 and by Ashish Kothari, Vishaish Uppal and Aman Singh in 2020.
586   Prasad & Dhawan, 1982.
587   Kothari *et al.*, 1995.
588   Prasad & Dhawan, 1982.
589   Ashish Kothari, personal communication, 2020.
590   Vijayan, 1991.

ecosystem, and because Indian legislation simply *does not allow* grazing inside national parks. A **wiser** governance institution would restrict or stop human activities in protected areas only after **careful consideration of the social-ecological history of the place**. This implies the participatory evaluation of the consequences of modifying or eliminating traditional practices. In other words, an extensive discussion of the desired conservation objectives with local rightsholders and stakeholders would have offered precious insights about the impacts of specific measures.[591] In the Keoladeo case, it could have lessened the ecological damage and avoided the human tragedy of 1982 and the protracted suffering that followed it.

Across the new millennium, some form of dialogue between the park management and the local communities was promoted with the help and mediation of WWF India. Agreements were drawn to regulate fodder collection and access to temples inside the park. Welfare measures were also initiated by park authorities, with resources coming from tourist fees. In 2000, park authorities were reported to be willing to allow controlled grazing inside the park, the sharing of tourist revenues with the local communities and setting up effective so-called 'joint management' schemes.[592] By 2020, however, the local governance situation had not substantially changed. The Indian national park policy does not foresee formal sharing of authority with local representatives or even formal management agreements with local stakeholders.

Like all other national parks and sanctuaries in India, Keoladeo is 'governed by the government'. It is also a Ramsar Site and a World Heritage Site, however, and these international designations presuppose equitable and collaborative relations with local rightsholders and stakeholders. Possibly in recognition of this, park authorities today *allow* the neighbouring residents to remove invasive *Prosopis* brush species from the park area[593] and *allow* residents of nearby villages to harvest grass for their livestock from specific plots within the park.[594] The residents also get some income as tourism guides or rickshaw pullers, and benefit from eco-development initiatives. These are helpful steps. The wise engagement of the residents in governing the park, however, may be even more helpful in building the relationships that embed a conserved area in a supporting social environment in the long term.

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591   The local peasants may not have known why it was so, but they knew that the birds had always coexisted with their cattle.
592   Biksham Gujja, personal communication, 2000. At that time 'shared governance' was not yet conceived, let alone used as a term.
593   Vishaish Uppal and Aman Singh, personal communications, 2020.
594   Aman Singh, personal communication, 2020.

Drawing from a quantity of such information of different types and origins, governance institutions need to be **discerning** about what is valuable for nature and people and distil what is meaningful for the situation at hand. Combining mētis, history and systematic, comparative analyses may help an institution to recognise the strategic importance of *relevant* **new knowledge**, for instance about new phenomena that may bring about significant impacts, or about inequities related to gender, age, ethnicity or caste, which may have been 'invisible' for a long time and disadvantaged the concerned communities and societies.

Some researchers stress that knowledge must be accompanied by mindfulness and respect,[595] not far from genuine humbleness. **Mindfulness** calls decision-making bodies to be aware of one's knowing and *unknowing*, doing and *undoing*, action and *inaction*. This is particularly important when dealing with Indigenous peoples and local communities, whose worldviews, languages, cultures, lifestyles and practices have evolved through centuries in specific environments and should not be treated hastily or inconsiderately. **Respect** calls for regard and **appreciation for the biocultural heritage** embedded in nature and human communities. Mindfulness, consideration and respect reduce the likelihood of wasting the many values of such heritage. It is difficult to codify this in prescribed behaviour, but it is good when governing institutions make explicit the reasons, foreseen results and expected horizon of their specific decisions and regulations. In addition, the institutions may wish to disclose the elements of experience and the web of relations that support any chosen course of action. Wise institutions invest in such long-lasting engagements— securing **transparency** about why decisions are taken and nourishing relationships of respect, **reciprocity** and **solidarity**,[596] foundational for human societies as they are for the institutions governing territories and areas precious for nature and human livelihoods and wellbeing.

Other 'natural' behaviours of wise institutions are the avoidance of waste and the appreciation of what is available, keeping in mind the needs of future generations. We may express this by stressing that wise institutions seek an **effective and efficient use of the gifts of nature**. This often includes devising a **best fit**[597] between the territories to be governed and their governing institutions. As stressed by Murphree,[598] the **social-ecological topography** of governance institutions is crucially important. The social cohesion, cooperation and compliance with rules that are necessary for effective governance are usually best achieved by small-scale regimes, for instance, regimes where local interactions are rather frequent and not particularly costly. On the other hand, ecological and economic considerations tend to suggest large-scale regimes, for instance at the level of a habitat of an animal species, specifically the size of territory at which it should be managed, or at a level where market factors make it desirable. Wise governance institutions find for themselves an **acceptable balance** between such social and ecological topographies. For instance, they make sure that the governed territories and areas are small enough for people to meet relatively easily and have direct experience about the decisions they take, but also large enough for the management units to have an economy of scale and be able to negotiate decisions at different levels. The search for such **optimal size** for the territorial units to be governed and managed is part of wise processes of institution building, as openly discussed by the *Maha Gram Sabha* of India (case example 15).[599] In general, 'size' is essential to understand the form of democracy that is possible in a given system, and it becomes crucial in globalised economies.

595   International Society of Ethnobiology, 2006.
596   Corntassel, 2008; Corntassel, 2012.
597   See the discussion of social-ecological fit in Part V, and references there.
598   Murphree, 2004a.
599   The CAMPFIRE wildlife management programme of Zimbabwe also provided an opportunity to study this (Murphree, ibid.). The 'right size and proportions' is also one of the key concerns described by Rahnema (1997).

Internally to themselves and the communities they serve, wise institutions also find a balance among the **diverse views** of women, men and people who define themselves as otherwise **gendered** and among the voices of experience and authority— often conveyed by **elders,** and the energy of new ideas, information and technology— often contributed by the **youth**. Internally but also externally, wise institutions appreciate **complexities** but avoid useless conflicts by exercising **diplomatic skills**, holding in mind their values and vision, and deciding the course of action that will more likely bring positive results. In most cases, diplomatic skills imply using and eliciting the **capacity to accommodate**, finding points of consensus, figuring out when the level of agreement on a decision is 'good enough' and more discussion would be detrimental rather than useful. In some cases, however, there may be a need to take a **defence posture**, which may make use of a variety of nonviolent means— from non-compliance and cheating to graffiti, artworks and popular songs of protest, from civil disobedience to occupations,[600] blockades and strikes— **up to outright resistance.**[601] In general, we may posit that wise decisions always seek to minimise the possible losses for people and nature. When the life of a territory, its related community and its governing institution are at stake... only *wise* decisions can save the day (but even wise decisions can fail when the powers at play are overwhelming).

Today, decisions need also to face the novel dimensions enabled (and at times imposed) by modern technologies. Governance institutions at all levels, from the local to the UN, must deal with the enormously enhanced power of accumulating information, surveying and controlling people, modifying, adapting and tinkering with various forms of life, physically shaping and altering landscapes and seascapes, and deeply affecting environments from the local to the global scale. Taking advantage of powerful technologies is a moral challenge as the use of technological means is inescapably intertwined with values.[602] In this sense, a 'wise' governance institution should use technology that respects its own principles and values, possibly including **precaution, decency, empathy, respect for human rights...** A 'wise' institution should make its principles and values explicit, apply them consistently in decision-making, and exercise them also to **confront and disempower** what some call **'the many faces of evil'.**[603]

It is with some trepidation that we have been using the concept of 'wisdom' for an institution rather than a person... but how else could we describe governing approaches that are *considered* about social-ecological history, *discerning* about relevant new knowledge and technologies and *mindful* and *respectful* of others? What other expression could characterise engaging in reciprocity and solidarity, making effective and efficient use of the gifts of life, optimising social-ecological fit, appreciating complexities and being diplomatic, accommodating, insightful, moral, courageous and prudent as needs require? Of course, different cultures describe 'wisdom' in different ways. Usually, the concept conveys a **combination of qualities** that have been supporting human survival and thriving based on long experience in specific environments, as in the case of the Dayak Kenyah leaders of North Kalimantan, in Indonesia (case example 22). It is through time that such institutions develop and enrich the 'wisdom from local experience' we attempt to describe here, the source of **considered decisions based on local values, knowledge and mētis.**

600   A recent example in the heart of Europe is found in the mountain pasture of Sinjajevina (Montenegro), a largely unspoiled environment that NATO earmarked in 2019 as a military training ground. In 2020, a group of about 150 local farmers and environmental and social activists set up camp in the heart of the pastures and remained there for weeks under freezing conditions to serve as human shields against the military uses of the area. This is just one of the many initiatives taken by the Save Sinjajevina movement created in response to the top-down occupation of an ancient territory of life (see https://sinjajevina.org/ accessed 2024). At the time of writing, in 2023, popular mobilisation is still high, and the NATO exercises have not restarted. In their place, an international conference is being held in the mountain pasture, focusing on ways of conserving the local natural and cultural heritage.

601   In several cases successful resistance was armed. Examples are innumerable, from 19th century resistance by poor upland communities to State expropriation of forests in northeast Italy (Merlo *et al.*, 1989) to 21st century resistance by Matsés Indigenous custodians to illegal loggers and drug traffickers invading their territories of life in Peru (Thomas Moore, personal communication, 2018). The examples just quoted were largely successful, but many others were not.

602   Elliott & Resnik, 2014.

603   On this, see also Dror (2001) who stresses the potential of human evil in traumatised societies combined with technical might and efficiency, as ominously shown in the history of 20th century Europe. While governance institutions for natural territories confront lesser stakes, they still must prevent that the decisions made today irremediably curtail the chances of future generations.

Case example 22.

The Dayak Kenyah leaders embody wisdom in Kalimantan (Indonesia)[604]

The term Dayak refers to the Indigenous peoples of the island of Borneo, most of whom traditionally lived along the banks of the larger rivers. In one of their most important subgroups, the Kenyah of North Kalimantan, traditional leaders are strongly respected in their communities. In turn, Kenyah leaders are expected[605] to embody various praiseworthy attributes that combine to characterise 'wise leadership'. Here is what a wise leader is supposed to be:

- *making* (courageous and strong);
- *dena' kimet* (sagacious and prudent) and '*un sahe* (helpful);
- '*un lesau* (having a sense of compassion and social responsibility);
- *tiga tira' ngan kenep* (polite when talking, and rational in thinking);
- *mencam pebeka' ngan mencam pekatok dulu ngeleppo'* (effective in uniting and advising the people);
- *abe' uba' lemalo, ngan bang pisiu iya lan* (speaking the truth and disliking lying);
- '*un kenep iya dado'* (having a broad perspective and an open mind);
- '*un sae'* (having a sense of shame);
- *abe' uba' basuk kenep* (not being hasty in action);
- *abe' uba' pejaat dulu* (refraining from vilifying others); and finally,
- *bawa'* (having great determination and sense of responsibility in leadership).

A crucial role of the traditional Kenyah aristocratic leaders has been **establishing, caring for and deciding about the** *tana' ulen*. This is a precious area in the community territory where the gifts of nature are not to be used for family farms but to remain carefully protected and used only for purposes that are collective and specially regulated. The *tana' ulen* is a sort of **protected core of the larger territory** of each Kenyah community. Traditionally, at the time of establishing a new village, the leader would identify the location of the *tana' ulen*. It would be a special place, but not too far from the new settlement. Usually, the leader would choose the watershed of a stream or a river, or an old forest with abundant non-timber products, good fishing and hunting or good timber for community construction projects, such as a longhouse.

The role of the leader was then, and remains today, that of establishing the rules for the sustainable use and protection of the *tana' ulen* and making sure that such rules are respected. He might assign privileges to certain individuals or households, but the *tana' ulen* is to benefit the entire village, and it is used mostly for village-wide celebrations— weddings, rituals, ceremonies, hosting important visitors, and so on. In the *tana' ulen* it is not possible to start new rice fields or carry out damaging activities, but not everything is forbidden. On the contrary, upon permission of the leader and customary council, community members can go together to the *tana' ulen* to catch enough meat or fish to share with important guests. But this happens only on major occasions. Because of these rules, the *tana' ulen* remain well conserved and healthy environments.

The traditional caste system of Kenyah communities is strict (you can belong to the aristocracy only by birth, and a commoner cannot become an aristocrat, not even

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604   Case example compiled by Grazia Borrini-Feyerabend based on an interview by Jessica Campese with Cristina Eghenter and personal communications with Cristina Eghenter in 2021. The original list noted in this case example is from the work of Liman Lawai, a Kenyah from Apo Kayan who was doing ethnohistorical work among the Dayak Kenyah in 1991–1993. The list was then discussed and confirmed with Anye Apui, the late Customary Chief of the Dayak Kenyah in Bahau Hulu (Anye Apuy, personal communication with Cristina Eghenter, 2009). See also Eghenter, 1999. The picture portrays the intergenerational bonding between Lewi G. Paru, customary Chief of Dayak Lundayeh, and two Dayak Iban boys (Bario, Borneo Highlands of Indonesia, 2016). The picture is courtesy of Edwin Meru. For more information on the tana' ulen see: Eghenter, 2000 and 2003.

605   In many cultures, leaders are required to possess specific qualities. In many Amazonian societies, for instance, they are offered prestige and power as long as they show wisdom, generosity and the capacity to pull people together, and as long as they maintain peace (Clastres, 1974).

by marriage). But not everyone in the aristocracy is able to identify or take responsibility for a *tana' ulen*. For instance, usually, the new leader is the son of the previous one. But only a wise man who has distinguished himself and taken strong responsibility for the community may have the power and prestige of governing a territory and its people, deciding alliances (in the past also going to war), making political and economic decisions for the future of all, and caring for a *tana' ulen*. So, if no child of the leader has the desired qualities and is appreciated by the community, a nephew or another relative is chosen. **The wisdom of the leader is essential**. In turn, one could say that the wisdom of the leader is **reflected in the healthy conditions of its people, territory and *tana' ulen*.**

The governance system of the *tana' ulen* with full authority vested in an aristocratic leader has persisted for centuries. In the last several decades, however, the socio-political, economic and ecological context has changed profoundly. 'Development' processes, formal education, new religions and party politics have enormously affected the hierarchal, almost feudal system of the Kenyah communities. The concept and practice of the *tana' ulen* are still very much alive, but important changes have taken place in their governance system. The authority of the aristocratic leader is still respected but the decisions about the use of the *tana' ulen* are no longer made by a leader alone. More often they are made broadly, through the village customary council. Yet, a wise leadership is still needed to sustain the system, ensure that the rules are respected and maintain unity and solidarity in the community.

Inspiring collective values

"Judge a moth by the beauty of its candle"
Jelaluddin Balkhi, known as Rumi (1207–1273 CE)[606]

Any governance institution is likely to encounter the temptation to maximise short-term gains at long-term cost, making easy choices, and ceding to corruption, laziness, thoughtlessness and personal greed. Any institution that has been performing well and prospering through time must have had, in the main, the capacity to resist[607] such temptations, stand for more than the immediate personal interest of a few, and remain **steadfast in the face of forces that would spell disaster in the long run**. It must have developed an 'institutional culture' that pursues **future-oriented** objectives and is motivated by **values** very different from personal gain and greed. Where could these values come from? And what could they be about?

The biologist Peter Kropotkin has stressed that attitudes of mutual aid and group 'solidarity' must be a product of the evolution of species, including humans, in both ancient and contemporary societies.[608] From there, it seems not a huge step to extend **solidarity towards one's own progeny and future generations**.[609] Today, experimental studies demonstrate the innate propensity of humans to collaborate,[610] respect social norms (e.g. understand and comply with 'forbidden', 'obligated' or 'permitted')[611] and experience anguish and shame when they do not.[612] It is also empirically confirmed that social norms are valued and respected when they are conceived internally to a group and meet their shared concept of fairness.[613] All this does not mean that proactive and reactive-aggressive tendencies are not part of the capacities of our species, as indeed they are.[614] We consider, however, that the dimension of cooperative relations in communities— relatively small groups where individuals can have daily face-to-face encounters, become accustomed to one another, procure food together and protect the young and the weak— is common and natural for humans. This is what helped cooperative humans to have more descendants ('biological efficiency')[615] but also to interact effectively with the natural environments and 'make sense' of themselves.

There are countless representations and accounts of **'group solidarity'** and 'future orientation', including in a vast array of artworks and epic poems, moral theories and legal treaties. Some note that the human ability to follow rhythm in large groups, dance and sing together is likely to originate from the need to synchronise neural activities and reach a trance state of collective identity. Such synchronised vocal polyphony would be a defence system from predators, an important component of hominids' aposematic survival strategies.[616] Similarly evocative and impressive are the collective efforts that so many individuals have provided as they

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606   Translation by Barks, 1995.
607   ...or the effective social control to prevent...
608   Kropotkin, 1902.
609   Some refer to this as a sense of inter-generational justice.
610   Tomasello, 2009.
611   Ostrom, 2000.
612   Posner & Rasmusen, 1999.
613   Ostrom, 2000.
614   Wrangham, 2018. Within limits, aggressive tendencies may have served some evolutionary service to hominid groups. They may also, however, merge with psychopathological traits towards cruelty (Baron-Cohen, 2011). Recent experimental evidence has highlighted behavioural heterogeneity between groups— likely related to differences in social structure and culture— but also within groups, suggesting distinct mental dispositions whereby some people behave in 'selfish' ways but others respond to "a sense of fairness, a devotion to reciprocity, an aversion to inequality, a concern for relative payoffs, and a taste for punishment" (Henrich *et al.*, 2005).
615   Bernal, 2012.
616   Jordania, 2015. This may also have facilitated coordination in hunting.

nourished and crafted the long-term wellbeing of people in nature— working harder than they needed to for themselves alone and than they needed for their immediate present. The land terraces, hydraulic works and planted and tended forests of generations of our ancestors— of which we have traces since long before 5,000 BCE— testify to all this.[617]

We posit that acting together to secure livelihoods, perceiving similar feelings together in those actions— fear, hope, rejoicing, pain, empathy— has helped communities to develop collective memories of events and places and conceive a **sense of a broader self**. Some African communities find the kernel of their identity in a phrase such as: "*I am because we are; and since we are, therefore I am*".[618] An expressive term that illustrates the same idea is also *Ibuanyidanda.*[619] This is an Igbo[620] concept that compounds the words *Ibu* (load or task), *anyi* (not insurmountable) and *danda (a* species of ants) and illustrates the ants' capacity to perform tasks seemingly beyond them by relying on the strength of their interdependence. By inference, the concept is used among the Igbo to describe how a community can accomplish what would be impossible for any individual. We believe that this broader self— being part of a **community** and perceiving that the community has a shared present and past— is the source of the values that prompt people to act also in a future-oriented way. In this way, a mix of internal and external dialectic processes[621] could build a sense of **intergenerational collective identity**.[622]

Communities accumulate and store infinite bits of experience in their environments of life. Those bits of experience are repeated, reflected upon, consolidated, used, refined, and passed on to others as an evolving body of mētis and knowledge. With diverse names for diverse cultures, the very notion of 'territory' embeds this body of ongoing purposeful experience and reflection. In the same territory, individuals also recognise connections with other members of their community and, across generations, to their common past ("we are the people coming from this place", "our survival as a people has always depended on this place"). In this sense, feeling part of a broader 'intergenerational community' may shape a good part of the relations with the natural environment. This, intertwined with the care for the young, may generate the mentioned 'future orientation' of human decisions. It may subdue the immediate interests of some individuals and elevate the collective interests of the community. If this is true, the dimensions of **'territory' and 'community'** are **intertwined and fundamental** for our own relations in/with/as part of nature, as well illustrated by the case of the Kichwa Indigenous people of Sarayaku, in Ecuador (case example 23, part a. and part b.).

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617   See Laureano, 2013.
618   A. Mbiti quoted in Jimoh, 2017.
619   Jimoh, 2017.
620   The Igbo comprise various related ethnic groups in central Africa, mostly in areas straddling the Niger river. They are one of the largest ethnic groups of Africa and developed a strong sense of national identity in the context of decolonisation.
621   Nagel, 1994.
622   According to van Stekelenburg (2013, and references therein), collective identity concerns "the shared definition of a group that derives from members' common interests, experiences, and solidarity"— best conceived as a "process constructed and negotiated by repeated activation of the relationships that link individuals to groups", i.e. by some form of "collective action". People generally "strive for, and benefit from, positive social identities associated with their groups". In turn, collective action is contingent upon "seeing the self as part of a group, possessing some collective identity or consciousness".

"For us, the Kichwa Indigenous people of Sarayaku (Ecuador), territory is more important than money!"[623]

"We, the Kichwa of Sarayaku, have always strenuously defended our territory. Yes, we did it because our territory is the ground of our physical and spiritual lives. But we have also defended it because it carries our values, it is where the 'life plan' we have developed as a community is coming alive. This is why we have not allowed nature to be altered or damaged in our land. This is why we took action to defend it ourselves. This is why, to protect our land, we even did something that was previously unknown and unthinkable for us, such as suing in court the government of our country.

Yes, we need money to purchase a variety of things, especially when we interact with the outside world. We are fine with that. We have no problem dealing with money. In our tribal governance we even have a 'Ministry of Economic Affairs'! But money should not interfere with, or damage, the heart of our livelihoods— our territory— which is essential for us all.

We want to reinforce ancestral wisdom and knowledge so that our history and identity live on and become stronger. We want to conserve our humanity and solidarity, our culture, and our identity as people. And we want to conserve our territory.

Our territory does not need to be sacrificed for the sake of modernity and money. It must come first, and then other values can be pursued. Our people must maintain a sense of what is fundamental. Leaders have the responsibility to show this to their peoples. This is what happened here, and we continue to thrive."

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623   José Gualingua, leader of the Kichwa Indigenous people of Sarayaku, unpublished notes from an interview by Grazia Borrini-Feyerabend (2018). The image of women collecting clay for ceramics in Sarayaku is courtesy of Wachachik.

Many contemporary societies that describe themselves as 'Indigenous' remain closely attached to their territories and a sense of broader intergenerational self. They remain appreciative and grateful for what was done by their ancestors, and practise reciprocity by **planning for future generations** "*…even those whose faces are yet beneath the surface of the ground— the unborn of the future Nation*".[624] The same cannot often be said, on the other hand, for non-Indigenous societies. Along with the enrichment of the technical and intellectual capacities of *individuals*, many societies that describe themselves as 'modern' have become atomised. There are notable exceptions,[625] of course, but the sense of 'being a community' or possessing a 'collective identity' and a unique bond with a 'territory' can erode all too quickly. In urban areas, individuals get together as shareholders, brand consumers, union workers, party members, sport fans or short-term vacationers… Only with rare exceptions,[626] they interact in nature in collective, self-directed ways, aware of what happened in the local environment in the past and what they wish to happen in the future. The dominant groups in society take charge of important decisions about nature, and they often do so in profitable and productive ways, starting from privatising land. Even the local commons, when they still exist, are often managed by professionals mandated by the relevant municipality. If people have future-orientation propensities and hopes for the conservation of landscapes, unique biodiversity or cultural values, these are often channelled and confined to 'protected areas'.[627]

Indeed, many of today's official protected areas— established and governed by governmental agencies at various level— play crucial roles in preserving ecosystems and habitats from the damage and contamination associated with modern development practices. As seen earlier in this work, however, protected areas are usually run by specialised institutions, dependent on external flows of resources and too often poorly connected to the communities in their vicinity. They may embody a sense of broader self and future orientation for a number of individual citizens of the relevant country, possibly including some local residents, but likely not *most* of them. If the people for whom the area is crucially important are widely dispersed and not in touch with one another, they would find it difficult to get to know the area intimately and, if needed, to organise and act together to defend it. There still are cases, however, where a State-declared protected area embeds **strong cultural and spiritual values**, speaks of a common past and offers a vision for a common desired future for local people who share a **sense of common identity** and are **willing to act together**. An example is Bears Ears National Monument, in the USA, which comprises the ancestral lands of several Indigenous American Tribes, as described in case example 24. In such situations, it seems most valuable to incorporate those values in the governance institution. We will come back to this in Part V.

Societies develop their cultures and sense of collective identity by maintaining and recreating a dynamic body of shared memories, language, customs and practices[628] that naturally generate values and moral codes,[629] possibly including the sense of being part of an 'intergenerational community'. Within such broader perspectives, the institutions governing territories are grounded in **context-specific values and moral codes**[630] that vary with the circumstances and are differently able to sustain collective action.[631]

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624   Constitution of the Iroquois Nation http://www.indigenouspeople.net/iroqcon.htm accessed 2024.

625   Some examples are described in https://vikalpsangam.org/ accessed 2024. New forms of social solidarity have been powerfully re-kindled, including in urban environments, in the wave of reactions to the COVID pandemic.

626   Some such exceptions may involve slum communities, which may share a common history of displacement and/or land occupation.

627   …and possibly some private landholdings.

628   Nagel, 1994.

629   Stewart-Williams, 2015.

630   In some cases, only a sense of shared values and selfless future-orientation could inspire people to take the difficult moral decisions they need to take for the sake of their territory. In other cases, the decision-makers may simply make intelligent, self-interested decisions as they know they will also suffer, in the mid- or long-term, from wasteful and selfish choices.

631   Ostrom (1990) has offered an important set of design principles— mostly of an economic nature— that promote long-term survival and comparative effectiveness for communal action. In investigating governance vitality, we embrace those principles wherever applicable, but also seek beyond them, although not in a prescriptive sense. Remarkably, a rare multi-country analysis of community capacities for wildlife management (Roe *et al.*, 2000) corroborates the importance of 'inspiring collective values' as it stressed the need for small-scale social settings, cultural significance of wildlife, community motivation and sense of legitimacy, etc.

Case example 24.

The Bears Ears Inter-Tribal Coalition faces shifting political powers in the USA[632]

Bears Ears— or Hoon'Naqvut, Shash Jáa, Kwiyagatu Nukavachi, Ansh An Lashokdiwe in relevant Indigenous languages— is a vast landscape that was home to Native Americans for many generations. Sacred to the Ute Mountain Ute Tribe, Navajo Nation, Ute Indian Tribe of the Uintah Ouray, Hopi Nation and Zuni Tribe, it contains over 100,000 cultural and archaeological sites dating back thousands of years, including rock imagery, ancient cliff dwellings and ceremonial sites. As with much of the country, **Native Americans were dispossessed of this land by European colonists** in the 19th century, often as part of unjust treaties and other discriminatory government policies. As federal public land, Bears Ears has long been a multi-use landscape, managed primarily by the Bureau of Land Management. The land has been largely unprotected and permits have been issued for grazing and mining. Limited patrolling made the area vulnerable to vandalism and looting.

For about 80 years, efforts to bring Bears Ears under protected status met with strong political barriers. In 2015, a process spanning years involving the cooperation of both major US political parties to bring parts of Bears Ears under State protection had stalled. The Native American tribal representatives who had been engaged in negotiations for that effort had walked away from the table, feeling that their voice had not been heard in any substantial way.[633] In July 2015, representatives from the Hopi Nation, Navajo Nation, Ute Mountain Ute Tribe, Pueblo of Zuni and Ute Indian Tribe formed the **Bears Ears Inter-Tribal Coalition** and took decisive, innovative action. They prepared a proposal to **protect the cultural and spiritual values of Bears Ears** as a

National Monument and advocated directly for it with the administration of President Barack Obama. After a negotiation that lasted about two years, President Obama established Bears Ears as a **National Monument** of more than half a million ha. It was December **2016 –** one month before he left office.

Many had **envisioned** that the new National Monument could be governed through **an historic shared governance arrangement** between US federal agencies and the five tribes in the Inter-Tribal Coalition, each of which has a long-standing cultural relationship with the land. **What emerged** from negotiations in 2016 and is reflected in the Bears Ears Proclamation **does not go this far** in actual power-sharing… but is a good step in that direction. It establishes formal roles for representatives from each of the five tribes to provide guidance and recommendations for monument management[634] and explicitly recognises the importance of their traditional knowledge in that management. It also ensures Native Americans' access to the Monument for cultural uses, including medicine collection and ceremony. Following the National Monument's establishment, the Coalition stated: "*…these lands will be managed in an entirely new way, incorporating Native American traditional knowledge as an intellectual partner to western science, where the land and all its component parts are the mentor, the teacher, the healer, and where all our other-than-human relatives are honored and respected in a dance of reciprocity. Now, all Americans who cherish and respect the Bears Ears landscape are assured that these lands and the culture and history they contain will be protected, forever.*"

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632   Case example proposed by Jessica Campese in 2020, later compiled and updated based on cited sources and on: https://bearsearscoalition.org/ and https://earthjustice.org/features/defending-bears-ears, both accessed 2024.

633   https://www.theatlantic.com/science/archive/2016/12/obamas-environmental-legacy-in-two-buttes/511889/ accessed 2024.

634   The arrangement proposed in 2015 by the Bears Ears Inter-Tribal Coalition was that the governance board include eight members— five representing the Tribes and three representing federal government agencies. This Commission was to have hiring and firing powers and decision-making about the management plan. The National Monument as proclaimed by President Obama, however, established instead two advisory committees: one including only the tribal representatives (Bears Ears Commission) and the other including many and diverse stakeholders (States and local government, Tribes, recreational users, business owners and landowners).The Department of Agriculture (US National Forest Service) and Department of Interior (Bureau of Land Management) have governance authority. https://obamawhitehouse.archives.gov/the-press-office/2016/12/28/proclamation-establishment-bears-ears-national-monument accessed 2024.

In the USA, the president can proclaim as 'national monument' any historic landmark, historic and prehistoric structure, or other object of historic or scientific interest situated on land owned or controlled by the federal government. The proclamation provides permanent protection, precluding new grazing permits, mineral or oil extraction, and roads for motorised vehicle access, while allowing permitted uses (with some potential new restrictions, which can be a source of political conflict).[635] Some earlier national monuments had been declared to protect Native American cultural treasures… but at the expense of the continued access of Native Americans themselves. Some were considered to have "eliminated indigenous presence in order to preserve landscapes for non-Indians".[636] The Inter-Tribal Coalition developed and demanded a different vision for the governance of the Bears Ears Monument… and the resulting agreement was a step towards substantive shared governance— and as such long overdue progress. In the words of Krakoff (2018): *"Bears Ears and other recent monuments […] reflect human connections to the land and prioritize traditionally marginalized communities. The protective aspects of monument designation are achieved through participatory stewardship rather than exclusion. Bears Ears shows that conservation and public land laws can be vehicles for equality and justice, even if they initially served the interests of the politically and economically powerful."*

Presidential proclamations do not involve a negotiation process… but may face fierce political opposition in the case of administrative change. For conservatives, they symbolise a sort of federal overreach in land and environmental management.[637] Shortly after President Donald Trump took office in **2017**, his administration declared the **intention to reduce the size of Bears Ears by 85%.**[638] This was part of a larger rollback in federal land protection, reverting to a situation in which

the landscape was vulnerable to oil and uranium interests[639] and people who may loot or destroy sacred sites.[640] Beyond denying the natural and cultural heritage of this landscape, many alleged that this decision by the Trump Administration violated national law, as there is no clear ground for such reversal of prior presidential decisions. In the light of this, the tribes and environmental organisations filed **multiple lawsuits to block this rollback** immediately after the Trump administration announced their decision. The Inter-Tribal Bears Ears Coalition fought this on several fronts.

Because of the various legal procedures underway, by the time Joseph Biden was elected president, in November 2020, little substantive change had taken place on the ground as a result of either the Monument's declaration or the intended rollbacks.[641] Prior to his election, President Biden had vowed to restore the Bears Ears Monument, and one of his actions on his first day in office, in January 2021, was to issue an executive order to re-examine the Monument's borders. His Secretary of the Interior,[642] the first Native American to serve as US Cabinet Secretary, then reviewed the situation and made relevant recommendations to President Biden. In **2022**, the **National Monument** was **restored to full size**[643] and a new management plan started being developed with the involvement of two federal agencies and the federally recognised Tribes. In March 2024, a draft management plan was released and opened for public comment about several 'options', including one centred upon traditional knowledge and priorities described as an example of 'co-stewardship agreement'.[644]

The longer-term destiny of the Bears Ears contested case remains to be seen. The wheels of the US federal government and courts turn slowly, and the Utah government has threatened to sue the federal government should the National Monument be 'reinstated' to its full size.

635   Robinson, R., 2018.
636   Krakoff, 2018.
637   Meyer, 2016.
638   https://www.nytimes.com/interactive/2017/12/08/climate/bears-ears-monument-trump.html accessed 2024.
639   https://www.americanprogress.org/issues/green/news/2017/05/08/432011/industry-interests-behind-president-trumps-attack-national-monuments/ accessed 2024.
640   https://earthjustice.org/features/defending-bears-ears accessed 2024.
641   Nordthaus, 2021.
642   Deb Haaland, a member of the Indigenous Pueblo of Laguna.
643   President Proclamation 10285 of 8 October 2021 (US Federal Register vol. 86, no. 197) https://www.govinfo.gov/content/pkg/FR-2021-10-15/pdf/2021-22672.pdf accessed 2024.
644   https://www.hcn.org/articles/as-national-monuments-multiply-bears-ears-forges-forward/ accessed 2024.

Further, while many expect the National Monument to ultimately be fully restored, the question of how it will be governed through genuine power-sharing with the Inter-Tribal Coalition remains open. Despite this turmoil, in the words of the Bears Ears Coalition: "*The five Coalition Tribes continue to defend and protect lands, natural, cultural and sacred resources within the original Bears Ears landscape*." In some sense, this case exemplifies the vulnerability that even vital governance may face when full rights are not secure, powerful actors seek to undermine them and political winds may change in drastic ways. Regardless of the outcome in protected status, however, this is not an example of vital governance being lost, but of **innovation and determination** of custodian peoples in maintaining and re-establishing their roles and relationships with their territory against political odds. As James Adakai, President of the Navajo's Oljato Chapter and member of the Bears Ears Commission said: "*Something that is sacred cannot be reversed*".[645]

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645   https://player.vimeo.com/video/204067469 accessed 2024.

For some, governing the territory *well* means ensuring that all have fair access to the salt licks and pasture for the animals, or to water sources, or to proteins from wild meat and game, and forest tubers to be dug in case of famine. As a result, selfish behaviour is frowned upon. For others, it means reserving exceptional wealth as royalties and respecting the locations that bear names in the local language and the burials of ancestors. As a result, the existing power system should not be questioned. Still for others, it means maintaining spectacular, scenic beauty and the possibility of sighting rare species by 'conserving biodiversity' as defined by respected scientists in distant universities. As a result, protected areas free from human residents should be developed wherever possible.

We use the term **'inspiring collective values'** to describe the values that motivate a governance institution for a conserved or protected area to function *well* through time. These values are said to be 'inspiring' as, in order to be effective, they must feed the institution's own motivation and energy and ensure that a large part of society continues to adhere to its decisions and respect its rules. They are also said to be 'collective' in the sense of hopefully connecting people to a broader, intergenerational self and offering a future-orientation to their thoughts and actions. As noted above, the values may vary greatly, but it is often possible to link them to the **biological purposes** shared by all humans (food, water, warmth, comfort, reproduction, life itself…) and/or to some **symbolic meaning**, with cultural, spiritual or aesthetic dimensions. Many inspiring collective values also generate **emotions**,[646] often connected with 'a shared sense of what is good, precious and just', namely, some social morality. Capable governing institutions rely on these values and their associated purposes, meanings and emotions. They draw a good part of their energy by eliciting, encouraging and nurturing them and by strengthening their 'grounding' and connections with the relevant conserved or protected areas.

Revisiting the case examples examined so far, we may speculate about the inspiring collective values that may, or may not, be nourishing their governance and sense of purpose. Whatever they are— livelihoods-related or cultural, spiritual or ecology-oriented— when such values can be identified, there is little doubt that they nourish the vitality of the concerned institution and its relations with society at large. Some clearly affirm that "…the most effective organizations are based on communities of shared ethical values…[where] **moral consensus** gives members of the group a basis for mutual trust".[647] Conversely, when shared collective values *cannot* be identified, governance vitality may be in trouble. This is shown by the early decades of the Galápagos Marine Reserve of Ecuador (case example 25).

The values that sustain the decisions and actions necessary to govern a given conserved or protected area may be embodied by **charismatic leaders**, such as a powerful politician, a respected council of elders, a brilliant scientist, a shaman or an experienced park manager. While leaders are the embodiment and visible face of governance, some scholars of governance tend to highlight their role more than others. Some believe that the capacities of the individuals who occupy leadership positions are fundamental to ensure positive and meaningful— and thus vital— governance results. Yehezkel Dror (2001), for instance, stresses that leaders have a responsibility to "weave the future" for others, and thus ought to possess competences in environmental, socio-cultural, demographic, historical, geo-economic, political science, legal and policy matters.

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646   Cognitive and brain sciences have increasingly shown that the great part (98%) of what we understand as 'reason' is unconscious, it requires emotions and uses a logic of frames, metaphors and narratives. As frames vary, our 'reason' changes (Lakoff, 2010).
647   Fukuyama, 1995.

Case example 25.

The difficult birth of a governance institution for the Galápagos Marine Reserve (Ecuador)[648]

A **Marine Resource Reserve**, comprising the coastal and marine resources surrounding the Galápagos Archipelago (Ecuador), was **established in 1986** over an area extending up to 15 nautical miles from the islands' coastline.[649] The reserve was to keep at bay threats from industrial fishing and extensive sea-cucumber extraction by artisanal fishermen. The main supporters of the reserve were the local Charles Darwin Research Station and the tourism industry that was then booming… both keen to preserve the unique local marine biodiversity. The Galápagos had been settled only recently and had no 'traditional' fishing communities with local knowledge, practices or resource governing institutions. The artisanal fishermen and boat owners operating in the archipelago were all recent migrants from the mainland, mostly engaged in purely extractive livelihoods. Industrial fishing, in operation mostly in the western pristine waters of the archipelago, had a severe environmental impact but also a sizable influence in the Ecuadorian Parliament. The same could be said about the tourism industry. The lack of trust among the various actors was generalised, and there were frequent infractions of the rules of the reserve. The governance arrangement for the reserve was not well defined, and the administration of the pre-existing, terrestrial Galápagos National Park was *de facto* in charge.

The need for a broader and more inclusive governance arrangement was clear. In response, an extensive **participatory process** was supported **in the 1990s** to gather the key sectors (municipalities, fishers, local tourism representatives, conservation advocates) and make sure they first internally agreed about their own relevant interests and concerns.[650] This seemed necessary before a viable management plan could be negotiated. The process was consolidated, in 1998, by an innovative legal regime (*Ley Orgánica de Regimen Especial de la Provincia de Galápagos*— LOREG). LOREG upgraded and substantially enlarged the Resource Reserve to create the Galápagos Marine Reserve, the **first Marine Reserve** of Ecuador. This remarkable extension, encompassing 40 nautical miles from the islands and all waters between the islands,[651] was strongly contested by the industrial fishing sector but agreed by the artisanal fishing sector, which saw it as a guarantee of some exclusive access rights. Predictably, the marine reserve was strongly supported by the conservation advocates and the tourism industry (although it was not clear whether the tourism industry would respect environmental standards that might, eventually, affect its own interests).

LOREG included a clear effort to improve the reserve's governance institution towards a **shared governance arrangement**. Governance was to be operated by three main bodies: a participatory management board (PMB) that would develop socially-agreed management plans; an inter-institutional management authority (IMA) in charge of formally deciding on the adoption of those plans; and the existing park agency for the terrestrial protected area (GNP), also part of the participatory management board, to remain in charge of implementing the agreed plans. The PMB included representatives of all main social actors in the archipelago: conservation, research, artisanal fishing and tourism. The only key sector that was purposefully left out of the PMB was industrial fishing, deemed *incompatible* with the conservation objectives of the marine reserve. The IMA included several ministries and technical agencies

648   Case example compiled by Grazia Borrini-Feyerabend based on: Borrini-Feyerabend & Farvar, 2001; Heylings & Bravo, 2001; Günther Reck & Óscar Carvajal Mora, personal communications, 2020; Tilman Jaeger, personal observations, 2020.
649   An initial recommendation had been made in 1974 for the protection of two nautical miles all around the Galápagos coastline (see https://www.Galápagos.gob.ec/reserva-marina/ accessed 2024).
650   Reck, 2014.
651   This amounts to 13.3 million ha, approximately equivalent to the entire land area of the State of Ecuador.
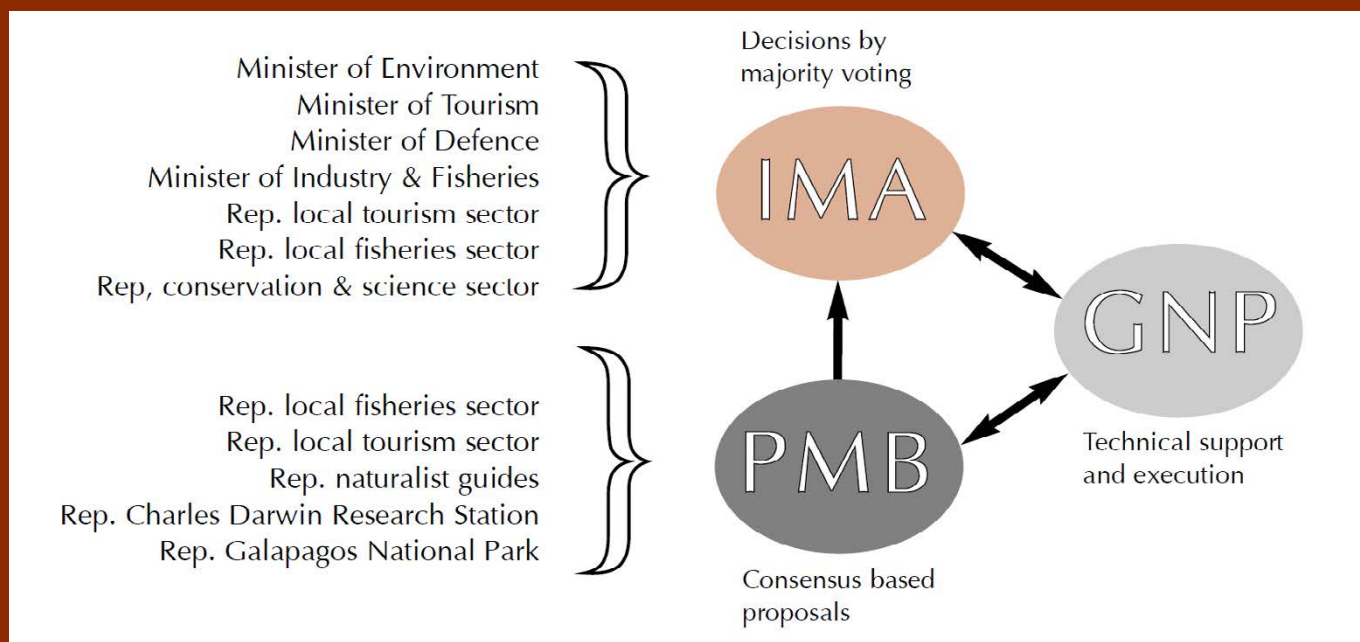
The new governance institution established by LOREG for the Galápagos Marine Reserve (acronyms explained in the text)

and was presided by the Minister of the Environment. Importantly, all local actors included in the PMB had a **built-in incentive to develop an agreement** as they knew that, in the absence of their proposed plan being agreed by consensus, the IMA would decide entirely on its own.

The new governance institution backed the extension of the reserve and achieved another success in the early 2000s, when the first management plan for the Marine Reserve was approved by consensus by the PMB, including a definition of coastal no-take and total protection zones, zones where only tourism visits were allowed, and zones where artisanal fishery was possible under agreed rules and calendars. Putting the plan into operation did not prove easy and regular adjustments had to be made over subsequent years, but it was crucially important to have identified a common ground for decisions among many different perspectives and concerns.

The new institution provided an example of the **evolution of governance type**, from governance by government (the situation that existed prior to the new law) **to shared governance** (the situation that developed *de facto* after LOREG). Arguably, this second type was *more appropriate* than the first, as most of the social actors that needed to respect the management plan had developed it, and agreed upon it, themselves.[652] Shared governance also represented an improvement in terms of **governance quality** ('better governance'), as decisions were now taken more in line with the broad principles of legitimacy and voice, direction, performance, accountability, fairness, and respect for rights. In short: more of the sectors concerned had gained a say in the decisions and rules for the protected area, and this initiated a period of enhanced collaboration.[653]

Despite this, the distrust among sectors was far from eliminated. The meetings of PMB and IMA remained strained, particularly around topics such as quota for the

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652   Borrini-Feyerabend & Farvar, 2001.
653   Heylings & Bravo, 2007.

lucrative extraction of sea-cucumber and spiny lobster. Only the collapse of the sea-cucumber fishery during the first decade of the millennium led to a common understanding of the need for sound management, including a 5-year fishery calendar and a monitoring plan.[654] Besides the legitimately *diverse* understandings, interests and concerns, what was **still missing** was **a set of shared values** equally appreciated in the Galápagos Marine Reserve by the ministerial staff as by the local fisherfolks, tourism sector or marine ecologists. This came to the fore in 2008, when the new Ecuadorian Constitution established a totally **new governance agency** for the marine reserve that **erased all** that had been developed until then. Remarkably, neither the artisanal fishing sector nor any one of the other actors engaged in the PMB openly protested. Indeed, there was **little to keep them together**, despite the remarkable design of the prior shared governance system.

The IMA was thus replaced by a Government Council, including the local mayors and presided by a chair with the rank of minister, directly appointed by the president. In time, a participatory process much less extensive than that of the late 1980s also established a new Consultative Council of Participatory Management (CCMP) for the Marine Reserve, meant to replace the PMB. This Council has a merely consultative role and there is **no** mention of **consensus negotiation processes** among its functions. As an example, in 2016 a Marine Sanctuary area was created within the reserve by ministerial decree, without any local consultation. In 2020, the CCMP implementation procedures were still to be completed and Galápagos National Park was still the authority in charge. But even marine ecologists do not believe that, in the long term, this situation will be favourable for conservation. The Government Council has considerable power to affect management issues, and its members (including city mayors) respond easily to economic demands and pressures. The instability and frequent rotation of political and technical appointments is such that **continuity in policies and decisions** is **unlikely**.

The birth of a new institution is never easy, and few examples may be more arduous than Galápagos, where the relatively recent establishment of human settlements and the plurality of strong interests in mutual opposition do not facilitate a sense of collective responsibility for the marine territory at stake. The LOREG governance institution was well conceived, but still too young and fragile to stand up to momentous political decisions. Scientists of the University of San Francisco de Quito are currently studying whether, through time, some 'inspiring collective values' may surface among concerned parties in Galápagos, if not in Ecuador in general. It can only be hoped that this may form the basis of a Galápagos Marine Reserve governance institution endowed with stronger constituent vitality.

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654   Castrejón *et al.*, 2014.

They should also be literate in science and technology, possess language skills, be accustomed to critical thinking, personal detachment and systems thinking, and be able to apply moral reasoning to the choices involved in major decisions. Dror is persuasive in lamenting that contemporary societies apply very diverse competence standards to, let us say, the medical profession and the political profession. After all, the former deal with one individual at a time, while the latter have vast powers over entire communities and the environments that they live in. For Dror, what we refer to as vital governance requires leaders gifted with specific knowledge and skills— both explicit and tacit.[655] He recommends opportunities and incentives to acquire these from formal courses, sabbaticals, short retreats and in-depth studies but also from life experience, visits and direct practice that nourish a **sense of vocation and mission** in leadership positions.

Indeed, **leadership** can be effective in articulating the 'inspiring collective values' that help society to bond with a territory. But the work of a leader is still inevitably the transient **tip of an iceberg**. Leaders who are truly effective nourish governance institutions that persist beyond them and continue to generate, maintain and represent through time the motivation and commitment of many individuals in the relevant society. The tip of the iceberg floats on the broad upward push of the ice below water. For a conserved or protected area to function well in the long term, the leaders in the governance institution (the tip of the iceberg) must receive the upward push from the broader social body that shares the values expressed by the leaders. That is why we state that the importance of characteristics related to governance vitality is not the fact of shaping powerful leaders but of embedding 'inspiring collective values'.

This said, **charismatic leaders** have two crucial powers. The first is the capacity to **bend and interpret** shared collective values towards life-supportive but also life-destroying ways, in particular when those involve the sense of common identity and social morality of a people or community.[656] This is one of the most significant faculties possessed by individuals, which may lead to enormous changes in the lives of others. And the second is the capacity to **nourish** and **prevent the erosion of** the **'inspiring collective values'** upon which the institutions governing conserved and protected areas were created. Several institutions that have demonstrated vitality throughout centuries have learned that the collective concerns, interests and values supporting them need to be nourished in systematic ways. For that, they have organised **recurrent events**, such as **collective visits** to their territory, as powerfully shown by the Maya K'iché of Totonicapán, in Guatemala (case example 26), **celebrations** where the agreed rules are repeated and communicated to the youth,[657] and **rituals** that connect a territory to a **ceremonial calendar** (e.g. harvest times, start of the fishing season, gathering and sharing of seeds, anniversary of the founding of the institution).[658] Many institutions regularly call for blessings from the gods, saints and ancestors to rekindle the inspiring collective values that support them. Others acknowledge the spiritual guidance of non-human entities embedded in nature.[659] For Rachael Knight (2020), governance institutions are dependent in an essential way upon the "cosmologies and cultural practices that generate the respect for sites and wider ecosystems" and ceremonies and rituals can "revitalize and deepen humans' relationships with the more-than-human world" in both traditional and innovative ways. Indeed, religious or secular rituals are often essential for the capacity of the governing institution to elicit and maintain its 'inspiring collective values'.

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655   We earlier discussed much of this as 'wisdom from local experience'.
656   See Barkin & Sánchez, 2020. We discuss this further in Part III.
657   For instance, this has been the case for centuries among the Tibetan communities of Sichuan (China).
658   Nature-connected ceremonies and rituals are commonly described in anthropological literature, and some telling examples by communities in diverse ecosystems can be found in Reader (1990).
659   Rosemary Hill, personal communication, 2020 (see also footnote 584).

Case example 26.

Keeping our forest alive: collective field visits repeated for five centuries in the heart of Guatemala[660]

The Komon Juyub Life Territory, or Communal Forest of the 48 Chwimeq'ená Cantons, is found in the Maya K'iché territory, municipality of Totonicapán, Guatemala. Lying 3,000 m above sea level, this is an ancestral communal forest of 22,000 ha, origin of more than 1,500 water sources, including the main sources that supply Atitlán, the emblematic lake of Guatemala. The forest is a rich source of quality timber, edible and medicinal plants, mushrooms, firewood, and grazing for sheep. It abounds with endemic species of trees (some of which are endangered, e.g. *Abies guatemalensis*), as well as rare plants and animals.

The forest is the sacred territory of life[661] of the local Maya K'iché people, whose collective governance and management of the forest have been exercised by the same institution for well over five centuries. Every year, an assembly of the entire community elects the traditional authorities (*K'axq'o*l) who voluntarily agree to self-sacrifice and serve the community to ensure the defence of the territory of life. The volunteers are grouped into five committees (*Juntas*) in charge of making decisions about different aspects of community life. One of the five committees oversees the surveillance and control of the communal forest, which includes watching over it, preventing fires, maintaining a tree nursery to carry out reforestation, combating illicit extractions and resolving any type of conflict that may arise. The rules within the community are transmitted in writing, orally, and through the assignments (*consignas*) that each group of authorities leaves to the incoming ones.

Maya governance, based on ancestral, spiritual, social and cultural principles, is still regularly active today. It is not, however, officially recognised by the State of Guatemala. Moreover, the municipality of Totonicapán has assumed control of the forest without the consent of the people and agreed to the creation of a protected area over about half of the forest of the 48 Cantons, for which a technical officer has been 'set in charge' by the National Protected Area Council. The officer has good working relations with the traditional authorities, who maintain an office, computer equipment, cameras, cell phones, GPS, and the backing of the National Civilian Police to fight illicit activities in the communal forest. An awkward co-existence seems to be in place.

The threats to the territory include illegal extraction of forest products for commercial purposes, especially timber, firewood and products used as Christmas decorations (moss, bromeliads, young trees and branches of spruce and pine), a situation that requires increased control and surveillance efforts, especially during certain periods of the year. The pine beetle has also damaged large areas of pine trees and must be monitored and kept in check. Moreover, national, regional and local entrepreneurs frequently develop 'new ideas' to extract resources, take advantage of the unique location and features of the forest, and encroach on the forest in whatever way they can. Because of these threats, the Junta in charge of the forest carries out frequent inspections, which include a **yearly transect walk throughout the entire forest** that, until recently, used to take up to three weeks.

The transect walk is a **widely known practice** of the traditional authorities, which has been going on **for centuries**. During the walk, **surveillance** is directly carried out, infractions are discovered and discussed, and remedies are decided. The practice is both a strong element of legitimisation for the Indigenous collective governance and a way of exercising their rights over

the communal territory. The visit **involves both the in-coming and outgoing traditional authorities** (which remain in charge for one year only) and many people from the local communities, but not the municipal authorities. Importantly, the visit provides an effective way of **sharing knowledge** about managing the forest as well as **maintaining and consolidating the bond** between the people and its territory of life. **Spiritual ceremonies** are held in the numerous sacred sites found in the forest. Together with the direct elections and the spirit of self-sacrifice and community service, these frequent and extensive visits are a characteristic feature of the ancient governance practice of the forest of the 48 Cantons. For various reasons, today's visits are shorter than in the past, but they remain much appreciated. Hopefully, these visits may in the future be enhanced by the interaction and support of new technologies, including satellite imaging, drones, GPS and GIS mapping.

An important threat to the Komon Juyub Forest is the lack of clarity regarding its governance, aggravated by the current outmigration of many young people (intergenerational gap) and attempts at co-opting the traditional institution by diverse political parties and economic actors. Despite political repression and massacres, which have taken place even in recent years, Totonicapán continues to be a stronghold of Indigenous resistance to imposed change. The traditional governance institution insists that it wishes to be fully recognised as the true and only custodian of the communal forest and wants to keep out all damaging extractive industries (mining, monocultures and hydroelectric power plants), particularly those that affect the water sources. The regular visit to the forest is a powerful means to re-assert this demand and keep alive the **inspiring collective values**— history, identity, spirituality, knowledge, livelihoods, vision for the future— shared by the Maya K'iché **custodians**.

Vitality interlude

Whoever has ever tended a bulbous plant knows the sense of amazement of realising that that 'small lump of a bulb' senses the seasons earlier and better than anyone else. You may have abandoned it in a dry, dark and forgotten place... when spring comes, it will burst out with optimism, getting all its courage together and shooting towards any hint of light and warmth, ready to reveal intense colours, exude subtle scents, convey pride and sensuality. You will be in awe, and so will the bees, ants and little spiders who will come to visit, all impressed at its vitality and beauty.

Part III: Purpose, meaning, emotions and chance

…for readers who enjoy exploring 'why'…

… that the collective life of mankind can achieve perfect justice […] is a very valuable illusion […] for justice cannot be approximated if the hope of its perfect realization does not generate a sublime madness of the soul.

Reinhold Niebuhr, 1932

Meaning is the central phenomenon of social life, and no aspect of the latter can be understood without looking into the question of what it means to those who participate in it.

Peter L. Berger, 1976

The energy to function

Energy is the basic ingredient of an institution's vitality, the spirit, breath, '*élan*' necessary for action. For human beings, that energy comes with life itself— a newborn instinctively takes a breath of oxygen to enter the world, seeks feeding and calls on others for the comfort and sustenance necessary for survival. As we develop through life, we maintain many of these initial impulses, which progressively become more differentiated and complex, and add to them the desire for sexual reproduction. Feeding us with energy, these impulses[662] underpin what we may understand as our **'biological purpose'— remaining alive and continuing our species**— a purpose that engages all of us as individuals, but also as part of groups.

Because of the need for **mutual support to secure food, safety and reproduction**, the genus *Homo* has always lived in groups, accumulating hundreds of thousands of years of experience in communal living. A patient, merciless and powerful *learning* has been underway, generation after generation, in the diverse environments where our ancestors foraged for food and water and found shelter to hide and protect themselves. Many found ways to travel as groups, sometimes over long distances and across seas, for which they had to build rafts and means to steer them.[663] Others learnt to hunt large animals, controlled fire and were able to keep warm in the harsh, subfreezing environments of Ice Ages at high latitudes, a major feat for furless beings.[664] We assume the motivation for **acting together** was powerful, immediate and direct: being fed rather than hungry and miserable, strong rather than fearful, warm rather than freezing. Yet, the capacity to satisfy the needs for food and sustenance collectively hardly distinguishes *Homo* from other primates, or cetaceans, or even insects.

A well-argued theory about what *does* distinguish the genus *Homo* is provided by Robert Bednarik,[665] for whom the difference is about competency in the use of **exograms**. Exograms are objects or features in the physical world that serve as 'units of memory storage' *outside* the brain.[666] As exograms elicit a reaction in the brain (e.g. a specific image, emotion or thought) this can be repeated, recognised, and possibly shared,

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662   These 'impulses' can also be referred to as 'instincts', which exist regardless of 'rational thought'. Lakoff (2010), however, also finds institutional and emotional roots in what we interpret as 'reason'.

663   Bednarik (2020) argues that Homo groups large enough to develop a viable descendance must have succeeded in crossing sea straits about one million years ago. This would have happened by way of rafts equipped with some capacity to steer and row— rafts likely built only by stone tools. The sheer difficulty of this achievement sheds a new light on the capacities of our distant ancestors long before the appearance of Homo sapiens.

664   There is evidence that Homo neanderthalensis and Homo denisovan inhabited high latitudes from approximately 400,000 years BCE.

665   Bednarik, 2020. See also footnotes 44 and 45.

666   The term 'engrams' was coined to describe units of memory inside the brain... which were extensively searched for, but never identified.

enabling **communication**, and opening the way to **symbols** and a sense of meaning. According to Bednarik, exograms are detectable in paleoart, from beads and pendants to petroglyphs, from manuports (objects with special features evidently displaced from their original sites) to the use of pigments, from engraved bones to ornaments and figurines. While time has presumably altered or destroyed most prehistoric exograms,[667] paleo-anthropologists claim to have identified some that are one million years old[668] and some that are surely more than one hundred thousand years old.[669] The most impressive paleoart discovered so far are the rock art and cave paintings that reveal the complex capacities of *Homo neanderthalensis* for imagination and narration.[670] Indeed, it is possible that the **'symbolic meanings'** of what we do— and in particular **of our relations with the natural environment**— have been with us for a very long time.

While some argue that *Homo* groups were able to control **fire** between one and two million years ago,[671] most evidence of its regular use are from about 100,000 to 50,000 years ago,[672] when fire was probably used to manage plants and wildlife.[673] By 12,000 BCE, we know that *Homo* groups were beginning to significantly affect most of the Earth's surface.[674] Archaeology reveals that practices of pastoralism[675] and agricultural land use were present by about 10,000 BCE, coexisting with various forms of foraging. Several hypotheses have been advanced to explain why mobile foragers ever decided to settle.[676] Some posit that agriculture was "climatically impossible during the Pleistocene but mandatory during the Holocene"[677] when planetary temperature rose and remained unusually high for several consecutive millennia and diverse peoples 'discovered **grains**'— first rice, millet, corn,[678] and then wheat, sorghum, teff, quinoa— in diverse world regions. Others have noted that, in settled situations, the wealth of farmers (crops, dwellings and animals) can be demarcated and defended, encouraging farming among the human groups inclined to accumulate wealth.[679] Still others go "deep in the human psyche" pointing at farming as an activity that "increases control over the natural world" while foragers tend to have a stronger sense of uncontrolled, spiritual presences in nature and higher needs for solidarity (e.g. the necessity of eating in common).[680] In this sense, the coming of age of pastoral and farming societies may reveal and/or reflect a change of mentality and values, the **emergence of diverse** and possibly **more complex meanings** to interpret the relations between a group of humans and their environment. Some outrightly claim that "agriculture planted the seeds of alienation from nature".[681]

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667 'Prehistoric exograms' may be a contradiction in terms, as the exograms themselves may offer the first traces of human history.
668 Bednarik, 2021.
669 Hoffmann *et al.* (2018) discuss such a discovery in Spain attributed to Homo neanderthalensis. Recent discoveries in Morocco are interpreted as showing that such capacities were developed much earlier and attributed to Homo sapiens (Sehasseh *et al.*, 2021).
670 Price (2019) and Brumm *et al.* (2021) describe figurative arts discovered in Indonesia and dated at more than 40,000 years ago. This predates the better-known cave art of Chauvet in France, dated about 40,000 BCE, and Altamira in Spain, produced by diverse people from 21,000 to 11,000 BCE.
671 Gowlett & Wrangham, 2013.
672 Bowman (2009) mentions that cooked food may have appeared as early as 1.9 million years ago, although reliable evidence for controlled fire use does not appear in the archaeological record until after 400,000 years ago. It is even noted that this may have influenced the evolution of human tolerance to air pollution (Bednarik, 2020).
673 Pyne (2016) offers an impressive review of the meaning of fire for humans, including this distressing phrase: "By cooking food, people got small guts and big heads. By cooking landscapes, they went to the top of the food chain. And now that we have begun to cook planets, we have become a geologic force".
674 Ellis *et al.*, 2021.
675 Pastoralism is defined as a social and economic system in which people move domestic animals to pasture and rely on spatial mobility for survival (Marshall & Capriles, 2014). See also the section on mobile pastoralism in Part I of this work.
676 Some are puzzled because farmers have higher energy expenditures (e.g. need more hours of work each day to cultivate and store food) and poorer health and less varied diet compared to foragers. Weisdorf (2005) discusses various hypotheses to explain the Neolithic Revolution: unfavourable climatic conditions for agriculture during the late Pleistocene; extinction of large herding animals just before the Neolithic; growth of the human population; or even cost-benefits analyses that supposedly 'convinced' human groups in some unconscious way. None of these hypotheses seem decisive, although a climate-related hypothesis (Richerson *et al.*, 2001) has been gaining grounds.
677 Richerson *et al.*, 2001.
678 Price & Bar-Yosef, 2011.
679 Bowles & Jung-Kyoo, 2013.
680 Barker & Janowski, 2011.
681 Mason & Kassam, 2021.

The emergence of symbolic meanings and their combining with what we have earlier defined as 'biological' impulses for survival and reproduction is a phenomenon primarily concerning groups. It is reasonable to imagine that, through time, repeated experiences generated memories, preferences, recurring behaviours, and— following Bednarik— a variety of exograms. As those accumulated, they intertwined with relational issues— playing and collaborating with others or subjecting/being subjected by others on matters concerning a shared territory. All of this likely evolved[682] into the unique human capacity for communicating by spoken **language** (and music), for constructing stories, rituals and ceremonies, and for consolidating all that into knowledge, mētis, worldviews and 'institutions'. From accumulated practice and learning, we posit that **institutions** developed a **sense of self**[683] and described the meaning of their actions with a bewildering variety of terms, concepts, narratives and interpretations, fitting the unique mix of the necessary and the casual that characterised each historical situation. By emotionally adhering to the biological purpose and symbolic meanings and narratives they had themselves generated, institutions might have, in fact, **bootstrapped** and **amplified their own energy and inspiration** to function. And they may have learned to **elicit emotions** in the larger society to foster its adherence and respect of the relevant rules.

The advent of settled lifestyles in human societies is often described as the 'Neolithic Revolution'. Historians now believe that it was hardly a revolution…just the beginning of a very long period in which diverse lifestyles have been *coexisting* (as they still do today). More than any sweeping change from mobile to settled societies, we can therefore conceive, *starting* about 12,000 BCE, a patchwork of different peoples and practices procuring both wild and domesticated foods in varied environmental conditions. With increasingly sedentary lifestyles, it is believed that the health of people generally declined because of more frequent infectious diseases and nutritional deficiencies,[684] but population continued to grow, possibly because of less spaced (more frequent) births.[685] In parallel, the environment continued to be shaped by the interaction with people. For instance, recent studies reveal that, in the Amazon region, thousands of forest islands were *generated* about 10,000 BCE because of plant cultivation by humans within what was earlier a treeless, seasonally flooded savannah.[686]

In the long run, domesticated plants and animals sustained population growth and the specialisation of occupations and skills that took place in large human settlements,[687] while many continued to procure their livelihoods via mobile lifestyles as foragers, mobile pastoralists and/or shifting cultivators. We cannot assume that the institutions of *Homo sapiens* that mastered the use of fire, selective foraging and agriculture had any direct preoccupation or care about *preserving* or *enhancing* the health of their environment. By 5,000 BCE, however, the environmental **impact** of humans was already substantial throughout Africa, Europe and Asia[688] and we may suppose that people had some **awareness** of it. As human communities engaged in larger agglomerations and other interactive and ever more complex forms of social life, various types of 'governance institutions' emerged and, with those, diverse political structures and systems of knowledge and worldviews. With that, we assume that **biological purposes merged with** increasingly diverse **symbolic meanings** and **narratives** about the interactions of humans with their environments, undoubtedly including intentional behaviour to decrease undesired impacts and foster desired environmental features.

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682   For a discussion of the multiple hypotheses regarding the evolution of language in humans see Bennett (2021).
683   This is suggestive of the distinction made by Max Weber between the rational, calculated benefit of being part of a group and the subjective feeling of belonging to it. For Weber, ethnicity is a construct of community— e.g. of possessing a shared language, memories and patterns of regulation of life— and not vice-versa (see Banton, 2007).
684   Infectious diseases spread more easily in denser populations, and diet is expected to be poorer and less varied among agriculturalists compared to hunter gatherers.
685   Armelagos *et al.*, 1991. Overall, however, it is estimated that prehistoric agriculture did not bring a population advantage with respect to prehistoric foraging (Bettinger, 2016).
686   Lombardo *et al.*, 2020.
687   Some see a sense of historical necessity and 'progress' as human societies became sedentary. Others do not.
688   Stephens *et al.*, 2019.

Culture and politics

The very ideas of 'humans' and 'nature', and their possible coincidence or separation are constructions of human consciousness that vary from place to place and throughout history.[689] The same can be said for what we understand as 'time', within which both 'humans' and 'nature' are generally supposed to be immersed and that adds to our consciousness the dimensions of instability, irreversibility and evolution.[690] These basic concepts, combining with many others that emerge in language and discourse, serve as cornerstones of diverse **worldviews** and 'roles' people see for themselves in the world. Through time, **narratives** about history, values and the symbolic meanings of entities and events become **normalised** (i.e. perceived as normal, **common-sense**, revealing the one and only existing **reality** and **truth**).[691] It is from the diverse narrative-based perceptions of the world that diverse institutions for the governance of nature emerge, and part of their role is about making further sense and giving further voice (language, discourse, narratives) to prior and future events and actions, from immediate self-interested exploitation to careful management for intergenerational solidarity.[692] In so doing, institutions contribute to determining what happens to 'nature', economies and societies. They solve, or generate, phenomena such as environmental conflicts and exclusion, environmental degradation, social marginalisation, and control, management and conservation of land and other gifts of nature.[693]

Crucially, diverse worldviews, narratives and institutions for the governance of nature embed diverse **political ecologies**,[694] that is, perspectives about the power relations that affect people and nature and their interactions, including issues of production and consumption, status quo and change, and dependence, disparities and justice in the distribution of costs and benefits of dealing with nature. In so-called *hegemonic* situations,[695] the dominant groups manage to further their own interests and secure their power by shaping the aims, values and behaviours of institutions and producing a political ecology discourse that is beneficial to them. They may *also* use some violent means, but by and large are capable of convincing and persuading their societies, or indoctrinating them, by capably using narratives that pervade education, religious discourse, the media, entertainment, advertisements, territorial governance and management, etc. As part of that, the **cultural-spiritual dimensions** of territorial governance institutions end up providing justifications for, and **consolidating, the political-economic structures** of society.

In an even broader perspective, the diversity of territorial governance institutions reveals the fundamental interplay among whatever exists ('nature', 'reality', 'Being') and the extremely complex and ever-evolving body of narratives that we often understand as 'culture'.[696] In other words, institutions respond to, and are shaped

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689   Latour (2004) explicitly posits that "we must deal simultaneously with the sciences, with natures, and politics, in the plural" as natural phenomena, social phenomena and the discourse about them are not separate but hybrids of one another.

690   Prigogine & Stenglers, 1997. For instance, some cultures conceive time as linear, others as circular and always returning.

691   Ludwig Fleck (1935) illustrates how the prevailing thought-style in one's milieu exerts a compulsive force upon [one's] thinking, with which it is not possible to be at variance. As fundamental theories change, meanings change, and new conceptions of the nature of reality may well emerge (Oberheim, quoting Feyerabend in Feyerabend, 2016). We return to this in the section entitled 'Whose reality?' in Part IV.

692   For a discussion focusing specifically on conserved and protected areas see the analyses by Wilhusen (2003) and Borrini-Feyerabend and Hill (2015).

693   See Robbins (2012).

694   Michel Foucault (Gordon, 1980) describes the relevant phenomenon of 'power-knowledge' ("Posing for discourse the question of power means basically to ask whom does discourse serve?").

695   For commentaries on the concept of 'hegemony' as conceived by various authors, see Ives (1968).

696   The definitions of 'culture' are many and evocative. A 'culture' is seen by some as a way of being and interpreting information from the environment, a way of working of individual and collective minds (Fuglesang, 1982). Others refer to culture as the "map of the self, knowledge, and the universe we carry in our heads" (Banuri, 1987). We follow in this work the understanding of culture espoused by Geertz (1973, p. 5, added italics): "Believing, with Max Weber, that man is an animal suspended in webs of significance he himself has spun, I take culture to be these webs, and the analysis of it […] an interpretative science in search of meaning". A 'body of narratives' fits well this definition.

by, nature as much as nature responds to, and is shaped by, institutions.[697] It seems rather futile to try to disentangle the world from the symbolic representation we make of it, which an academic conservationist like William Adams well understood when he stated: "Conservationists need to take a deep breath and admit that nature is a social construction".[698] The fact that whatever we call 'Nature', 'reality' or 'Being' is infinitely rich,[699] *plural,* and always *in the making[700]* has major consequences for all humans, and for no one more so than for vulnerable communities and their livelihood environments, for whom a change of narrative may be extremely significant.[701] In this light, the key questions about institutions for the governance of nature may be: "what plays an important role in the kind of *life* people want to live?",[702] "what plays an important role in the kind of *nature* people want to live *in* (or *with*, or *as*)?", "how can our institution secure that kind of life and that kind of nature?". These "matters of *concern*",[703]which should be fundamental for institutions governing conserved and protected areas, can be explored by considering their main *stated* concepts, methods, intentions and aims… while always also comparing those with *factual* activities and results.

Aims and intentions of institutions may not be expressed in direct ways, or not even understood fully or consciously. For instance, some governance bodies have ensured their dominant position and privileges by taking advantage of basic emotions such as **fear**. They may describe **dark forces of known and unknown dangers** in specific places and pretend to pacify them by patterns of allegiance and control that culminate in mass excitement, the identification of culprits and scapegoats, and rituals of sacrifice. The people who elicit these feelings may be cynical profiteers or genuine believers, possibly themselves deeply scared or unable to see otherwise. The result of their discourse upon 'nature', consciously desired or not, is likely to be the perception of nature as hostile and frightening, and of other groups as diverse, inferior, impure, guilty… 'enemies' to be hated and possibly brutalised.

Other governance institutions appear nourished by a very diverse emotional energy. They seem established to **give thanks to nature**, to **celebrate** its visible and invisible manifestations, and the wealth of material and non-material gifts offered to people (see Picture 7). For instance, the institutions organise events and rituals of gratitude, displaying abundance and promoting rivalries in generosity and sharing. Even in this case, regardless of the aware or unaware, sincere or contrived intentions of those who play key roles in the institutions, some groups may end up gratified and uplifted and others humiliated. In these opposing situations and in the many others in-between, the institutions often generate and take advantage of **social excitement** and of collective feelings of **liberation** and **catharsis**.

The places that some people refer to as **sacred natural sites** offer examples of both the need to exorcise fear and the need to give grace but also, and more in general, of the need to participate in **resonance with others** in a **collective relationship with nature**. Such sites are generally governed by institutions that regulate access to them, inform about allowed and disallowed uses of their 'gifts of nature' and, as mentioned, prescribe practices consonant with the dominant worldviews of the relevant societies. Some such worldviews imply

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697   Among the first to stress that our experience of 'realities' (plural) is socially constructed were Berger and Luckmann (1966). For Bruno Latour (2018) "…facts remain robust only when they are supported by a common culture, by institutions that can be trusted, by a more or less decent public life, by more or less reliable media." Facts are thus dependent on their "conditions of construction", including who is making statements, to whom, which institutions they relate to and make visible, etc.

698   Adams, 2004, p. 233.

699   Feyerabend (2016). Heit and Oberheim (ibid, p. xxiv) stress that the author quotes Shakespeare's Hamlet: "…there are more things in heaven and earth […] than are dreamt of in your philosophy".

700   Escobar, 2020, p. xxi. Escobar does not shy away from seeing the limitations of diverse forms of political resistance. But he stresses that this should not pre-empt either deconstructing the dominant discourse of development and exploitation, or de-colonising political imagination.

701   For instance, Escobar (ibid) stresses the feminist "technologies of sociability" that are dysfunctional to capital but allow people to survive outside the State, weaving that very fabric of domesticity and relations that creates the historical and political project of "being community".

702   Feyerabend, 1999, p. 248.

703   Latour, 2011 p. 73. Others would say "matters of care" (Loh & Shear, 2022).

caring behaviour and profound bonds between human communities and 'nature'. Indigenous peoples humbly take off their shoes before entering some sacred natural sites in the mountains of the Philippines and communicate there only by whispers. Other sacred natural sites, relevant for organised religions, see thousands of visitors each year and cater for tourism and markets on a grand scale.

A strong spiritual connection with the natural world is implicit in animistic worldviews, ascetic lifestyles and shamanic practices, often mediated by breathing techniques and psychotropic substances, performed in specific sacred sites.[704] A similar spiritual connection with nature can be perceived in **music** from all times, from drumbeats to polyphonic expressions of ancient origin or modern compositions, in the visual and representative arts, and in **dancing**, architecture and theatre. Many religious traditions draw meanings and symbols from nature and attribute special values to specific places and rituals and music performed there.[705] After decades of focusing nearly exclusively on natural and economic sciences and perspectives, even major international organisations dedicated to conservation embrace today the **socio-cultural and spiritual significance of nature** as fundamental for governing and managing conserved and protected areas.[706]

Governance institutions may be created or captured by dominant powers and their stated or covert intentions may be **self-interest, greed** and the desire to **crush competitors,** or simply the desire to **resolve conflicts**

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704   Such practices are recreated for various purposes in contemporary 'new age' cultural interactions. In fact, a number of traditional and modern spiritual 'leaders' may be cynical practitioners who interpret 'inexplicable occurrences' and natural phenomena in pursuit of personal power and material privileges. But shamanistic imagination has also elaborated magnificent myths, rituals and works of art, likely from the time of pictographs on cave walls.

705   A powerful example is the Japanese Shinto tradition, which focuses on natural sites, specific moments in the cycle of seasons and lives of peoples, rites of passage and different ways of being in nature.

706   SCBD, 2004c; Dudley *et al.*, 2005; Mulongoy & Gidda, 2008; Verschuuren *et al.*, 2021.

in one's own favour. Institutions shaped to suit the vested interests of specific individuals or groups offer a proven way to gain status and economic benefits. They may respond to a 'narrow consciousness' but fit like a glove the vision of a world dominated by the strongest and most powerful actors[707] that has come to rule the global arena. Yet, there is also a chance that the aim of an institution for the governance of nature may relate to a 'broader consciousness' of individuals as part of society,[708] a desire to **resolve conflicts in a fair way**, a yearning for **solidarity** and **mutual support**,[709] a sense of **justice**.[710] In the words of the biologist Peter Kropotkin: "… human solidarity [is] the unconscious recognition of the force that is borrowed by each man from the practice of mutual aid; of the close dependency of everyone's happiness upon the happiness of all; and of the sense of justice, or equity, which brings the individual to consider that right of every other individual as equal to his own."[711] In fact, both the selfish and solidarity elements might be traced back to the hundreds of millennia of experience as hominids, whose 'living in groups' presents costs and benefits.[712]

When encountered in everyday life, the 'competition-collaboration' dichotomy is usually nuanced, but still fundamental to guide individual and collective action. We are reminded of some questions we touched upon earlier: is governance vitality more often a result of successful **competition or** successful **collaboration?** Is vitality best suited by selfishness and **immediate self-interest**[713] **or** by sharing, solidarity and **longer-term goals**? We may keep these questions in mind while exploring (or re-exploring) the case examples of governing conserved and protected areas interspersed in this work. And we encourage readers to also ask themselves: what is the key purpose of the governance institution under consideration? Where does it find its energy, intention and meaning? The answers are rarely simple and clear-cut, but often insightful.

Finding the true aims that guide an institution governing nature is not a straightforward exercise. For one thing, we should not only consider the aims stated on air or on paper but also the real flow of benefits deriving from a territory. The crude facts of **control**, **occupation** and **economic benefits** often speak more loudly than words and expose the 'true purpose' of governance. This is well expressed by the question: *'cui prodest?'* or *'cui bono?'* (i.e. 'who draws benefits from the situation?').[714] We should also keep in mind that institutions generally respond to *many* purposes, and that such purposes may *change* with time. The private estate of a rich landowner may end up converted into a public recreation facility that also serves as precious source of water for an expanding urban sprawl. Mangroves planted to restore a fish nursery may buffer a village from sea rise for many years… and someday be cut and sold for timber by a few individuals in the local governing body. A protected area born with the lofty aim of conserving a biodiverse coral reef may end up as a conservation *offset*, the fig leaf of a company that extracts fossil fuels not far from it. And it may no longer conserve any precious biodiversity but be kept in place to 'justify' the salaries of its employees who, in turn, seem only to cater to destructive mass tourism. In this light, when faced with 'conserved and protected areas' we should remember to always clarify and explore the **gaps between statements of intentions and actual results**, how these vary with time and whom they serve.

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707   Huxley, 1888.
708   In this sense, the harshest and most unforgiving environments seem to ask for a culture of mutual support and generosity among fellow humans. For instance, in the case of rural Mongolia, mutual dependency and a narrow margin for error make 'altruism' a rational strategy, with the unspoken expectation of potentially life-saving reciprocity (Tilman Jaeger, personal observation, 2005–2008).
709   Mutual support, exchanges, sharing, sympathy, attachment, collective defence and protection are identified by Bernal (2012) as essential features of hominids, leading first to biological efficiency and, later, to morality and the law.
710   De Waal (quoted in Bernal, 2012) identifies among primates a sense of social regulation of 'proper behaviour' and expectations which clearly approaches what humans call a sense of 'justice'.
711   Kropotkin, 1902 reprinted 1955, p. xiii–xiv.
712   Krause & Ruxton, 2002. Bernal (2012) recalls that selfishness can be positive (interacting organisms obtain mutual benefits) or negative (an organism obtains benefit at the cost of harming the other), which is also referred to as parasitic relationship. She states that the act of living in a group through time must improve biological efficiency if it is maintained despite greater competition for food resources and mating and higher probabilities of getting diseases and parasites.
713   Solidarity can be seen as self-interested as well… only 'enlightened', i.e. related to a 'broader consciousness' and/or larger timescale.
714   Asking this question may lead us to consider that many, in the staff of governance institutions, may be devoted to 'conserving their own jobs' as first priority.

The political-economic and the cultural-spiritual features of governance institutions may be discussed by comparing legality versus legitimacy in any given situation. We understand legality as being *consistent with relevant jurisdiction*, which usually reflects the dominant political-economic powers in society. Legitimacy, on the other hand, means being *consistent with the perceptions and values of the relevant society*, which usually reflect the dominant worldviews and cultural-spiritual values. Of course, societies are rarely homogenous and thus legitimacy varies in their midst. Legitimacy also varies with time, although it tends to do so more flexibly and 'organically' than legality. The two concepts merge in the many dimensions of environmental justice.[715] Again, there are questions we may wish to keep in mind while exploring the case examples of conserved and protected areas in this work: is the relevant governance institution mostly seeking, and drawing motivation from, **legality or legitimacy?** Is there any tension or contradiction between the two? Does that affect the institution's internal coherence and/or the respect it commands in society? Is **environmental justice** being explicitly pursued here?

Closely intertwined with the above are the **interests and logics of individuals and groups as part of institutions**. Relationships, material goods and social orders within an institution strongly motivate individuals and specific groups to act and support certain decisions instead of others. In fact, personal and group motivations may go beyond legality, legitimacy and even beyond moral values. As we will see, they may acquire **emotional and collective identity** dimensions, which enormously enrich the energy, and fuel the motivation, of a territorial governance institution.[716] That energy and motivation may be directed to affect an institution's work and fate.

Mētis and sciences

A broad distinction can be made between the institutions that remain anchored in local, '**vernacular**', territory-based experience and values, and those designed and determined by general views, not dependent on context and often associated with 'scientific' perspectives. Vernacular logic depends on knowledge, skills, needs and motivations that are **practical, fluid**, and relate directly to **specific locations** (even micro-environments) **and communities**. As noted, James Scott refers to this as **mētis—** a **living body of local knowledge** developed only through experience, too complex and subtle to be codified even though it can be transmitted and recounted in many ways.[717] Many traditional and Indigenous institutions are rooted in such mētis, usually preserved and passed on by the elders of a community— those capable of guiding others through the complex, multi-dimensional and changing circumstances of the experience of living in a territory.

Fully independent from local and vernacular conditions is, instead, all that belongs to the realm of '**science**', or merely affirmed to be 'scientific'. Science is often understood as the road to progress that brought about the **stunning capabilities** that characterise modernity. As the source of most powerful cumulative human achievements, it carries their weight and their might. But not only. For many, 'science' also reveals the **reality** subjacent to everything that exists, it describes the **truth** that pervades the world. While it is difficult to identify coherent statements to describe these beliefs, a profound respect for the formal and natural sciences is a crucial element of the worldview associated with modernity, actively communicated in schools all over the

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715   Martin *et al.*, 2016; Coolsaet, 2020.

716   Cleaver and de Koning (2015) discuss several examples, from an Ecuadorian Indigenous community that opposed the new forest legislation merely based on 'historical distrust', to women in Zimbabwean villages who negotiate flexibility in the rules for water use according to social standing, to Kenyan officials who exercise their roles by cultivating personal networks, tailoring informal agreements, and engaging in 'institutional bricolage'.

717   See Scott (1996) and Scott (1998). Before Scott, Michael Polanyi— who famously said, "we know more than we can tell"— explored what he termed "tacit knowledge", i.e. knowledge that cannot be expressed in words or a theory (see Polanyi, 1967).

world, pursued in universities, factories and the marketplace.[718] Those acquainted with history and philosophy of science may have questions and doubts, but even they can be easily absorbed within 'science' as hegemonic environment. Matters become more complex when examining the **sciences** (in the **plural**), the **alternative currents of thought** that exist in every scientific discipline, and the **technologies** and systems of power, including the personal and political allegiances and the sources of **funding**, that are interdependent with them. Still, a sense of inevitability remains attached to the political choices that pursue technologies and research deriving from 'scientific discoveries'. This is not to say that *some* modern technologies and research results are not liberating and desirable. Some indeed are. But some are not. Only a few, however, would understand the sciences not as revealing the one and only 'objective reality out there' but emerging from "a complicated interplay between an unknown and relatively pliable material and researchers who affect, and are affected and changed by, the material".[719]

The institutions of State governments generally function on systems of knowledge based on the sciences and on needs and aims described by concepts like 'administration', 'production', 'development' and 'conservation'. These broad and generic concepts are deemed applicable to specific environments and communities because they are supposed to be valid 'everywhere and at all times', and with very little room for manoeuvre or adjustment to local conditions. Based on this, processes like **specialisation, standardisation and commodification** guide political and administrative approaches in many countries— including for the development of systems of official protected areas. Not always, but not rarely either, the new territorial authorities grounded on the sciences[720] are unaware of their own limitations and find themselves in conflict with traditional, mētis-based institutions and worldviews (likely also unaware of limitations of their own). Given the complexity of social-ecological systems, some competing 'understandings of the situation' in specific conserved or protected areas, especially when they have diverging management implications, are fertile ground for conflict, as shown by the case of Alto Fragua-Indi-Wasi National Park of Colombia (case example 11). Facing such conflicts, some custodians— like the Mijikenda elders of Kenya (case example 27)— re-interpret their local knowledge in modern terms to preserve their territories and concerns. Others— like the Kavet people of Cambodia (case example 4)— are swept aside by worldviews they do not manage to control. And other communities, like the Greveniti of Greece (case example 28) find ways, through time, of creatively combining diverse forms of knowledge and worldviews.

This is not the place to discuss in detail the diverse features, properties and concerns of **systems of knowledge** that are **mētis-based versus** those that are **based on the sciences**. We shall mention, however, that the fact of embracing one or the other generally triggers a cascade of consequences, including choice of technology, infrastructure, practices, financial costs and benefits, and the agency and relative power of diverse actors and institutions. Cleaver and de Koning (2015) mention a telling example of field irrigation canals, which can be easily diverted by farmers through the insertion of mud barriers (earth banks) based on mētis— their own local knowledge, experience and skills. Mud barriers cost little and can be flexibly operated by local users. When irrigation is 'scientifically understood' as part of a production system, however, all inputs and outputs are measured and costed, and there is an obvious call to maximise productivity. For that, 'improved' concrete gates are needed and a gatekeeper to operate them. This requires someone acting in an official capacity, which means structures, salaries, hierarchies, investments, financial inputs and returns, the dependence of local decisions on outside experts and bankers, and much more rigid operations overall. Traditional earth

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718   Social sciences enjoy a somewhat lesser level of unconditional respect, although economics is often allowed to guide decisions affecting millions of people with little popular discussion or even scrutiny.

719   Feyerabend, 1999, p. 146. "The 'subjective' side of knowledge, being inextricably intertwined with its material manifestations, cannot be just blown away. Far from merely stating what is already there, it creates conditions of existence, a world corresponding to these conditions and a life that is adapted to this world; all three support or 'establish' the conjectures that led to them." (ibid)

720   Here the singular 'science' is also often used, signifying an even less critical and possibly totalitarian attitude.

banks and gates made of concrete and metal clearly fit diverse situations. They also offer a good example of how diverse systems of knowledge favour diverse technologies, powers, actors and institutions, and have a substantial impact on the sustainability of operations.[721]

Again, we may keep in mind a few questions when examining the case examples collected in this work. Is the relevant governance institution guided more by mētis or by the sciences? Are its aims concrete and locally appreciated, or abstract and demanding? Is all this related in any way to the vitality of the institution? Combining some prior questions, we may also ask: is the institution motivated by a desire to **structure society 'from above'**, according to more-or-less benign and enlightened[722] ideas, visions, plans and laws? Is it meant to steer society to conform to such plans and laws, allowing minimal adjustment to the situation at stake (**'enforcing legality'**)? Or is it rooted in local experience, in fluid processes of **reacting to local conditions and needs**, while **'nourishing legitimacy'**[723] in a self-determined society? Furthermore, what is the *stated* purpose of the governance institution— enforcing legality or developing legitimacy? Is that reflected in its work energy and overall vitality? These questions help us to understand the symbolic meanings at play. Approaches based on scientific understandings and modern technologies show their power on innumerable occasions. But approaches based on local knowledge and mētis also have great merit, which they can demonstrate even against overpowering forces.[724] As illustrated by the Étivaz cooperative of the Parc Regional de la Gruyère-Pays d'Enhaut (case example 8), a wise balance between local and 'scientific' capacities and worldviews can, in fact, resolve controversies and provide good overall guidance.

As the **purpose and meaning** of a governance institution are **increasingly articulated**, however, they may become increasingly **controversial** for those who need to respect decisions and rules. For instance, some purposes are straightforward enough (e.g. a group of women get together to help in childbirth, villagers decide about sharing what they collectively hunted or fished, some forest guards are on alert to help a community to defend its territory) but others include many symbolic and conceptual elements (e.g. a group seeks a connection with God through spiritual exercises and ceremonies, a health care system organises to control an epidemic, a system of protected areas is designed to conserve biodiversity for its intrinsic values and to maintain "land fit for heroes" returning from war). As institutional objectives and values become more complex and abstract, a **gap** may widen **between those who 'govern'** (decide about intentions, rules, means and meanings), **those who implement** decisions (e.g. managers) **and** the **society at large**, expected to adhere to decisions and respect rules. This has much to do with vitality, as lasting governance should be inspiring for society, not antagonistic or struggling to impose its rules.

We may make an interesting observation here. On the one hand, the stated purposes of contemporary governance institutions for conserved and protected areas can be conceptually rich, refined and guided by complex aims and symbolic meanings. As we have seen, they are increasingly articulated and intertwine with cultures and politics, mētis and sciences. On the other hand, all our institutions may also be traced back, at least in part, to the need for food, sustenance and reproduction shared by all humans and other beings. The basic motivations of social life that we readily ascribe to our ancestors during hundreds of thousands of years may be hidden from view, elaborated, combined, variously expressed in different cultures and variably satisfied... but remain under the surface of even the most sophisticated modern institution.

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721   Some contemporary movements (e.g. La Via Campesina) highlight technology, and in particular traditional food technology, as a crucial point of resistance to modernity.

722   Adams and Mulligan (2003, p. 292) speak of "'enlightenment values' versus eco-centric worldviews". Various sorts of technocratic scientism merge well with totalitarian and missionary tendencies.

723   See Berger and Luckmann, 1966, p. 110.

724   See the conclusion chapter in Scott (1998), Chapter 10 in Adams (2004) and Pascual *et al.* (2021).

In fact, in all institutions we find individuals who share food, drink and shelter, have regular face-to-face encounters, speak a common language, have emotional and sexual exchanges, create and respect rituals, resonate in collective songs and rhythms, and perceive the same threats, desires and a common destiny. In all past and contemporary institutions, we find— provided we look— the 'survival instinct' and its accompanying tremendous energy, the sense of relative security provided by communal vigilance and collective defence,[725] the sense of 'being one' in facing 'others', as well as the mix of generosity, trust, distrust and envy we may feel as we compete for food or status even with the members of 'our own group'. For the vitality of contemporary governance institutions, it may be useful to be aware of both the sophisticated **symbolic meanings** we may develop to guide our action and the ancient, concrete, **biological purpose** of procuring the necessities of life as groups of humans. Both nourish our **emotions**, and both can be nurtured, in ways appropriate to the context, to generate energy for the governance institution.

Collective emotions

'Emotions' are a powerful constituent of the energy that moves human beings[726] with direct connection to biological purposes (e.g. finding food,[727] reproducing) but also to symbolic meanings (e.g. as they relate to cultural expressions, knowledge and worldviews). The nature of emotions may vary (anger, fear, love, contentment, repulsion, sympathy, grief, loathing, joy, curiosity, attraction…) but they can generally be described by a state of mind associated with **pleasure or displeasure**, generally ascribed to reactions in the nervous system. As we consider institutions for the governance of conserved and protected areas, we wonder whether they can also engage individual but also collective emotions about their territories and, if so, *how*.

First, is it plausible to imagine that a group shares a common emotion? Families, clans, teams, clubs, enterprises, sororities and fraternities, political parties, nations, armies, sects, peoples and communities— they all have some elements in common. The elements may relate to the place where they meet, their collective activities, the objects they use, or the symbols that pull them together as a group. The elements may include memories, stories, relations, beliefs, understandings and capacities nurtured in ritualised behaviours and ceremonies as the group develops its own institutions. This generates what sociologists discuss as scripts,[728] prototypes[729] and stereotypes,[730] clearly related to what we earlier described as 'inspiring collective values'— one of the characteristics we found supportive of the vitality of institutions governing conserved or protected areas.

Commonalities, scripts, prototypes and inspiring collective values are part of the internal and external dialectic processes[731] that construct a **broader self**. Individuals do not lose their identity by adhering to shared prototypes and values but do acquire a larger **social identity** that contributes to their **self-esteem**, and shapes their behaviour in relations with other groups.[732] Consolidated through time, such 'broader self' nourishes

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725   Krause & Ruxton, 2002.
726   This is applicable to other organisms. Nussbaum (2022) notes that current neuroscience and evolutionary biology understand emotions as "important pieces of animal survival equipment, with clear links to behavior". They are "ways of processing information about how a creature's important goals are being met in the world", ascribing "salience or importance to objects to which creatures are attached" (ibid). For De Waal (2019), all living beings— from cells to fungi, plants and animals— possess "subjective feeling states", which led to the development of consciousness "relatively early in evolution".
727   Hamsun (1890) has delivered a powerfully detailed description of the emotions connected with protracted hunger.
728   Based on existing literature (some references in the notes that follow), 'scripts' can be understood as "coherent sequences of events and behavioral patterns expected by an individual as part of a group, involving him as a participant or spectator". They are often related to specific places and ordinary situations, and resistant to change.
729   In a similar fashion, 'prototypes' can be understood as "combinations of characters that maximise the perceived differences with other groups whilst minimising the perceived differences within one's own group". Characters may be context-specific and fuzzily defined.
730   Similarly, again, 'stereotypes' can be understood as "combinations of characters that accentuate the similarities to the perceived prototype of one's group".
731   Nagel, 1994.
732   The collective behaviour of a group is very much connected with its social identity (Reicher quoted in Challenger *et al.*, 2009).

what we earlier referred to as 'intergenerational collective identity'.[733] In turn, when such identity is related to a specific place, it likely also bonds the group with an **emotional attachment to place** ("our ancestors lived here and are buried here", "our 'rite of passage' was held here, this place is sacred to us", "we always ate the products of this land, our food has the colors and perfumes of the place" "we love this place, its seasons, its wildlife…", "we worked so long on this place, we made it better, we will defend it for our children", etc.). In fact, a collective, intergenerational identity and a sense of emotional attachment to place add something **extremely powerful** to the governance institution that deliberates decisions, customs and rules to the society that needs to respect them. This seems to be confirmed by at least three specific research results. The first is that collective action is more likely to take place when group members share (or perceive themselves as sharing) a common social identity.[734] The second is that group behaviour, far from allowing anonymity and permissiveness, is generally regulated and determined by the nature of the in-group prototypes.[735] And the third is that groups that define themselves locally and not according to pre-defined social categories, enhance *mutual attraction* among their members.[736]

But an intergenerational collective identity and an emotional attachment to place are not necessarily *benign* for all those concerned. **Collective emotions** present both **crucial opportunity and danger for an institution**. Depending on much else that goes on in society,[737] such emotions can make people the best they can be. They can inspire collective responsibility, self-motivated hard work, and the commitment necessary to act under difficult circumstances, such as showing admirable selflessness and solidarity in responding to a natural disaster. The emotional connection with a common past and a desired shared future can generate pride, the appreciation of local beauty, feelings of collective security, empathy, hospitality and generosity. They can nurture artworks, celebrations, festiveness, joy, and a sense of shared fun and wellbeing— the best that life can offer. But, as a wise political leader once said: "…there is no noble cause or idea in history that has not been, or cannot be, perverted into its opposite".[738] A sense of shared identity and an emotional attachment to place can also make people be the worst they can be. The emotional energy and amplifying properties of social identity can also unleash anger, 'fear of losing ground', a desire for confrontation. They can make a crowd capable of lynching a single individual or going into battle with full conviction. Even when violence is not physically present, the collective emotions can nourish all sorts of arrogance, intolerance, xenophobia, nativism, nationalism, racism and the lack of compassion that generates gender oppression, apartheid and cruelty. Ultimately, they can empower brutal and violent behaviours and wars, even war crimes and genocide.

The very energy that can sustain life, human relations and communion with others can thus be the source of brutality, pain, destruction and death. This ancient understanding is nowhere better expressed than in the Trimurti stone relief of Brahma the Creator, Vishnu the Preserver and Shiva the Destroyer, united into one Being (see Picture 8). If the energy is one, however, could anything help us to channel that energy towards life and vitality, towards positive action and appropriate change, towards the emotional awareness that connects

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733   See again van Stekelenburg (2013) and note 622. Social identity is that "part of an individual's concept of oneself that derives from his knowledge of being a member of a group together with the value and emotional significance attached to that membership" (Tajfel, quoted in Challenger *et al.*, 2009). Individuals are permanently involved in processes of categorising themselves and others, associating with 'in-groups' with whom they share a sense of identity in contrast with 'out-groups'. Self-esteem from the fact of 'belonging' to the in-group may even lead to individual self-stereotyping— replacing their own sense of self by a collective self and individual behaviours by behaviours that fit shared characteristics rather than individual characteristics (Turner, quoted in Challenger *et al.*, 2009).

734   Veenstra & Haslam, quoted in Challenger *et al.*, 2009.

735   Reicher quoted in Challenger *et al.*, 2009.

736   Lea *et al.* quoted in Challenger *et al.* (2009). This corroborates the relevance of the scale of the system and constitutionality for the effectiveness of the governance institution (see the section 'Is vitality related to other concepts?' in Part V of this work).

737   Factors include widespread sense of security or fear, economic and social wellbeing or misery and injustice, religious and cultural attitudes towards solidarity, respect of human and political rights, etc. The quality of governance exercised by the institution itself may also be relevant.

738   Langer, 1996, p. 199.

us to the past, the future and the entire realm of creation? Can that very energy accompany living beings into death only when natural and necessary, and not because of meaningless destruction and the wasting of life?

According to crowd behaviourists,[739] conflict is born in relationship between identities of different groups, when such groups hold incompatible and irreconcilable notions of proper social practice that violate the social identity of the other. If this is true, collective emotions would acquire destructive or constructive force because of the specific **'prototypes' related to the collective identity** and nourished by each 'in-group' as social morality— **normalised ways of taking values to action**. In itself, self-interest is positive— it can be nurtured intelligently and peacefully negotiated with others. For that to happen, the behavioural model of each 'in-group' would require identifying and stressing the elements of *communality* that connect it with 'out-groups'. In societies dominated by nativist, intolerant and racist sentiments, however, the *differences* between 'in-groups'

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739   Challenger *et al.* (2009) offer an interesting review of some of the many studies that have examined crowd behaviour. A working definition of 'crowd' may be: "a sizeable number of people that share the same physical environment for some time, share a common 'interest', interact with one another, and act as one group". A physical group becomes a crowd when individuals share a social identity. What makes crowds unique is their ability to act in a coherent manner (act as a united mass) in an unfamiliar or ambiguous situation even without prior awareness or communication. A crowd engaged in collective emotional release in singing, cheering, chanting, celebrating or moving together (i.e. an 'expressive' crowd) is likely to bond and may turn on rival crowds, either playfully or with harmful intent, under the influence of 'leaders'. Freud posited that leaders release unconscious, 'uncivilised' impulses in the crowd members. Others stressed that the members of a crowd perceive themselves as anonymous, reduce their self-observation and self-awareness ('deindividuation' effects), minimise their concern for social evaluation, weaken their controls based on guilt, shame and fear and thus lower their threshold for exhibiting inhibited behaviours. But uncivilised, antisocial behaviours are not automatic or inevitable consequences of anonymity. Deindividuated individuals may even show increased adherence to group norms, as the physical presence of members of the same species instinctively causes arousal and motivates performance, following early prominent individuals. Group pressure to conform to emerging 'norms' is strong and can even generate rare antisocial behaviours (the mere fact of being categorised as a 'group' may produce ethnocentric and competitive intergroup behaviour).

and 'out-groups' are highlighted, and the 'others' can even be de-humanised.[740] **Fanatic nativism**[741] is brutally apparent in **apartheid practices** and phenomena such as witch hunts, **ethnic cleansing**, dehumanisation of immigrants or **eco-fascism**,[742] which pretend to reshape and *purify* societies to fit the self-aggrandising visions of some against others.

When self-interest is coarsely understood and imposed unfairly, violently, and in disregard of the needs of others and of what they perceive as legitimate, the upper hand may be gained and violently maintained over territories and areas for long periods. Brutal institutions gain public acceptance and support by spreading lies and self-serving narratives and by leveraging collective emotions like fear, envy, anger and greed, which are added to biological motivation for individual and family survival and various symbolic meanings. Crucially, this is based on a sense of social identity and **separation from 'others'**, the **devaluation**, **de-humanisation** or even **demonisation** of the **'out-groups'** that happen to be at stake. Examples of institutions that have occupied land and exploited nature for their own exclusive benefit at the expense of less powerful groups during long periods are evident in the imperialist and colonial societies, and are alive and well at the time of writing. Strikingly similar patterns, in fact, are common under both self-professed democracies and totalitarian countries. Purchasing land under duress, violently occupying properties and displacing legitimate residents are often followed by listing land under private, corporate or State 'property', to be later maintained with the support of the military, the police and complacent judiciaries. Human history has no shortage of such examples, and many institutions born of violent impositions end up *inspiring themselves* to function for decades or centuries, as demonstrated by colonial and racist States or even by the protected areas that continue to keep out rightful residents.[743]

Brutality is often effective. Ultimately, however, brutal impositions seem antithetical to the characteristics we have found associated with governance vitality, such as strategic flexibility, creativity, connectivity, wisdom from local experience and inspiring collective values. For instance, brutal institutions are unlikely to exhibit 'wide connectivity' and 'inspiring values', as these would involve positive connections among *many*, if not all, people. They can rarely be attributed 'wisdom from local experience' as this would imply *social-ecological fit* with the natural environment, and rule compliance based on *trust and respect* of the group in power. In this sense, it is also improbable that brutal institutions, often also distant from the impact they generate, succeed in implementing sound environmental decisions. Indeed, the demise of brutal governance institutions seems inevitable, although the timescale of that inevitability may leave much to be desired.

In light of the above, **'persistence by brutality'** should never be misunderstood as 'vitality'. A governance institution may stay on by being unwilling or unable to see that it is behaving in ways that are self-damaging, may fail to understand that the decisions and rules it has adopted will prove pernicious, or even fatal, for the

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740 At the time of writing (late 2023), and certainly not as an historical first, the intent to pursue a war and delay a negotiated agreement is revealed by one side using all sorts of dehumanising terms towards the other (e.g. 'animals', 'cockroaches'...).

741 The term is used by Pye-Smith and Borrini-Feyerabend (1994, p. 162) to express nativism that goes well beyond the mere opposition to immigrants and new cultural encounters. The concept may be akin to "dogmatic nationalism and totalitarianism" at the local scale. Of course, nativism may be damaging even when not openly racist... for instance in all those cases where the selfishly perceived interest of natives (or of those who self-identify as such) are placed before those of all other communities and even before the collective interest of everyone. For instance, some industrial farming communities in the Netherlands refuse to obey the EU regulations about land pollution and climate change that require them to limit the number of farmed animals. However improbable the argument, given that in some cases the land they inhabit was under water until a few decades ago, they justify that with the desire to maintain their "native traditions and lifestyles" and they do so with muscular means (Antje Lorch, personal communication, 2023).

742 'Eco-fascism' is an umbrella term for ideologies that blame environmental problems on overpopulation, immigration and over-industrialisation. Their 'remedies' invariably involve the demise of today's marginalised peoples. Fascism per se can be defined as "a qualitative change in how society is governed [implying] the essential elimination of the rule of law and democratic and civil rights. Fascism foments and relies on xenophobic nationalism, racism, misogyny, and the aggressive re-institution of oppressive 'traditional values'". See https://refusefascism.org/ accessed 2024.

743 Brockington (2003) insightfully describes the case of the brutally imposed Mkomazi Rhino Reserve in Tanzania on the border with Kenya. In the 1980s, the creation of Mkomazi caused the eviction of several thousand pastoralists from their customary grazing land. As Brockington argues, some imposed forms of 'conservation' can generate lasting myths of their own and their inherent inequity does not necessarily undermine them.

institution and its territory. The negative consequences may accumulate in slow and imperceptible ways, while the territory and people remain apparently healthy and powerful. The institution may misunderstand or ignore phenomena that will exhibit sudden and catastrophic behaviour. It may be insouciant about consequences, self-deceiving and lying, blinded by arrogance, and freewheeling on the easy energy of the aggressiveness of the few that keeps many in fear… In fact, persistence by brutality and a poor understanding of the relevant ecological and social systems may be rather germane. Without any proof or assurance,[744] we *like to believe* that they are bound to eventually give way to something better.

We also *like to conclude* that the 'inspiring collective values' and emotions that best nourish vital institutions for environmental governance are those that remain *life-supportive*,[745] using the term with reference to nature but also to the life and wellbeing of the relevant group *and of all other people, including future generations*. This would extend the 'in-group' social identity to the entire humanity, past and future generations included, leaving no room for intolerance, gender oppression, fanatic nativism, racism, or the brutality and violence they often engender. We use the term *life-supportive* following Albert Schweitzer, who offered a simple, universal definition of good and evil: "good is what maintains and encourages life, bad is what destroys or obstructs life".[746] For those who perceive it, the **basic and supreme value of *life*** may **derive from the long and unforgiving processes of evolution and accumulated learning**. In the words of Pietro Laureano,[747] ancient, shared values: "… communicate rigor and sobriety… offer rules and harmony… find root in stone, water, heat and cold, food… but also in elements closer to myths, dreams and illusions… they give meaning and energy to the lives of humans by the sense of sacred, the curiosity and fear of the unknown, the awareness of our biological precariousness and limitations…". It is values like these that create bonds of **silent empathy among *all* people** and **care between people and places**. They create sites of universal heritage,[748] by offering support to life and ground for 'meaning' across generations.

Life-supportive emotions and values guide wise ways of dealing with natural phenomena ("if we do this, these will be the consequences…") but also norms of **reciprocity**, fostering **solidarity** and **collective responsibility** transmitted from ancestors to descendants. Today, a good part of intergenerational communication— or 'education' as some would call it— has moved away from the unforgiving rigour, sobriety and responsibility that was dictated by environmental and social circumstances for much of human history. Some applaud this, as the very changes that distance urban residents from direct dependence on a territory are believed to be associated with improvements in living conditions, raised standards of habitation, nutrition, health care, and respect of human rights.[749] Other emotions and values, on the other hand, have been diminished. Feeling part of a community, nurturing an emotional attachment to a territory, remembering a common past and

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744   It would certainly be instructive to collect and analyse data about this.

745   In a positive sense or, at least, in the sense of not consciously doing harm.

746   Schweitzer (1923, p. xviii). The actual phrase is "…the fundamental principle of morality [is that] good consists in maintaining, promoting, and enhancing life, and that destroying, injuring, and limiting life [is] evil.". Something similar ("the equal right to live and blossom is an intuitively clear and obvious value axiom [of all forms of life]") was offered by Arne Naess (1973) and spurred the development of the 'deep ecology' movement and related controversies (e.g. about its limited political awareness and unconditional appreciation of utopian 'wilderness'). Again, we are reminded that powerful concepts and collective emotions offer crucial opportunities and dangers.

747   Pietro Laureano (1993 and 2018) powerfully recounts how traditional societies learned to live in environments of scarce resources, guided by the need to use them commonly and sustainably. In many specific locations he 'reads' the environment to rediscover how people understood the economies of land, water, sun and wind, how they terraced the land, moved with their animals, conserved food, defended themselves from heat and cold, gathered water, and created gardens and oases in ambitious long-term efforts of collective environmental planning and management.

748   The quotes— liberally translated from the Italian— are from a magnificent work (Laureano, 1993) that recounts how it became possible to recognise the neglected urban site of Matera, in southern Italy, as a World Heritage Site. Perceived for decades as a shameful vestige of primitive living, Matera's grottos, water conducts, cisterns and intricate living quarters came to be recognised as a time-perfected, cultural space of understanding and care. Shame was transformed into pride when the biocultural heritage was 'revealed' in its full complexity and ingenuity.

749   'Human rights' as developed in the Universal Declaration of 1948 and successive elaborations are surely dependent on the political and socio-cultural powers of the day. Yet, they may also speak to values that are fundamental to 'us as humans'. Among these we may see the protection extended to the weaker members of society (children, elders, disabled, women), the desire to prevent atrocities, including by the systematic use of repression, terror, imprisonment, torture and killing, and even the respect for cultural pluralism versus monist fundamentalism. This kind of global ethics is what Dror (2001) calls 'raison d'humanité'. While the appeal of these universal values is enormous, we cannot forget that they remain the product of historical and cultural circumstances.

preparing a common desired future… all this used to be the norm and provide **energy for collective action** and **meaning** in the lives of people. It used to provide motivation for local institutions to govern territories with respect for the investments and care made by ancestors and an orientation towards the future. Today, such energy, meaning, motivations and respect have become rare. When shared emotions and values are maintained and supported, they can be at the root of an institution's vitality. When they erode, it may be exceedingly difficult to substitute them with other, less powerful forces. An instructive case 'still in balance' is that of the Mijikenda people of Kenya, who may lose their unique attachment to their ancestral land under the onslaught of commercial forces (see case example 27).

Case example 27.

Dramatic conceptual and institutional change: will it allow to conserve the sacred kaya forests of the Mijikenda people of Kenya?[750]

The Mijikenda people is a large ethnic group settled in the coastal region and nearby hinterland of Kenya. They speak a Bantu language and, on their own account, originate from what is today the Somalian coast, from where they moved south about five centuries ago. They were originally horticulturalists and pastoralists and, when migrating south, they found large and dense forests that they partially cleared for their homesteads.[751] The homestead clearings inside the forest were the site of occasional large ceremonies and a sort of *moral core* of Mijikenda societies. Anthropologists report that the name *kaya* means '**sacred void**' and originally referred to these clearings. The forests surrounding the homesteads remained thick and often impenetrable. Only a few access paths existed, and they were well guarded, which helped to protect the Mijikenda from invaders and raiders, including when the slave trade was flourishing along the Swahili coast. Councils of Elders oversaw the social rules regarding removal of trees and vegetation and the use of the forest as burial ground. Still today, a rich body of beliefs exists about the magic power of trees in the forests, which would resist being axed and hurt those attempting to do so.

Through the influence of Islamic and Christian missionaries, through colonial times and the following periods of State-driven development and expansion of agriculture, mining and tourism, deforestation along the Kenyan coast and hinterland has been relentless and severe. In the last decades, the Mijikenda themselves have started establishing settlements outside the forests, where they more easily farm, keep cattle, or find salaried jobs. As conservation organisations became aware of the importance of putting a stop to rampant deforestation along the Kenyan coast, they identified as 'sacred *kayas*' not the original homesteads in the middle but the fortresses of vegetation surrounding the clearings, where rare and endemic species of plants, birds, reptiles and insects could still be found: the concept of '**sacred kaya forest**' was born.

Well into the 20th century, dozens of such forests could be identified, but the demand for land and other gifts of nature progressively reduced their size and wiped out the smaller ones. Trees were felled for building materials, carving wood, and fuel. Land was opened for mining of iron ore or cleared for agriculture, livestock grazing and housing. The spread of Islam and Christianity promoted a decline in reverence for the traditional practices, and external cultural influences increasingly affected the youth. Soon, only small but still biologically important patches of coastal forests remained standing in the thick surroundings of the original Mijikenda homesteads. Yet, the appreciation of the 'sacred *kaya* forests' for biodiversity conservation was increasing. In 1992, motivated by this enhanced appreciation and with the active support of WWF Kenya, the Kenyan government partnered with local communities, mapped dozens of *kaya* forests, surveyed their biological diversity, and documented social and cultural information. The *kaya* forests were then officially recognised as National Monuments under the Antiquities and Monuments Act and the National Museums of Kenya took on the task of listing specific sites, whose boundaries were identified and signposted.[752] But the protection proved relatively weak. Use restrictions can easily be ignored, as enforcement of rules

750   Case example compiled by Grazia Borrini-Feyerabend based on: a visit to kaya forests in 1999; Terence Hay-Edie, personal communication, 1999; Delfin Ganapin, personal communication, 2020 (referring to information from Peter Muigai and Kiunga Kareko, 2020); and https://sacredland.org/kaya-forests-kenya/ accessed 2024. The picture portrays an entry path into a kaya forest, with a signpost explaining the rules, including speaking in a low voice and wearing proper clothing (similar to proper behaviour in Mosques and Churches). The picture is courtesy of Grazia Borrini-Feyerabend.

751   A different historical interpretation sees them as original inhabitants of the Kenyan coast who moved to inland forest areas to escape colonial conquests.

752   As of 2020, 45 kaya forests had been identified in Kenya's Kwale and Kilifi counties, but only some of them had been declared as national monuments.

is difficult, and the courts rarely upheld the required penalties. Some Elders decided to remain in the original clearings inside the forests, taking care of the burials and ceremonial sites, performing rituals, and maintaining the capacity to identify and collect medicinal plants. In fact, each functioning *kaya* maintains its **Council of Elders**— respected men and women who govern it under the umbrella of the National Museum of Kenya. And the Elders do their best to mentor younger community members to take over from them and remain capable of connecting with the ancestors.

The National Museum of Kenya and its partners have a programme that supports and legally strengthens the role of the Elders and the Mijikenda communities. Selected community members are hired to patrol and keep watch over the forests, while the Elders handle minor offences by imposing traditional fines. Despite difficulties, major offences are pursued in court. Self-awareness activities have included small grants to help communities hold traditional ceremonies in the *kayas*. Farmers are helped to establish tree nurseries, beekeeping operations and culturally sensitive tourism and trade in associated craft products. In 2001, a project initiated guided tours of the *kaya* forests, educating visitors about the forests' medicinal plants and the traditional practices of the community. Visitors must follow a strict code, including a prohibition on wearing shorts and miniskirts, and certain areas are off-limits or excluded from photography. Entry fees support schools and other community projects, and women's groups operate a craft market. In 2008, a dozen separate *kaya* forests sacred to the Mijikenda people were inscribed on the prestigious UNESCO World Heritage List.

Will the *kaya* forests survive the onslaught of modernity? Elder Mijikenda custodians have willingly agreed to conceptually refashion their original *kaya* 'sacred clearings' into 'sacred forests' as well as their own roles as modern custodians and guardians of their territories and ethnic traditions. An association of *kaya* Elders has even registered officially to be able to take on an advocacy role with the government of Kenya (its resources are scarce, however, and the government backing truly limited). A telling video[753] offers an excellent representation of

the efforts of such Elders and their partners. Only a few ancestral taboos remain intact to help to restrict access to and exploitation of the forests. The Mijikenda youth are under the influence of **new and powerful forces**, including those that consider *kaya* rituals as a form of witchcraft to be eliminated. Most of all, the **monetary economy** pushes them towards destructive activities— from forest encroachment for buildings to forest clearing for mining and quarrying. For the protection of the *kayas* to be effective, conservation organisations like WWF seek resources to monetise it as well, to be able to hire the youth as local guards. This is helpful in the short term, but whether it will be successful in the long term remains to be seen. The *kayas* are a positive influence for the local communities, enhancing their sense of possessing a distinct culture and, at least for some, supporting livelihoods. Possibly, however, only the **strengthening of inspiring collective values** among the Mijikenda youth could succeed in conserving the *kayas*. The **collective identity, community solidarity** and **emotional attachment to place** that sustained the *kayas* for centuries are still a possibility... if the youth is able and willing to govern and manage them as their 'territories of life'.

753   https://www.youtube.com/watch?app=desktop&reload=9&v=lNS1zYwv9oc&feature=youtu.be accessed 2024.

A rainstorm has just wreaked havoc in Hausaland and two
friends meet.
"is yaya ruwa?" (how was the rain?)
"is ruwa yayi gyara" (the rain has fixed everything)
<div align="right">Hausa expression quoted by Barau et al., 2016</div>

What keeps governance institutions 'vital'?

We started our journey by offering a working definition of vitality for a territorial governance institution as its "capacity to perform in excellent and inspiring ways through time". We then explored cases of conserved and protected areas that demonstrated vitality throughout history, some institutional characteristics that appear associated with vitality, and various sources of energy and motivation for the relevant institutions. As we saw it, vitality reveals itself when people have **meaningful, direct and long-standing relationships with nature**… offering lessons for governing the conserved and protected areas of today. We are now ready to ask the basic question underlying our exploration so far: why do some governance institutions remain 'vital', function well, and deliver positive conservation and livelihoods results while others, at times under similar conditions, wither, or even collapse? The answer we can offer is not simple. Factors intrinsic to the governance institutions and factors that pertain to their broad contexts act in combination.

Factors intrinsic to the governance institution

A governance institution functions by *taking and implementing decisions and rules*— about the relevant territory, conserved area or protected area— and *getting those adhered to and respected in society*. Besides 'appropriate type' of governing bodies and quality criteria in taking and implementing decisions, we have found that good and lasting performance is often associated with five characteristics, or features, of the institution itself. These are schematically recalled in Figure 2 and described as mostly *intrinsic* to the institution, that is, deriving from it and possibly, at least in part, under its control.

The characteristics include the capacity to generate and maintain **'inspiring collective values'** among the people expected to adhere to the decisions and to respect the rules provided by the governing institution, a feature often related to the energy and motivation of the institution itself. As discussed, such values may engage biological purposes (e.g. drawing from the territory the nourishment and security that allow a group to stay alive and shape its own political and cultural expressions…) but also symbolic meanings (e.g. condensing repeated experiences and reflections as part of 'knowledge', mētis and worldviews…). When the inspiring collective values are strongly felt, the biological purposes and symbolic meanings at play are also capable of generating individual and collective emotions. In a sort of virtuous cycle, such emotions may help the institution to amplify its own **energy and motivation** to function and to **inspire itself and others,** arousing **adherence and respect** in the larger community or society.

The purposes, meanings and emotions that an institution may engage while governing a conserved or protected area or territory can be schematically described as a **field of tension** (see Figure 3) where diverse forces and factors are *dynamically at play*. At times the biological purposes may be predominant (e.g. drawing from the territory the food, water, shelter necessary for survival… including in elaborated and culturally refined versions that depend on acquiring jobs, income and social status).
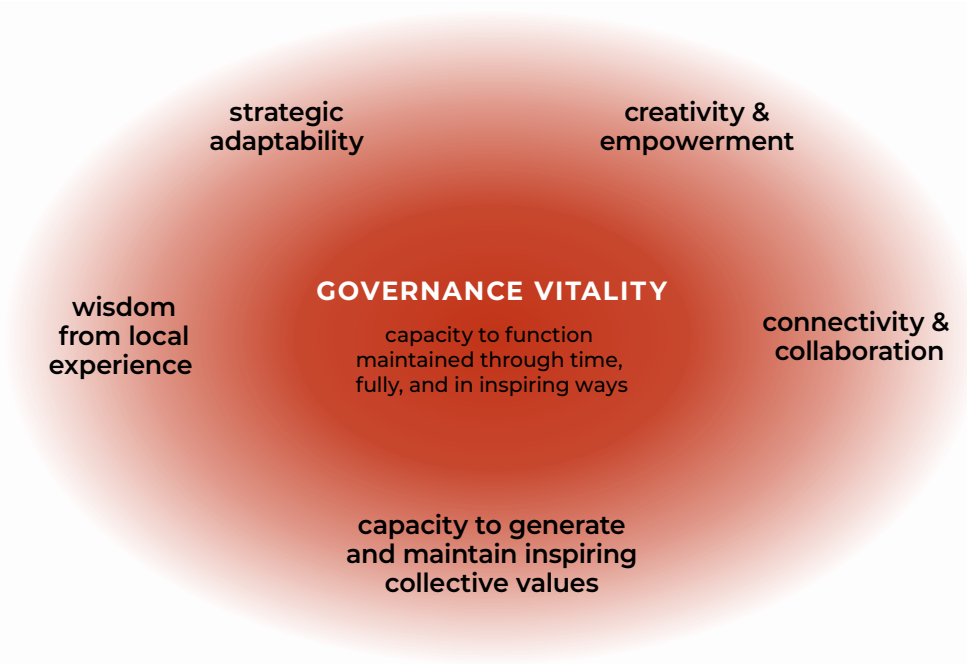
Figure 2. Characteristics likely to contribute to governance vitality that are mostly *intrinsic* to a governance institution

At other times, the governance institution may bring to the fore powerful symbolic meanings that encourage communities to respect decisions and rules because they fit the dominant values and worldviews (e.g. independence, sacrifice, solidarity, gratitude, justice, self-determination, imperial destiny, moral behaviour, national 'development', conservation of biodiversity, landscape care, respect for the ancestors or for the will of the gods, and so much else…). As decisions and rules are enforced, important considerations of legality and legitimacy are also brought to bear. And, at all times, individual and collective emotions may be aroused and further bend, modify, and add or subtract to, the field of tension.

Remarkably, some forces that are apparently in opposition in generating the purpose, meaning and emotions involved in governing a conserved or protected area may strengthen one another. The self-interest of a group may stimulate internal solidarity *against* other groups. Local mētis and insights from diverse sciences may merge to reveal new solutions to problems. Legitimacy and legality may find points of diplomatic agreement and energising consensus. Ancient sacred natural sites whose rules were dictated by religious piety may receive support from scientific considerations to promote caring for territories of life, as for the Greveniti Forest of Greece (case example 28). In all, there seem to be no general rules about the specific forces that 'should' be at play to foster vitality, but it seems important that an institution keeps generating and maintaining a combination of purpose, meaning and emotions that nourish its own motivation to function and the motivation of society to respect its rules. Earlier in this work we described this very feature as the **"capacity to generate and maintain inspiring collective values"** and the strength of such values and the social adherence to them appear fundamental among the intrinsic characteristics of an institution's vitality.

In light of this, we recognise that the governance institutions described in the case examples of this work find the 'vital breath' and energy that match the size and scale of their operations mostly from within themselves— in their own desire to function and the meaning they ascribe to their own functioning. When the governance institutions engage an **affective connection to place** and a sense of **shared social identity**, we also find **remarkable commitment**

and care for the relevant territory, nourishing vitality. This is particularly evident when the sense of shared identity is intergenerational— perceiving a shared common past and desiring a shared common future. These emotions provide inspiration and energy for both the institution and society at large. As briefly discussed, however, these are powerful feelings, bringing both opportunities and dangers. When they remain *life-supportive* they can maintain bonds of empathy among most, if not all, people and promote norms of rigorous environmental care, reciprocity, solidarity and collective responsibility. When they succumb to nativism and intolerance, they can normalise the distance between 'us' and 'others', de-value the latter and degenerate into apartheid, gender violence, eco-fascism, ethnic cleansing, and the many brutal practices that have nourished the *apparent* vitality of violently imposed rules.

May we thus say that the vitality of a governance institution depends fully upon its intrinsic characteristics, and on the strength and pervasiveness of the collective values it manages to share with society? We cannot, as much is not under the control of governing institutions.

solidarity, interdependence, life-affirmation, justice, 'morals', fair managing of conflicts...

selfishness, independence, greed, nativism, racism, supremacism, crushing others...

being **grateful**, celebrating nature's cultural & spiritual gifts

exorcising **fear** & darkness via control and sacrifice

society developing **legitimacy**

purpose meaning emotions

authority enforcing **legality**

applying **mētis** (vernacular knowledge & skills) for local benefits and values

applying the **sciences**-for general benefits & values (e.g. 'conservation of biodiversity')

survival & reproduction (food, sustenance, security, reproduction...)

Figure 3. A 'field of tension' among a few of the many cultural and political factors that can contribute to the purposes, meanings and emotions engaged in governing a conserved or protected area or territory

Supporting or non-overpowering context

Many customary ('traditional') institutions governing the territories of life of Indigenous peoples and local communities have stood the test of time and evolved as legitimate organisations, accumulating experience, and adapting their decision-making processes and rules in tune with local values and worldviews. Many have been capable and wise, they have been *caring* about their territories, made conscious efforts to enrich them for future generations and engaged the adherence and support of their societies. Yet, these admirable institutions present us with a problem. If wisdom from local experience and inspiring collective values are so much part of vitality, **why have so many**

customary governance institutions been withering or have even been crushed through modernisation[754] and up to the present day? How is it that many of their long-standing territories have been— and continue to be— invaded, transformed and destroyed? The simple answer is that the intrinsic characteristics of territorial governance institutions are not the only factor at play, and any institution can be overpowered by a variety of external forces and circumstances.[755]

Indeed, an institution with the attributes of governance vitality can incite not only appreciation, but also envy, hostility and rapacity. Thriving territories encourage competitors, predators and colonisers from outside. Humans can show limitless greed, even in the absence of material needs. And even meaningful and vibrant governing institutions can be violently **overpowered, undermined, replaced, displaced, economically and politically crushed, or acculturated by force**.[756] History is replete with cycles of accumulation of production, economic alliances, and periods of local flourishing interrupted by wars of conquest, invasions, disasters, large displacements of peoples and crises of all sorts.[757] Some unfriendly encounters with 'others' bring about changes that can be absorbed and accommodated, as did the *Regole* of Italy (case example 7) or ultimately reacted to, as did the Cherán community of Mexico, the *Maha Gram Sabha* of India or the Wampís Nation of Peru (case examples 10, 15 and 30). Other communities tried but did not manage to liberate themselves.[758] At times, the imposed changes affect the relevant institutions so deeply (e.g. remove people from the territories, eliminate all bearers of local knowledge and mētis, make the territory economically or ecologically unviable for livelihoods, crush the inspiring collective values that sustained the respect of rules)[759] that the institutions cease to function for good.

Thus, even the most *vital* governing institution for a conserved or protected area can be damaged or destroyed by contingent, overpowering forces from outside. In such cases, as illustrated by the Kavet communities of Cambodia and Penan of Malaysia or the Inter-Tribal Coalition seeking to govern Bears Ears in the USA (case examples 4, 19 and 24), we cannot fully attribute the changing fortune of an institution to its abundant or limited *intrinsic* vitality. All governance institutions for conserved and protected areas that remain active, successful and inspiring through time should recognise that no overpowering external forces have crushed them. Their vitality may be in very large part their own merit. They might have been aware of upcoming phenomena, worked to prevent problems, prepared alliances and, when troubles came, they might have resisted with ingenuity and might. But they must recognise that they also had the fortune of **missing destructive encounters that could have overwhelmed them**. Without mentioning major climatic variations, impacts with asteroids, earthquakes and tsunamis, they may have been spared powerful new diseases or invasions by better armed and unforgiving enemies…not rare encounters in history across entire continents.

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754   See Part IV.

755   Of course, we do not know what will emerge from these possibly 'dormant' biocultural seeds in the longer period.

756   Historians and anthropologists report encounters between diverse cultures and peoples that range from indifference to violent subjection and even genocide, from oppressive social norms to persuasion, from enslavement to assimilation. Today's cultural clashes often take place within the same country, and numerous reports (e.g. by the Oakland Institute, Global Witness and the ICCA Consortium) provide reference to cases of customary leaders who have been killed or maimed while attempting to defend their territories from invasions and destructive change. While their customary organisations are not necessarily destroyed in the process, most are severely damaged, intimidated and discouraged. Colonial practices on a much larger scale are having even more ominous consequences at the time of writing.

757   A rich perspective is offered by Arrighi (1994), who discusses how, in recent centuries, this is inherently related to the development of national States and capitalism.

758   For instance, several community management committees for natural forests in Song-Pan County (Sichuan Province, China) agreed to use timber resources sparingly and sustainably and were supported in that by their township authorities… but they failed to escape the insatiable demands for timber by forestry authorities at county level (Grazia Borrini-Feyerabend, personal observations 2006–2007).

759   Typical instances include: enclosures of rural commons (with consequent displacement of peasants to urban areas), colonial wars (with consequent slave trade and expanding extractive economies), mass migrations of colonial farmers (with consequent land occupation by people with little knowledge of the environment where they have settled), imposition of State control over forests and other 'natural resources', and neo-colonial imposition of mining, oil and gas concessions.

Further, as stressed by the scholars who discuss polycentric governance,[760] nested institutions,[761] traditional ecological knowledge[762] and multi-level institutional dynamics,[763]at least as important as being left in peace and missing over-whelming encounters is the fact of **being appropriately backed and supported**. Institutions never exist in a vacuum. The concept of *governance regime* is at times used to describe the networks of institutions that usually act in close interplay deciding about diverse aspects (e.g. rights, production, trade, safety…) related to a given sector (e.g. nature conservation or agriculture). In other words, institutions always interface with other institutions, which all possess aims, interests, concerns, capacities, practices and values of their own. Most such interfaces involve overlaps in powers and concerns. Institutions also need insights and capacities that exist at diverse governance levels. For instance, the local cheesemaker communities of the Gruyère Valley of Switzerland came to need the support of the federal government to resist the forces of globalisation squeezing their economic survival (case example 8). Similarly, the communities of Al Shouf Cedar Reserve needed support from the Lebanese government to rejuvenate their custodianship in times of economic and political crises (case example 20). A **supportive interplay among institutions** may even be the ultimate meaning of balancing a variety of concerns, interests and capacities at diverse levels— from local groups and communities to broader populations at regional, national and international level (e.g. in the United Nations).

Remarkably, the governance institutions for conserved or protected areas rarely have full jurisdiction over units of land, water and other gifts of nature that are socially and ecologically *coherent* (i.e. could be properly and fully described as 'territories'). More often, they possess limited decision-making power over only part of such units, their natural features and the phenomena that affect them. For instance, the communities in charge of Community Conservancies in Namibia can decide over issues of wildlife but have no unencumbered power over water or forests, for which they need to negotiate relevant decisions with various government sectors.[764] Similarly, the shared governance institution in charge of Guadeloupe National Park, in Overseas France, needs support from local tourism operators to stop disturbance from motorboat competitions if they wish to maintain a habitat favourable for the manatees. In sum, all governance institutions for conserved and protected areas depend on the existence of other supportive, and hopefully vital, institutions that interface with them and allow them to deal with a variety of forces that originate and act at diverse levels.[765] Some even say that governance institutions fully function only *with* others, as it is only with others that they 'mobilise', 'translate', 'negotiate', 'synthesise' and properly 'apply' together their capacities.[766]

We find here another strong similarity between the vitality of a governance institution and the vitality of living beings. Major life-affecting disasters are not new to our planet and something as unpredictable as a collision with an asteroid has wiped out some species[767] while opening possibilities and habitats for others. As has been well argued, biological evolution has always combined with chance towards the result that one rather than another species has managed to reproduce and survive.[768] If this is true for species, it is even more so for individuals, communities and their institutions, which can all be significantly influenced by unpredictable and catastrophic events. Pericles dying of the plague contributed to the folding of ancient Athenian democracy. The Minoan civilisation was greatly affected by a major volcanic eruption,[769] as were other empires by severe and protracted droughts.[770]

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760   E.g. the appreciation of a multilevel polycentric partnership approach to governance is fundamental for Berkes (2010).
761   Ostrom, 1990.
762   Tengo *et al.*, 2017.
763   See, for instance: Armitage (2008), Marshall (2008), Andersson & Ostrom (2008).
764   Long, 2004.
765   We are reminded here of the characteristic of 'connectivity and collaboration' among nested institutions and of the value of systemic networks for institutional vitality.
766   Tengo *et al.*, 2017.
767   Non-avian dinosaurs, for instance, were a dominant species for many million years but ultimately became extinct.
768   Gould, 1989.
769   Hellström, 2021.
770   A frequently cited case is that of the Maya civilisation (Haug *et al.*, 2003) but the literature is not uniform on this. Diamond (2011) does blame the drought, even if in combination with factors endogenous to the civilisation itself. Others (e.g. Gause, 2014) are more cautious, do not believe there is evidence that the Maya civilisation 'collapsed' and paint a nuanced picture where localised outcomes seem determined by specific local factors.

We all have painful experiences of individuals who were vibrantly alive, inspiring and positive for themselves and others and who were, nevertheless, taken out of the world by accidents, diseases or other chance events. Similarly depending on chance, much work that has merits, value and beauty is neglected and lost. Many **contingent factors** play a role in keeping an individual active and respected, a community alive, or an institution functioning well through time. Behind that functioning is always **a measure of good fortune**— the luck of not having encountered overpowering greed, stupidity or other disrupting forces and having been backed by other capable and vital institutions. This understanding may be at odds with our teleological orientations and sense of pride… but is supported by much that happens in history. Ultimately, all well-functioning governance institutions need to acknowledge the network of other institutions that have supported, rather than diminished or dragged down, their efforts and 'destiny'. They must all thank a lucky star.[771]

A combined answer

Encounters with accidents, disasters, violence, greed and disease are bound to happen in the functioning of governance institutions as during the life of humans. The institutions that are strategically adaptable, empowered, creative and positively connected with other institutions have a better chance of keeping themselves vital. This is even more so when they are also wise and oriented towards the future, and generate inspiring collective values, nourish a sense of collective intergenerational identity and affective 'attachment to place' and remain *life-supportive* in attitude and action. The experiences and case examples recounted throughout this work bring to light how combinations of characteristics that appear 'intrinsic' to a governance institution nourish purpose, meaning and emotions, how they provide the motivation and energy necessary to function, respond to change and keep inspiring society through time. All this, however, cannot be achieved without a supportive and non-overpowering context.

Governance vitality seems thus to depend on a combination of at least two factors:

- **Intrinsic attributes of the governance institution,** which nourish its energy and capacity to function, provide effective responses to ever-changing threats and opportunities and elicit the adherence and respect of society to the values it espouses.

- **Contextual conditions,** including the good fortune of having avoided overpowering encounters and having been backed and supported by other institutions, vital on their own account, that contributed to a favourable overall environment.

In Part V, we will explore whether some of the intrinsic attributes that accompany and sustain vitality can be understood, strengthened and enhanced *from within* the institution itself. We will also review some desirable elements for policies designed to engage communities in vitally governing conserved and protected areas. Before that, however, in Part IV we will introduce the phenomenon of 'custodianship' of 'territories of life' and touch upon its good or bad fortune of having faced many, and most powerful, political, socio-cultural and economic change processes in the last few centuries. Part IV will also recount the recent 'discovery' of community conservation as a policy approach, up to the current dramatic crescendo of recognition, for which outcomes are unfolding.

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771   Even Aristotle recognises that virtues are not sufficient to achieve eudaimonia (a thriving, happy, well lived life): a measure of luck is necessary to achieve material sufficiency, health, adequately good looks and the like (Sachs, 2021).

Vitality interlude

Humpback whales are enormous creatures known for their haunting and melodic songs and for breaching the water with amazing acrobatic abilities. No one knows why whales exhibit this spectacularly vital behaviour. Some believe the enormous underwater sound that accompanies breaching is meant to communicate their presence. Others suppose that this is spontaneous behaviour…just for pleasure.

Part IV: Territories of life as 'conserved areas'

...for readers concerned about old and new threats facing territories of life—
from the hubris of modernity to a crescendo of 'community conservation' discourse short of self-determination...

Must I make my home in wind?
Build my walls upon the water?

The Kalevala[772]

Custodianship of territories of life

As we explored the vitality of institutions governing conserved and protected areas, we found a variety of motivations and sources for their 'energy to function'. Some are concrete and directly connected with survival and livelihoods (e.g. procuring food, water, shelter, income…). Others engage symbolic meanings, cultural values and worldviews (e.g. conserving 'biological diversity' or 'nature'; valuing the contributions of the territories to the economy, or to recreation and public health; respecting the ancestors; maintaining a common focus for social identity…). At times, and closely entangled with concrete purposes and symbolic meanings, we also encountered emotions connecting people with nature. Often far from either weepy or euphoric feelings, such **emotions** deal with cherished memories, matter-of-fact intimacy, and repeated care. A quiet sense of communion is conveyed by the phrase of an Indigenous woman: "*Sweetgrass is best planted not by seed, but by putting roots directly in the ground. Thus, the plant is passed from hand to earth to hand, across years and generations.*"[773] Even more intimate, the words of an Inuit shaman express embeddedness in nature: "*The great sea has sent me adrift, it moves me as the weed in a great river, Earth and the great weather move me, have carried me away, they move my inward parts with joy.*"[774] And a similar deep union is found in the calm that brings silence to a poet: "*There is a stillness on the top of the hills. In the tree tops you feel hardly a breath of air. The small birds fall silent in the trees. Simply wait: soon you too will be silent*".[775] Emotions are felt by individuals but can also become collective, as when a group of people develops through time an **affective attachment to a place** and/or to one another in the group. Some form of affective bond among group members and to a specific place is part of the definition of the very concept of '**community**'.[776] It characterises **social identity across generations.**[777]

An affective attachment to place may be poorly separable from feelings of deep **attention** or even apprehension, or **awe**. Herders watch the movements of the herd, the kind and height of grasses, the colours of clouds on the horizon presaging rain. Farmers follow the succession of days and nights, sun and rain, the calls of birds and the wind sweeping the crops over which they laboured and from which they expect nourishment. With sustained attention humans recognise the combinations of plants that reveal underground water, hear the silence that betrays the presence of a powerful predator, feel **empathy** with animals as they experience hunger, thirst, fear or the need to rest from moving during transhumance. With sustained attention they become curious, try to understand which behaviours generate positive responses, which ones are wasteful and destructive, where the boundaries lie… All their senses stay attuned to natural events, hold in mind nature, '**are' in nature**,

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772   The Kalevala is the 'epic poem' of the people of Karelia, concerning contemporary citizens of Russia, Finland and Sweden. The cited English translation is from O'Brien (2021).

773   Wall Kimmerer, 2020, p. 1.

774   Quoted in Bly, 1980.

775   This is a short poem by Johann Wolfgang von Goethe, written in 1780 and entitled Wandrers Nachtlied (Wanderer's Night Song).

776   In his volume Gemeinschaft und Gesellschaft (Community and Society), first published in 1887, Ferdinand Tönnies, one of the fathers of modern sociology, identifies a community (gemeinschaft) as an 'affective' and organic social unit.

777   In Part II of this work, we discuss how 'inspiring collective values' for livelihoods and symbolic meaning provide motivation and energy for a governance institution. In Part III we also recognise that motivations and energy that are strong enough to generate emotions can prompt generous and life-supportive behaviours but also intolerance, fanatic nativism, brutality and violence.

feel with and within nature. In fact, what more than *constant attention through time*[778] could generate a sense of aesthetic attraction, an affective attachment?

Similar feelings are likely to be present also in those relations with nature— or with life in general— which some interpret as **revealing the sacred**, the mystically wonderful, the divine. Some are able to expand such feelings to embrace the entirety of creation. Francis of Assisi felt **awe**, respect and compassion for the entire community of nature— from the wolf to the humblest birds, from the waft of wind to powerful fire. He passed on those feelings to thousands of monastic and non-monastic fellows. Darwin concluded the *Origin of Species* with a homage to the beauty of nature in its entirety: "…*from so simple a beginning endless forms most beautiful and most wonderful have been and are being evolved*", inspiring thousands of biologists, ecologists and naturalists. Often, an affective attachment is generated by a unique relation with a specific place—[779] the place where ancestors have fought for their kin, or are buried; the place where a child planted a shoot that the passing years transformed into a majestic tree; the place where a family has lived and laboured for generations… Any such place arouses **emotions**, that in turn **nourish the will and capacity to care** for the place itself.

The sense of affective attachment to a place is well revealed by the difference between 'property' and 'patrimony'. As aptly described by Henri Ollagnon,[780] **patrimony** is "the sum of material and immaterial elements that concur to maintain the identity and autonomy of those who govern it by adapting, through space and time, to a changing world".[781] This offers an immediate way of highlighting the understanding we seek. Property has economic and monetary value and can be sold. Patrimony— better referred to as **heritage**—[782] cannot be translated into money, **cannot be sold, should not be diminished**… because in that case the subject itself would become diminished and lose identity and meaning. We invest economic resources into 'property' to receive the same kind of resources back in the future, possibly multiplied but generally unrelated to a specific place. We invest our hard work, our material and emotional resources, our sense of responsibility, our knowledge, mētis and time into 'heritage' to receive back an immediate return in the very act of investing and caring, a return that is *uniquely valuable for ourselves* and *uniquely related to place*. We work because we enrich our heritage and, in turn, our **heritage** enriches us by participating in keeping us alive both physically and spiritually. A heritage is often a source of **livelihoods**, but also an occasion to orient our efforts and express our creativity. It may add years to our life. But, most of all, it adds **meaning** to our existence.

Governance vitality brought us to admire the capacities, ingenuity and engagement of human communities caring for their territories and commons *through time*. We imagine our ancestors seeking the means of survival and encountering the joys and miseries of living in the most varied and challenging circumstances. Only the profusion of plant seeds, stars in the sky, or insects in hives may match the abundance and variety of human efforts to survive and find meaning in life, in the past as in the present. Most ancient experiences and worldviews are now forever hidden from us— we may only catch a glimpse of them through the **poetry** and **music** kept alive through oral recitations, ancient documents or artefacts that survived by chance. The Upanishads, Kalevala, T*ao Te Ching or* Odyssey offer us diverse ways of perceiving the world, the 'reality', the 'Being' of which we are part. They tell us how the eternal meets the temporary, how consciousness of self meets nature, how 'words' have the shamanic power of destroying and bringing to life, transforming people into fish, birds, a log

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778   Appreciating this capacity for deep attention has little to do with the naïve appreciation for primitivism rightly deplored by Murray Bookchin (1995) and many others. Deep attention arguably also derives from the need— so important for humans— of being aware of impending dangers from insects, animals, other humans and the elements themselves. Deep attention nourishing a sense of wonder is central also for Carson (1965).

779   On ways of assessing 'sense of place' see Lin and Lockwood (2014).

780   Barthod & Ollagnon, 1991. We use 'patrimony' here as the most direct translation of the French term 'patrimoine', but we will later discuss the term.

781   Ibid.

782   Better insofar as 'heritage' is gender-neutral and less suggestive of material versus non-material wealth. Unfortunately, many Latin languages use words akin to patrimony (patrimoine, patrimonio, património) to mean 'heritage'. We will use 'heritage' when we are not specifically referring to the work of Ollagnon.

transported by a river, infusing a "pantheistic tremor"[783] into all that exists. Letting go of any attempt at systematic descriptions, one may turn to incantatory poems, music and silence, animistic feelings, worshipping connections with mountains, forests, rivers, marshes, sun and moon, wind and animals, or simply the inner conscience of unity despite the separations among all that exists, the experience of time disappearing... It is in this porous space between the 'real' and the 'mystical' that people connect to nature via **omens and humour**, **play and magic**, **meditation and total dedication to work**.

It is not difficult to recognise when a community has an affective attachment to its territory and is capable and willing to care for it. We discern this from the familiarity of the peoples of the North with ice, marshes, dozens of qualities of snow, the silent patience of long nights and the exhilaration of summer. We perceive it as people and camels move as one body under the starry skies of deserts. We understand it when we learn that the Mapuche Pehuenche[784] have named themselves after the species of pine tree whose nuts provide them with staple food in the Andes of the Southern Cone. Or when we are told that the earth that grows olive and lemon trees and vineyards in some steep and rugged Mediterranean coast was carried there, basket by basket, by the very people who built the endless stone terraces that keep that earth in place. Beyond the ability to govern and manage a territory, an affective attachment is revealed by a **respectful and enduring relation of care** and the hard work, attention, closeness, sacrifice, apprehension, gratitude, even love,[785] that often goes with that. An affective bond can energise a community to give the best it can give[786] and culminate in a sense of identity across generations, a sense of communion with others not only **in the present** but also in the **past and future**. In this way, the intimate and affective bond to a place may merge with **a link to the vitality of nature, of which a community is part across generations**. Communities who experience such feelings may feel a sort of **umbilical connection** with a place, with nature and with other people, something akin to the **life instinct** itself.

We can hardly conceive how our ancestors have survived and embarked on perilous journeys to populate the planet, but from our own connection with a territory, we may feel the **echoes** of their gratification and fear, their quietude and excitement, their spiritual awareness and mutual solidarity.[787] Consciously or unconsciously, the relationship with a territory bonds us with our ancestors and the future generations. In fact, people of many and diverse traditions have transferred to their descendants a sense of deep connection with their territories. The connection may be expressed in rituals and ceremonies, in names, bodies of specific knowledge and mētis, or in symbolic meanings as part of aesthetic and spiritual traditions. It may be passed on by elders and respected 'guides'. It may be expressed in monuments and accumulated work. Or it may be mediated and revealed by ancient or modern technologies. Emmanuel Kant spoke of "the starry sky above us and the moral conscience within us"[788] as phenomena that have a deep and intuitive connection. Similarly, our ancestors may have found that the mood of animals, the smell of earth and the colour of crops told the group how to behave and what was 'right' to do, nourishing through time a sort of **collective moral conscience**. As part of evolving worldviews, our ancestors' connection with nature may have given origin to some 'inspiring collective values' that managed to nourish their decisions and action. Rooted upon the local satisfaction of needs and survival, such values may have fully developed into **a local sense of what is good, precious and 'just'**.

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783   O'Brien, 2021.
784   Pehuenche means 'people of the pehuen' and pehuen is the name of the pine tree.
785   In an online webinar, the Indigenous leader Nataly Domicó speaks in terms of "being in love with a territory"; see https://www.facebook.com/UYichLuum/videos/598764008054328, accessed 2024.
786   As discussed in Part III, the bond between a community and a territory may also bring a community to become the worse it can be, e.g. by exhibiting intolerance, racism, brutality, fanatic nativism, and violence towards 'others', well beyond the rational discussion of the costs and benefits of accepting migrants, and in what numbers.
787   Many religious traditions refer to this as 'transcendence' while Hulin (2008) has chosen the term 'oceanic feeling' to express a mysticism that predates religious language.
788   From *Critique of Practical Reason* (1788), also part of the inscription chosen by friends for Kant's tombstone.

We use the term **'custodianship'** to express the ongoing **affective care**[789] and the **meaningful relations**[790] that bond a specific community to its **territorial heritage**— an entity that concurs to maintain the **identity, autonomy and social morality** of the custodians themselves. This is by no means a simple or uniform concept, as custodians engage with nature and interpret their role in ways that are always part of their worldviews and cultures.[791] Some care by being as conscientious as possible as managers, applying in a given locality the recommendations that scientists developed elsewhere. Others 'feel with the land', learn by experience, by observing the behaviour of nature through the seasons and the years. Some see moderation and fair distribution as the heart of caring and social morality. Others believe that it is the territory that cares for them and teaches them... they believe that it is *the territory* that *manages people*, rather than the opposite.

The bond of custodianship may be felt by individuals, but it is most powerful when it engages people in a collective way— as in a family, a community or a 'nation'. Seamon (2018) uses the concept of **'common presence'** to describe the synergistic interaction of people sharing a worldview, a territory and some 'togetherness' in intentions, culture and spirituality. Others use the idea of *genius loci*,[792] the sense that places have protective spirits, as represented by the figurines of the guardian deities that cared for specific environments in ancient Rome. The spirit of a place might be related to a sacred character, but it might also be secular, describing only the distinctive aspects of the place cherished by people as associated with its unique qualities and capacity to inspire. A **co-dependency relation** between a natural environment and a human cultural environment describes well the *genius loci*, as the relations it embeds among people and between people and the ecosystem provide the place with 'atmosphere', 'authenticity' and a 'soul'.[793] This kind of strong and shared relation with a territory seems almost inevitably tied with a collective sense of identity, autonomy and social morality, as well shown by the Sarayaku people of Ecuador in case example 23 (see part a. and part b.).

As we noted, we apply the term 'custodianship' to describe a rich and affective bond with a territory. In the same vein, we apply the term **'territory of life'** to describe a territory that **generates and enables a** *heritage relation* **with a** *custodian community* **and supports it through time**— in the past, present and hopefully in the future. Personal testimonies like those collected from the Manobo of Soté in the Philippines or the Sarayaku of Ecuador (case examples 9 and 23, part a. and part b.) consistently reveal the affective attachment of communities to their territories of life, conveying the depth and strength of such relations and the joy that comes with it. When they expand into stories, they offer an even better sense of the multidimensional nature of such relations and of the *diversity* among them. In no way does our use of the concept of 'territory of life' intend to freeze or diminish such diversity. On the contrary, it upholds all expressions of pluralism,[794] and the capacity to be different, change, err and learn, and evolve— the essence of vitality.

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789   Harrison (2008) would say that "caring for a collective garden" is a basic human instinct and vocation, binding humans with their land and with life itself, an activity much more powerful than any other. Others may dispute that nature needs our 'care'. Possibly it is the 'relation' between people and nature that expresses itself at best through the act of 'caring'.

790   See also Milton, 2010.

791   Numerous examples are available in: ICCA Consortium, 2021; www.iccaconsortium.org; www.iccaregistry.org accessed 2024.

792   See Vecco 2020.

793   Ibid.

794   Pascual *et al.*, 2021.

Case example 23, part b.

"We, the Kichwa Indigenous People of Sarayaku (Ecuador), can live only together with our forest…" [795]

*"We can live only together with our forest, which has kept us alive until now… Our ancestors did not have money, but lived well, they were free and lived as they wanted, without others imposing their will upon them. They were following the rules revealed to them by **Kawsak Sacha**, the Living Forest.*

We live together with all the beings that are a part of the Living Forest. [...] We live together with the Sacha runakuna, the visible and invisible inhabitants of the rainforest [...] we are Sarayaku runakuna, descendants of the jaguar... [...] Along these rivers the Tayakkuna, bearers of a millennia-old wisdom, navigated, naming all the places they found along the way.

Our territory has been and is being defended by our Ayllukuna, past and present. We are heirs to a history of resistance and struggle against colonizing systems, invasions, and external aggressions that threaten our freedom [...] Our mission is to take care of and to use, in a respectful

manner, that which allows the sustainability of life in our territory, [...] the continuity of Kawsak Sacha.

We have grounded our efforts, as an Indigenous people struggling to defend our rights, in the search to manage our territory autonomously, and in the conservation of the Amazonian ecological systems that contribute to the maintenance of the water and climate cycles that matter greatly for the planet. Our Life Plan has been established to keep terrestrial and aquatic ecosystems free of contamination, a fertile land of abundant animals, diverse and healthy forests, and clean waters that can ensure food sovereignty and the reproduction of life.

*The Sarayaku territory is [...] a place from which **we elevate our emotions by entering in connection with the world of the Custodians of the Living Forest**. The rainforest is alive. It is Kawsak Sacha, a living forest. It is inhabited by the Custodians that diligently ensure equilibrium in the frailty of ecosystems and relations with human beings. The waterfalls, the lagoons, the rivers, the swamps, the Buriti palms, the salt licks, the great trees and mountains have their own Custodians: they are Runayuk. The perpetuity of Kawsak Sacha depends on the continual relationship with the Custodians of the Forest. [...]*

*The great mountains of the Sarayaku territory are beings in themselves [...] they communicate with each other through spiritual connections similar to vines and paths. In the Sarayaku territory there are rivers and lagoons and waterfalls [...] ancient trees that [...] manifest themselves to us, in visions and dreams. The Earth is our mother, the origin of life and of existence. Life itself permeates the lagoons and the rivers, the trees and the plants, the mountains and the caves, the soil and the air, the animals and the fish, men and women. **Kawsak Sacha gives us the energy and breath of life**…".*
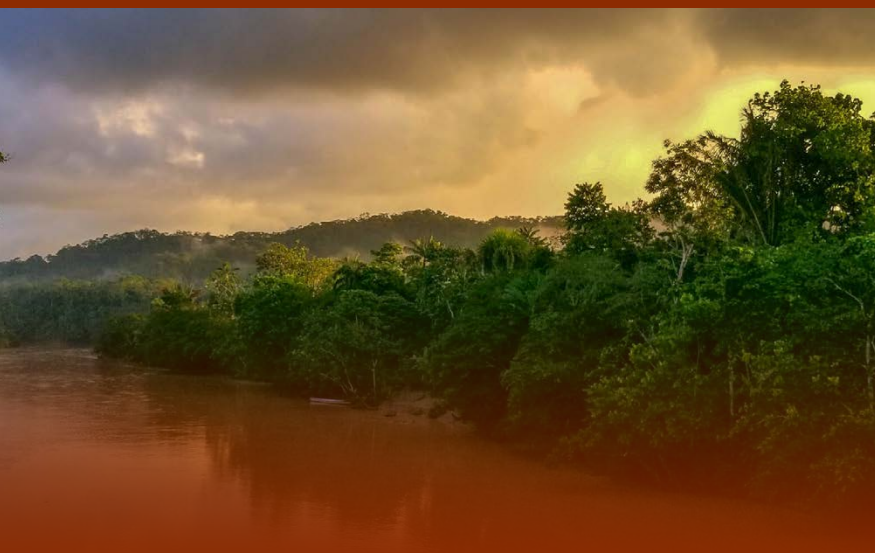
795   Extracts from the 2012–2018 Kawsak Sacha Declaration of the Indigenous Kichwa of Sarayaku (online English translation https://kawsaksacha.org/ accessed 2024) and from statements by Narcisa Gualingua, elder and wise person of Sarayaku (https://youtu.be/z57_kIq10Y0 accessed 2024). The picture of the Living Forest of Sarayaku is courtesy of Samali Gualinga, of the Sarayaku Communication Team.

Many of the case examples of conserved and protected areas included in this work describe relations between communities and territories that clearly evocate custodians and 'territories of life'. But often we did not use these terms in order not to attribute to others any strong feelings and relations, nor define the geographical extension and/or boundaries of their 'territories'.[796] In other words, we refrained from using the term 'territory of life' for specific territories when it had not been agreed by the relevant custodians, as only they should decide what concepts, narratives and interpretations are applicable to their situations. Yet, we are convinced that innumerable 'territories of life' have existed and exist today on our planet, and we allow ourselves to apply concepts in a general sense, because **"concepts are 'world-making tools'"**[797] and narratives do shape the world, in the case of both using and *not* using specific terms.

Is it plausible that affective bonds with a territory develop under *all* types of governance for conserved and protected areas? We strongly believe so. We find expressions of devoted territorial care among generous professionals governing and managing national parks, among landowners looking after their family properties,[798] and within communities for whom territories are essential for livelihoods, identity and *buen vivir*. Particularly strong affective bonds are found among the Indigenous peoples who maintain strong collective self-awareness and a good measure of livelihood autonomy and self-determination within their territories, like the Karen of Burma/Myanmar, the Manobo of Soté in the Philippines, the Cherán community of Mexico, the Sarayaku of Ecuador, the Maya K'iché of Guatemala or the Wampís of Peru described in case examples 3, 9, 10, 23 (part a. and part b.), 26 and 30. Because of this, while the term **'custodian'** is appropriately used for individuals also, we generally use it in this work for *peoples* and *communities* possessing a strong bond with their territories— a bond that merges with the connection with their ancestors, and the generations of the future. The governance institutions that evolve in such communities offer good insights about vitality, as illustrated by the case of Greveniti Forest in Greece (case example 28).

While bonds of custodianship in territories of life may have been common in our past, historical processes— and modernisation in particular— have been accompanied by profound and often abrupt changes in the relations between the human communities and their environments. In the next sections we will briefly explore such changes, touching upon the industrialisation of production, the monetisation of the economy, the growing political influence of national and global markets, and the hegemonic ideas of 'development' and 'economic growth' offered as global solutions to many problems defined as just one: widespread 'poverty'. These processes and ideas have made it increasingly possible for people to be cut off from a direct relation with nature and its gifts, and for distant actors to decide in place of local institutions. Many governance institutions of **custodian communities** have thus been **disempowered** of the decisions affecting their territories of life and generally experienced an erosion of local biological and cultural diversity. With the weakening or loss of habitats, species, genetic diversity and cultivars, there has also been a weakening or loss of vernacular languages, knowledge, mētis, ceremonies, practices, values and worldviews.

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796   As an example, it would be inappropriate to identify as the 'territory of life' of a given Aboriginal people the territory of the Indigenous Protected Area (IPA) they may be managing under an agreement with the Australian government. An IPA results from a government policy and its extension and borders are more frequently a compromise than what the custodians intended it to be.

797   de la Cadena and Blaser (2018) use this expression to describe 'political ontology'. We use it here also in the spirit of Anderson (2018) describing attempts at 'decolonising historical practice' and of the quote by the Zapatista Front of National Liberation that appears on page 326.

798   In North America, 'land stewardship'— a practice that may have elements in common with custodianship— is widespread and facilitated by conservation NGOs. When taking on a stewardship engagement, a landowner signs a long-term contractual agreement with State agencies that lower taxes in exchange for biodiversity-favourable property limitations (e.g. the owner refrains from developing buildings, roads, or engaging in agricultural production damaging to biodiversity). Such agreements are often also called 'conservation easements' (Brown & Mitchell, 1998). Similar arrangements are possible under various State legislations, e.g. not only in the USA and Canada, but also in Brazil, Chile, etc.

Case example 28.

The sacred forest of Greveniti (Greece) preserves its community governance throughout centuries of dramatic socio-economic and political change[799]

The mountainous region of Epirus, in Northwestern Greece, hosts numerous well-preserved examples of 'sacred forests'— an ancient tradition and practice, closely connected with the sense of collective identity of the villagers who care for them. One such village is Greveniti— 193 people in the Epirus municipality of Zagori, today mostly devoted to woodcutting and forestry activities. Greveniti is situated at the periphery of Northern Pindos National Park and of another protected national forest. Its **sacred forest** covers approximately 120 ha of mostly beech trees (*Fagus sylvatica*) on a slope from 1,000 to 1,500 m above sea level. The forest is located right above the Greveniti settlement and **adjacent to the 'community forest'** where villagers extract timber resources. The local management rules for the sacred forest have been in place for centuries and prohibit tree cutting (there are different views about collecting non-timber forest products, including firewood). For all residents, it is clear that the sacred forest preserves the stability of the slope and secures other important **ecological functions** (e.g. water retention, soil formation, habitat for wildlife) but the residents very much value it also as an occasional source of firewood and non-timber products (mushrooms, fodder, etc.). As importantly, the **cultural value** of the forest has been appreciated for centuries by the residents of Greveniti, contributing to their own sense of **collective identity** and connection to the land and to nature in general.

The forest that the residents of Greveniti call 'sacred' has been well-preserved through centuries because of an ancient religious practice that threatened the **excommunication** (i.e. exclusion from the Church and social stigmatisation) of anyone harming it. This practice was born during the Ottoman Occupation (1479–1913) and was the heaviest sentence that could be imposed on Christians at a time when the Church oversaw all the main political, administrative and judicial powers. Excommunication rituals were performed *in situ* and included singing imprecatory psalms of David (e.g. psalm 59), ringing bells and holding black candles. The number of priests that announced the excommunication was of great importance. While the Ottoman rule lasted, which was until the beginning of the 20th century, several mountainous communities of the Epirus region enjoyed a remarkable degree of autonomy, including religious freedom and self-governance. Greveniti was then a flourishing settlement of about 1,500 people devoted to agro-pastoralism. Since the 17th century, men from the village also seasonally migrated to work in cities and distant trade centres, from where they sent home remittances that supported the village and allowed the construction of luxurious homes and community buildings in Balkan architectural styles. In all, during the 18th and 19th centuries, the remote mountain village of Greveniti saw a flourishing of cultural and intellectual life.

In 1913, as the Epirus region became part of the Greek State, the local agropastoral activities continued but the temporary migration of men was slowly replaced by a permanent exodus out of Europe (e.g. to the USA, Canada, Argentina, Egypt, Congo and Ethiopia). Adding to this, severe political instability and the many casualties sustained during World War II (1939–1945) and the subsequent civil war (1946–1949) led to a considerable decrease in the village population. During World War II, Greveniti was attacked more than once and burnt to the ground by the German Army. All private houses and

community buildings were destroyed (the only exception being the village church), and some people had to flee and take refuge within the sacred forest, where they survived in conditions of terrible deprivation. During the civil war, the village was mandatorily evacuated, and the villagers were moved to a local town. When peace returned, only 450 people returned to face their houses destroyed and their fields overgrown. It was at that time that people turned to logging activities in the community forest, organising themselves into two cooperatives. At the turn of the millennium, when most social services shifted from villages to larger towns, the population of Greveniti counted less than 400 souls… but their sacred forest was there, it was still thriving, and the residents remained determined to care for it.

Before the establishment of the Greek Forestry Service, in 1929, the only entity responsible for the sacred forest was the community itself. Today, the actors engaged to different degrees with the community and its sacred forest are the national forestry service and guards, the municipal council, a local cultural association, the village brotherhood, members of the logging cooperative, occasional residents and, most recently, also summer tourists and researchers. Management is officially under the responsibility of the forestry service and of a rather distant municipal council, which incorporates several other villages beyond Greveniti. Remarkably, the national legislation offers some backing to the prohibition of major grazing and wood-cutting in 'sacred forests'.[800] In all cases, the **community rules and management practices** (e.g. informal surveillance, forest path repairs) have **continued to apply**. In fact, the management role of the community remains crucial. For instance, the woodcutters are always the first to spot anyone entering the sacred forest. In Greveniti, everyone knows about the sacred forest and respects its rules— the elders as they still remember the days of excommunication in the narratives of their ancestors, and the youth as they wish the forest to protect the village from floods. Worryingly, however, on a recent occasion a lack of care in cleaning water channels and water tanks contributed to the occurrence of a landslide and to a shortage of water in the summer months.

The community **governance** system of the sacred forest of Greveniti appears to possess a very good level of **vitality**. Despite extreme hardships, it has been able to maintain its simple but effective rules for centuries, while adapting to new circumstances and developing agreements with formal organisations. The forest remains healthy, it continues to regenerate naturally, and it has been only marginally affected by the socio-economic and political changes that have taken place in the last few centuries, despite dramatic phenomena that include successive waves of migration, wars, depopulation, and even formal ownership change for the forest itself. In theory, these events should have doomed the governance system and conservation results. In practice, the obvious protective role of the forest for the village appears to have stimulated a **long-term, dynamic and affective custodian relation of the community with its forest.** This relation has maintained its kernel intact while all the rest evolved— local population declined, the main livelihoods system changed drastically, many new actors were accommodated, religious taboos embraced environmental awareness and were enriched by it, etc. Even local vernacular knowledge and mētis seemed to have happily merged with the 'scientific approaches' of the forestry officers and cooperatives. Hopefully, the recent small landslide and water problems will prove a passing glitch, to which the 'community governance kernel' will be able to find solutions… possibly even by taking advantage of the capacities and resources of the community's new institutional partners.

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800   In theory, all 'sacred forests' could be declared 'National Monuments' under Greek legislation and thereby enjoy some level of protection… but the process to achieve that may be laborious and slow.

*Most 'lessons from history' are fraudulent […] most victories
are ephemeral […] few visions survive a single generation. Few
historical actions lead to the intended consequences. This need
not be paralyzing. Political morality does not demand visions
or certainties, only that we act as best we can. The best political
morality is informed by the heavy knowledge of the past. Its fruits
are humility and compassion.*

<div align="right">Peter L. Berger, 1976</div>

Facing the hubris of modernity

In the Western world, the historical period referred to as 'modernity' is marked by a radical differentiation from past human experience. While it was long brewing, its origins are conventionally placed in the second half of the 18th century, when the Industrial Revolution in Britain (1760–1840), the Declaration of Independence in the USA (1776) and the democratic revolution in France (1789)— building upon the ideas of the Enlightenment—[801] unleashed powerful change in social life and the perception of people about themselves and their world. The end of 'modernity' and beginning of the post-modern or contemporary era are usually set at the end of World War II, specifically, post 1945.[802] There are many views on what phenomena reveal the 'essence of modernity'. One that closely concerns conserved and protected areas sees **modernity** as the phenomenon that **undermined** rural communities and their traditions of **local environmental governance**.[803] This section largely focuses on this idea, but starts by mentioning a few other aspects that set the context.

Among the phenomena that characterise modernity is the emergence of **nation States** in Europe, and their capacity to develop the **market economies** that, in turn, ushered in 'market societies'.[804] In what came to be called the **great transformation**,[805] new State-based institutions established markets for a variety of goods and services, backing and promoting private property rights,[806] respect of contracts, competition and information sharing. The economies of pre-industrial societies— based on reciprocity and redistribution and immersed in personal and community relations— are described by social anthropologists as tending to be 'anarchic' in the sense of "refusing higher levels of government", regardless of their capacity to develop and enforce local rules.[807] In marked contrast, the economies of State-based markets would have never developed without the presence and active intervention of **powerful regulatory States**.[808] State governments took determined

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801   The 'age of Enlightenment' or 'age of Reason' (Smith, 1934) is generally situated across the 17th and 18th centuries and characterised by the ideas of influential thinkers, such as Voltaire, Diderot, D'Alembert, Descartes, Hume, Beccaria, Rousseau and Kant, who built upon the 'scientific revolution' of Copernicus, Galilei, Bacon and Newton.

802   Others would rather take the 1980s or early 1990s, depending on different understandings of what post-modernity entails.

803   Shilliam, 2010.

804   In the words of Polanyi (1944, p. 57), a market society is one where "instead of the economy being embedded in social relations, social relations are embedded in the economy."

805   ibid.

806   John Locke (1632–1704) was among the first influential thinkers to stress private property as based on 'making land productive'. This was not because of fair compensation of one's own labour, as one could pay others to labour on one's behalf. The idea was to make land more valuable in land markets and to produce for the market, which was considered a value in itself. Property was a 'compensation' for the generation of such value. The unique conditions for this view to become practice coalesced in Britain in the late medieval and early-modern period, and were fundamental for the development of capitalism (Wood, 2002). Locke's understanding of the 'generation of value' also provided a justification for the dispossession of land whenever Indigenous peoples used it as foragers or mobile pastoralists, as only agriculture was recognised as 'valuable' and deserving compensation. This vision— rooted in the specific ecological and socio-economic situation of Britain— was nevertheless applied all over the world, and in the USA and British colonies in particular.

807   Shilliam, 2010, p. 5223, quotes several social anthropologists about this. Obviously, this cannot be generalised.

808   Paradoxically, State-based markets promoted the idea that people behave efficiently and rationally only under conditions of 'free trade'. This myth, based on the assumption that economic subjects exist 'cleansed' of any affective or socio-political relations and constraints, remains powerful even today.

action to 'modernise' their societies, in particular by enacting specific legislation and investments, and their necessary corollaries of taxation and utilitarian simplifications.[809] The overall result was the overpowering and "disenchanting" [810] of pre-existing institutions, accompanied by the convergence of a large working class in urban areas, including women and children ready to be employed.

The labour boom in towns provided the basis for a large rise in the wealth and power of the **bourgeoisie**— the original town residents, comprising merchants, craftsmen and artisans who gained a chance to become **entrepreneurs** as owners of means of production. The new standard of truth based on 'science', rational thought and publications[811] also allowed part of the bourgeoisie to become **bureaucrats**, assuming State-sanctioned authority over specific attributions and 'means of coercion' (e.g. education, medicine, agriculture, fishery, forestry, police forces, the prison system, the armed forces, the legal system…). Deeply intertwined with State-based support to markets and the booming urban working class and bourgeoisie, was the invention of new technologies, adopted in an increasing number of mechanised production processes. The development of machines that multiply the work capacity of people (e.g. mechanised weaving) and new processes to deal with chemical substances and metals (e.g. iron and steel) provided a solid ground to industries in Britain. Crucially, however, it was the invention of the **steam engine** powered by charcoal and the later massive use of **fossil fuels** in general that generated the immense power of the Industrial Revolution as it expanded all over the world. The steam engine first, and the internal combustion engine later, allowed energy to be used in concentrations and amounts never before imagined.

While processes of urbanisation and industrialisation were shifting the focus of attention away from the countryside, rational thinking, technology and economic wealth were attracting attention to progress in the standards of living. Thinkers like Copernicus, Galileo, Kepler, Bacon, Leibniz and Newton had highlighted the natural laws revealed by the **sciences,** supposed to be objective and based on rational thought. In line with this, social thinkers proposed that people establish rational 'social contracts' among themselves. Some, like Locke, argued that social contracts should chiefly preserve the *innate rights* to life, liberty and property. Others, like Rousseau, thought that social contracts should express and enact the general will of the people. Remarkably, the 1776 Declaration of Independence of the United States refers to the "rights to life, liberty and the pursuit of happiness" for all men. Some interpret 'happiness' in line with the liberal ideas of John Locke, and thus as the right to enjoy private property and limit the powers of the State. Descartes and his followers, however, imagined that people could become able to "*conserve their own health…*[and thus their own] *wisdom and capacities*" as "*masters and owners of nature*"—a goal best appreciated when considered against the background of the appalling conditions of many in the 18th century (famines, ill health and misery, material scarcity, arduous toil, etc.).[812] In both interpretations, rational thinking is seen as essential for a free and healthy society… but one sides with the development of liberalism and capitalism, while the other favours social organisations and social values.[813]

809   Scott, 1998.

810   Max Weber, who was in many ways appreciative of the role of bureaucracy, used the powerful expressions "iron cage" for bureaucratic control and "disenchantment" for societies based on "science". Concerning the evolution of bureaucracies in charge of "natural resources" in the 20th century, see also Bromley and Cernea (1989) and the personal recollection by Madhav Gadgil (2021) in India, mentioned later in this same section.

811   From the original encyclopaedia of Diderot and D'Alembert to innumerable books, pamphlets and newspapers— a phenomenon that has also been read as the rising of the 'rule by the writers'. See Smith (1934).

812   Descartes, 1824.

813   The American and French revolutions of the 18th century had crucial political dimensions but remained far from meeting the material needs of most people (what are 'liberty' and 'equality' without the means of exercising them?). Material egalitarianism became an explicit political goal only for the socialist revolutionaries of the early 19th century.

Many thinkers associated with the Enlightenment questioned some of the values associated with religion (e.g. spiritual contemplation, asceticism)[814] and embraced secular values, including those we would describe today as **'humanitarian values'**.[815] In 1764, Cesare Beccaria published an influential treaty proposing a rational reform of the criminal law system. The treaty advocated against torture to obtain confessions and against discretionary practices in the delivery of justice, including inconsistency and inequality of sentencing, and against capital punishment in general. A few years later, Condorcet— who denounced slavery, sought free public instruction and equal rights for women and men of all races— affirmed that the sciences would bring endless progress to humanity, with no other limits than "the duration of the globe upon which nature has cast us."[816] During the 18th and 19th centuries several major efforts unfolded based on similar aspirations, from the Quakers who did all they could to eliminate slavery to the Luddites who actively sought to improve the living and working conditions of labourers from the oppression of capitalism. With similar humanitarian aims, the Red Cross Society was founded in 1863 to limit the horrors of war and prevent unnecessary suffering of soldiers by organising support to the wounded. Indeed, modernity brought to light some profound aspirations for humanitarian values. Closer to the time of writing, Murray Bookchin has offered a powerful defence of *humanistic rationality*, a hopeful vision of a society that is "...not only rational but wise, and not only ethical but passionately visionary".[817]

Modernity also brought much attention to individual identity[818] and individual action in society, prioritising personal freedom, private property and the pursuit of individual choice and happiness over and above the roles and values associated with families, clans, communities, fraternity and solidarity. Combined with the strong State support to market practices, the focus on individuals promoted the unconstrained freedoms congenial with **liberal capitalism**. The idea of fraternity (i.e. that all men are born free, equal, and with some form of moral obligation to one another) was highlighted in declarations[819] and should be incompatible with sexism, racism and the exploitation of some for the benefits of others. In practice, however, the liberatory ideas of modernity remained only minimally successful at unshackling societies from sexism, racism and exploitation.[820] They were comparatively more successful in promoting some form of **representative**

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814   See Hagman (2013). In Europe, however, a shift towards the values of thrift, hard work and material wealth can also be associated with the protestant religious reform (Weber, 1905). However, Smith (1934, p. 33) stresses that "science merely replaced revelation as a standard to which to appeal […] and, almost unperceived, took the place of philosophy...".

815   At the broadest level, humanitarian values ground all action on saving lives and alleviating suffering. More specifically, they also include values such as mutual understanding, cooperation, friendship and peace, refraining from discriminating against anyone and responding to the 'humanitarian imperative' i.e. the right to receive and give humanitarian assistance wherever needed. The rise of monastic orders like the Franciscans and Poor Clares, who actively and individually engage in acts of charity and do not retire to ascetic lifestyles in praise of God, can also be seen as an early example of modernity— highlighting both humanitarian values and individual action versus action by the monastic community only, as was the case for the Benedictine orders.

816   Condorcet's full name was Marie Jean Antoine Nicolas de Caritat, Marquis of Condorcet. His Sketch for a Historical Picture of the Progress of the Human Mind was first published posthumously, in French, in 1795.

817   Bookchin (1995). In the same work he stressed that "However important sentiment, intuition, feeling, and spirituality are as part of our being, reason must always stand like a sentinel, a continual challenge and corrective, lest our animality conspire with our intelligence or cunning to yield unforeseeable terrors and unexpected horrors in our still-unfinished development as human beings". Bookchin cherished reason, reflection and discourse as unique characteristics of our species. He saw the contemporary human condition as profoundly irrational, dangerously deploying its 'rational means'— technology, communication, knowledge... even intellectual powers— against the attainment of a better word. For instance, he saw the socio-biology theories described by authors like E. O. Wilson and Richard Dawkins as perniciously irrational, as they describe human nature as purposeless and controlled by 'selfish genes'. Bookchin saw this as a "crude interpretation", based only on personal inclination and opinion. Yet— he stressed— crude interpretations can foster pernicious reactionary policies, such as the denial of social responsibility in creating human misery and environmental degradation.

818   As described by Boyd (2001) "...the Enlightenment built the foundation for individual identity. By valuing moral autonomy, or individual self-determination, Enlightenment philosophers promised freedom […] a utopian society without hierarchies and inequality. Ironically, as Sartre noted, this freedom begets personal burden as 'man is condemned to be free'". The division of labour in modern society described by Adam Smith as enhancing social productivity also allows some people to choose a labour role that expresses self-identity (personal freedom as social choice). Similarly, choice about consumption of non-necessary, fashion goods is constrained and guided in many ways but seems to offer avenues for 'self-expression'. Berlain (2021) would disagree. For him, not individual autonomy, but collective autonomy at a level that preserves human relations and interdependency is the only condition that allows freedom from mass domination.

819   These include the Declaration of Independence of the United States of America of 1776 and the Declaration of the Rights of Man and of the Citizen (Declaration des Droits de l'Homme et du Citoyen) that emerged from the French Revolution in 1789.

820   Slavery eradication, gender equality and an end to racism are examples of goals that, even today, are only very partially achieved. The Universal Declaration of Human Rights dates from 1948 and its refinements have since been proceeding, and will hopefully proceed as long as humans will exist. A major recent refinement concerns the universal right to a clean, healthy and sustainable environment (UN Human Rights Council, 2021).

democracy,[821] although alongside a strong **militarisation** of State powers. For instance, the colonial powers actively promoted the modernisation of the countries they subjugated in the Global South by focusing, first and foremost, on modernising their military apparatuses.[822] Predictably, State-based modernisation processes were accompanied by socio-political turmoil and various forms of **imperialist and nationalist adventures**, which delivered tragic results in a myriad of colonial and national/regional wars[823], and led to two World Wars— the bloodiest in human history.

As a historical phenomenon, modernity is infinitely rich. It has woven together innumerable socio-cultural aspirations— from the edifying and marvellous to the unspeakable— and has even managed to produce a powerful, pluralist, critical understanding of itself. In essence, however, it has marked some major **shifts in power**, penetrating into the everyday life and worldviews of people. One of its key forces is the affirmation of general, 'objective', rational ideas and values[824] over anything merely local, particular and contextual. For instance, one such process that created major winners and losers based on general ideas like productivity and monetary land value[825] goes under the name of the **'enclosure of the commons'**. The process refers to rural environments in Europe and Russia where "large new fields were removed from common rights, enclosed by hedges, walls or fences, and reserved for the sole use of individual owners or their tenants".[826] In parts of England, enclosures were established as early as the 13th century while in Russia common governance rights resisted well into the Bolshevik Revolution. In the 18th and 19th centuries, however, enclosures were strongly encouraged or even imposed by many State governments,[827] which is why the phenomenon is strongly associated with active processes of modernisation, and modernity *per se*.

For most of the second millennium CE (medieval times to the 19th century), the primary units of governance in most of Europe and Russia were **territorial communities**, including some dispersed and clan-based, that progressively evolved into village-based communities.[828] They varied greatly in origin, extent and wealth of their covered territory, but usually held under communal control their forests, pastures, meadows (for hay production), watercourses and wetlands. Such commons comprised 50% to 90% of the usable land at their disposal but the communities generally set the rules for the management and use of *all* their land, either communally or privately held. This was done in part to minimise conflicts. For instance, regardless of land ownership a common decision was made on when to start tilling the land, when and where to let the animals graze after harvest, whether to provide or deny access to newcomers, etc. In places with abundant flat land, the open fields system was also in place because of its economies of scale, as large ploughs pulled by many oxen were necessary to work large open lands, demanding the effort of the entire community.[829] Even land tilled by individual families was often put back in common and redistributed at regular intervals— generally by lottery— to prevent inequities and excessive fragmentation. As feudalism promoted the consolidation of the peasantry in villages, it was usual for the villages to have some form of 'constitution' promoted by local lords, for instance, to make sure that they pay taxes in unison. In general, village life and the mutual obligations and

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821   This was representative democracy for men of European descent only. See Gerring *et al.* (2022).

822   Shilliam (2010) reports that, as late as 1968, Samuel Huntington in *Political Order in Changing Societies* stressed that it was up to the military to bring in technological advancement, industrial production and "responsible nationalism" in post-colonial societies and that only this could prevent "disorderly populism and communism".

823   Examples are the wars related to the creation and decline of the British and other empires in Asia and Africa, the American Civil War (1861–1865), the US war with Spain (1898), and many 'local' wars in Central and South America.

824   Of course, some particular people decide what such ideas and values are supposed to be… which is a fundamental problem for all absolutist philosophies.

825   See footnote 1060.

826   Definition from *Mingay (2014), quoted in Wikipedia*.

827   Blum, 1971; Mingay, 2014.

828   Blum, 1971. This paragraph largely draws on this source.

829   Fairlie, 2009.

relations generated much **intra-village cooperation and mutual support** that, despite internal controversies, were necessary for everyone to survive the many difficulties of the times.

The enclosure process took place differently and at different times, but it spread throughout Europe. Some believe that village communities were *destined* to fade because more efficient methods of agricultural production were badly needed, requiring intensive rather than extensive land uses.[830] Indeed, in 18th and 19th-century Britain— as commons were enclosed and new farming methods introduced new crops, crop rotation and machines to save farm labour— agricultural production increased. Fewer families than before, however, found work in the countryside, as tenants in farmsteads. Most farmers remained landless, became destitute and had to migrate to the cities, where they were forced to accept the horrible conditions of manual labour in emerging industries.[831] The enclosures and improved agricultural productivity in the countryside were thus essential contributing factors to both the **agricultural and industrial revolutions**[832] that characterise modernity. As mentioned, they prompted a large expansion not only of the urban working class but also of the bourgeoisie— the social class of merchants, craftsmen, entrepreneurs and bureaucrats that emerged as the main beneficiary of the 'revolutions'. The immediate losers were all those who had hitherto counted on the commons for survival.

The enclosures in Europe strongly contributed to the demise of rural villages in general— a phenomenon of *internal* capitalist and imperialist nature that shares important traits with the colonisation of territories *outside* Europe. While the enclosure phenomenon was taking place in Europe, in fact, the colonial adventures of European nations were also **enclosing the 'Indigenous commons'** in the rest of the world. Indigenous commons is a term used to describe the wide variety of arrangements by which a "quilt of native commons"[833] was governed by the rules of diverse peoples (nations) prior to colonial conquest. In North America, for instance, direct historical references to pre-colonial commons are not abundant but there is much *indirect evidence* that such commons existed in forest, dryland, pastureland, coastal areas or mountain terrain.[834] In Asia[835] as in Africa,[836] the pre-colonial predominant tenure system was communal, but property rights and types of production were severely disrupted under the colonial impact, generating the phenomenon that today goes under the name of 'open access'. Even in the Arctic region the penetration of European colonisers disrupted the traditional commons, although possibly to a lesser extent than in tropical and subtropical environments.[837] Colonialism did entail profound political and economic effects, but the socio-cultural and spiritual bonds between communities and their life environments were also profoundly altered.[838]

The colonial processes evolved differently in different regions, and, somehow paradoxically, dispossession of the native commons often took place by superimposition of *colonial commons* for animal grazing, which severely damaged local ecosystems and restricted the options for livelihoods of Native peoples. This was accompanied by various coercive practices, but private enclosures generally followed an initial imposition of diverse, and ecologically damaging, new types of commons. For instance, in New England the colonial settlers soon

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830   Blum, 1971.
831   See, for instance, Stearns (2007).
832   While in the past it was relatively common to hear that the agricultural revolution has spurred the industrial revolution, some now believe that the former was not properly a 'revolution', as it took place much more slowly than the latter.
833   Greer, 2012.
834   It is reported, for instance, that people gathered firewood, wild herbs, berries, game, shells and other resources as members of a specific lineage or community. The property they accessed is known to have been regulated under some form of common usufruct, hunting grounds were allocated by collective processes, and the forests and streams were actively managed (ibid.).
835   Hussein, 1999. Hussein also reports that, as traditional tenure became 'illegal' under colonial domination, its authority weakened. After independence, much land came under State control, but the inherent perception of illegitimacy amongst local peoples did remain and encouraged continued non-compliance with the system.
836   Metcalf, 1999.
837   Forrest, 1999.
838   Kula, 1999.

'unleashed' their domestic animals for free grazing into the Indigenous commons. The animals remained the property of the settlers even when they became feral, while the local game, fish and timber were declared for everyone's use. This was a clear dispossession of the Indigenous commons by the settlers' commons not least because of the extensive ecological damage caused by domestic and feral animals. The Indigenous residents tried to "flee from the four-legged invaders even before the two-legged variety became a settled presence" but the phenomenon was so widespread that soon no refuge was left.[839] In the New France territories of the north, on the other hand, the conditions for year-long grazing did not exist, no grazing commons were imposed and the relations between Indigenous and new settlers remained more cooperative and friendly.[840]

In what is today Mexico, the expansion of colonial property into the Indigenous territories "began in earnest only a generation or two after the conquest".[841] Here too, however, it took place by imposing Spanish-style grazing commons for large flocks of sheep. The colonial legislation tried to keep alive some of the pre-existing common rights, but the ecological damage of grazing by sheep and large numbers of feral animals— in addition to rapidly spreading human diseases— overpowered the Native residents. The same type of dispossession of Indigenous commons by colonial commons preceded various types of enclosures in Southern Africa, where Dutch pastoralists moved their herds into the interior's vast grasslands and imposed their presence and control over vital water sources, and in Australia, where sheep-raisers drove their herds and took control of scarce water resources in what they regarded as open access pasture, regardless of Aboriginal claims. As in contemporary Mexico or Southern Argentina,[842] the ovine population explosion altered the Australian landscape in ways that strongly affected the subsistence of the Native peoples.[843]

Whether it took place by enclosure, substitution or sheer occupation, the **disarray of community commons in Europe and Indigenous commons** elsewhere is the phenomenon— invisible to most, but **central to modernisation**— that seeded the demise of many traditional institutions for the governance of territories. Village-based agro-pastoral economies retreated, as did those of foragers, mobile pastoralists and shifting cultivators. Even monastic communities experienced a sort of retreat, as 'modern thinkers' started perceiving asceticism as a form of superstition and privileged individual relations with God versus any form of collective moral authority, moral education, or connection between knowledge and virtue.[844] In both Europe and the colonies, a new social class of individual entrepreneurs and adventurers was empowered, took advantage of the agricultural and industrial revolutions and **shifted power from rural to urban environments** everywhere on the planet. A large part of the people who used to draw their livelihoods directly from the land became 'redundant' and had to seek employment in industries, manufactures and services with consequent mass migration phenomena, pervasive socio-cultural distress, and loss of life.

A work published by Thomas Malthus in 1798[845] is in many ways symbolic of the anti-humanistic views that allowed immense human misery to accompany the early phases of modernisation.[846] The work— an ideological diatribe against the humanistic tradition of the Enlightenment— lamented population growth in view of Malthus' utter pessimism about humanity's capacity to significantly improve itself. Asserting that most humans

839   Greer, 2012.
840   Ibid.
841   Ibid.
842   Holdgate (undated) powerfully recalls this. Today, even scholarly analyses (Aagesen, 2000) find it extremely difficult, if not impossible, to determine what were the composition and characteristics of Patagonia's vegetation prior to the veritable 'explosion' of sheep ranching. Virtually free of domesticated animals in 1885, by 1910 the Patagonian rangelands supported some 12 million sheep. The number grew to 22 million by 1952 and subsequently fell to about 10 million.
843   Greer, 2012.
844   Hagman, 2013.
845   Essay on the Principle of Population first published in 1798, known more briefly today as On Population.
846   Malthusianism is defined by Bookchin (1995) as a "militant credo" with "socially malignant ramifications, which have nourished some of the most reactionary ideologies of the nineteenth and twentieth centuries".

are simple brutes, Malthus described how their numbers must be controlled by fair means or foul, providing the rationale *par excellence* for devaluing life and imposing all forms of human exploitation and imperialism. Malthus— purportedly a Christian— arrived at the point of arguing for the *promotion* of unsanitary practices to get rid of greater numbers of the useless poor.[847]

Some parts of the world never experienced the 'age of modernity' in all the dimensions just mentioned and conserve today, at least in part, their pre-modern economic and symbolic universes.[848] There is little doubt, however, that modernisation has been affecting in a major way the territories of life and their custodian communities in the Global North and South of the world. Most immediately and visibly, the **military and political impositions** connected with colonial and other wars affected the conquered ecosystems, manipulated or trashed pre-existing institutions, and physically imposed new forms of territorial governance, economies and mores. Also enormously important, however, have been the **socio-economic and cultural influences** of modernity— including the *hubris* often characteristic of modern people— disenchanted but unaware of the limits of their 'reason'; bold enough to combine imperialism with professed humanitarian values; heartless enough to allow millions to die in conflicts about land and nature but also in meaningless wars, ethnic genocides or nuclear explosions as tests upon live peoples. As ultimate *hubris*, modern people have been unaware enough to start using energy, land, water, air and life without any apparent limit, seeding environmental degradation and climate change.[849]

The period after the end of World War II— at times referred to as **post-modernity**[850] or the **'era of** (socio-economic) **development'**—[851] inherited such *hubris* with the added intoxication of the enthusiasm of the winners. The period was initially characterised by the post-war need for reconstruction and the new impulses towards enhanced production, consumption, international trade and financial integration, as well as re-arranged geopolitical postures (e.g. the Cold War blocks, the 'non-aligned nations', etc.). In continuity with the colonial period, we find, in post-modernity, an abundance of **neocolonial practices**,[852] vehicles of control between dominant and subservient States. We also find a variety of **innovative policies** and **social movements** (e.g. labour rights, gender equity, welfare rights) that advanced mutual solidarity and the living conditions of large numbers of people, offering continuity to the humanitarian aspirations of some of the key thinkers of the Enlightenment.

In tune with the articulation of the 'stages of economic growth',[853] the key indicator to measure socio-economic development in post-modernity has been the gross domestic product (GDP)— an estimate of the total production of goods and services in a country during a given period (usually a year). Basically, all countries in the world grew their GDP in the post-World War II period, with China lifting the wealth of hundreds of millions of citizens in just a few decades,[854] the European Union introducing 'welfare policies' of immense social impact, and the US emerging as dominant world power— a society of enormous opportunities and mobility, where misery coexists with

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847 "...In our towns we should make the streets narrower, crowd more people into the houses, and court the return of plague. In the country, we should build our villages near stagnant pools, and particularly encourage settlements in all marshy and unwholesome conditions. But above all, we should reprobate specific remedies for ravaging diseases; and those benevolent, but much mistaken men, who have thought they were doing a service to mankind by projecting schemes for the total extirpation of particular disorders." This quote is from Malthus 'On Population', as reported in Ibid.

848 George, 2015.

849 Climate change driven by human activity may have begun as early as the 1830s (Abram *et al.*, 2016).

850 Some consider 'post modernity' to start in the 1990s.

851 Sachs W. (1992 and 2020).

852 Such as unfair terms of trade that maintain countries' dependence on others, or high-interest loans that can never be repaid. Liberalism and capitalism are often implicated. Some commentators refer also to international conservation initiatives as neocolonial (Kashwan *et al.*, 2021).

853 Rostow, 1960.

854 See World Bank and Development Research Center of the State Council of the People's Republic of China, 2022.

unimaginable fortunes. Some visionary thinkers did not take long to see the shortcomings of GDP,[855] but only in the 1990s the United Nations was ready to formulate an approach that offered an alternative to GDP. It was based on the argument that what matters in society is not total production, but how well that production is translated into the "...wide range of social, economic and political freedoms"[856] that describe *human development*.[857]

Regardless of national indicators, the 'era of development' saw national and transnational **economic decisions**— at times with the justification of humanitarian goals—[858] coming to play an increasingly crucial role **as politics via non-military**, or partially-military, **means**. For instance, decisions regarding food aid, grants and technical assistance of various forms, loans from international financial organisations, trade agreements to feed mass consumption and embargoes to damage adversaries have been generating profound impacts on local territorial governance. In a globalised economy, such impacts span phenomena as diverse as land grabbing by agribusinesses catering to distant markets,[859] ecological disruptions and pollution caused by extractive industries, and profound market distortions by financial speculations. We touch upon some of these phenomena, and others of an even more subtle nature, in the following four sections.

Whose reality?

The decades after the end of World War II saw the supposed coming to closure of many colonial adventures. Some of the finales proved particularly painful, as enlightened new beginnings often failed to emerge, and the dependence and control *between* countries did not disappear. In fact, a few time-tested tools of power, such as deception and political assassination, came to be used in increasingly sophisticated ways,[860] and the arms race thrived like never before. Many new tools also appeared, as power was increasingly associated with the economy but also with "the composite of knowledge and skills that comprises the **technostructure**... all who bring specialized knowledge, talent or experience to group decision-making in government and corporations."[861] Besides economic globalisation, **cultural imperialism** remained essential in maintaining the neocolonial patterns of domination and control between countries, even when the dominant and subservient States were not the same

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855   In 1968, Robert Kennedy said the following at what was to become famous as his 'speech at the University of Kansas': "*Too much and for too long, we seemed to have surrendered personal excellence and community values in the mere accumulation of material things. Our Gross National Product, now, is over $800 billion dollars a year, but that Gross National Product [...] counts air pollution and cigarette advertising, and ambulances to clear our highways of carnage. It counts special locks for our doors and the jails for the people who break them. It counts the destruction of the redwood and the loss of our natural wonder in chaotic sprawl. It counts napalm and counts nuclear warheads and armored cars for the police to fight the riots in our cities. It counts Whitman's rifle and Speck's knife, and the television programs which glorify violence in order to sell toys to our children. Yet the Gross National Product does not allow for the health of our children, the quality of their education or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages, the intelligence of our public debate or the integrity of our public officials. It measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country, it measures everything in short, except that which makes life worthwhile. And it can tell us everything about America except why we are proud that we are Americans. If this is true here at home, so it is true elsewhere in world.*"

856   ul Haq, 1992.

857   In fact, the indicators of 'human development' are many. They relate to health, education, standards of living, dignity, gender equity... they may be as many as the values articulated in the Universal Declaration of Human Rights. Because they are multiple and diverse, they are usually combined into indices. The best known among them is the Human Development Index (HDI) reflecting average life expectancy, education and standards of living. The Inequality-adjusted Human Development Index (IHDI) adds in the dimension of equality of distribution (of life expectancy, education and income) across the population. Recently, the Planetary pressures-adjusted Human Development Index (PHDI) has also been developed, incorporating concerns for intergenerational (not only intra-generational) inequality.

858   Humanitarian goals include the most basic as 'saving lives' by providing immediate responses to environmental disasters and famines, but also broader and more controversial packages promoting 'democracy' and 'development' aspirations, responding to human rights abuses, and even promoting conservation objectives.

859   The literature about this is too vast to cite. Two regional analyses focusing on large-scale agriculture are: Burbach & Flynn, 1980; Dinham & Hines, 1983.

860   In the half a century after the end of World War II, powerful thinkers have been assassinated or effectively neutralised throughout the world, regardless of being political leaders (e.g. Mahatma Gandhi, Malcom X, Martin Luther King, Robert Kennedy), major economic or cultural actors (e.g. Enrico Mattei, Paul Robeson) or Heads of State/ Prime Ministers (e.g. Patrice Lumumba, Mohammad Mosaddeq, John Kennedy, Jacobo Árbenz, Salvador Allende, Indira Gandhi, Thomas Sankara, Aldo Moro, Olof Palme). Many of the assassinations remain unresolved. Besides well-recognised figures, cases of political violence are so numerous and widespread that the UN has had to establish a Special Rapporteur on extrajudicial, summary or arbitrary executions (https://www.ohchr.org/en/special-procedures/sr-executions accessed 2024).

861   John K. Galbraith, quoted in Chomsky (2014).

as in the colonial period.[862] As in the colonial period, however, the interplay between economic and cultural might remained tightly intertwined with militarism and war.[863]

Some powerfully argue that a state of 'permanent war'[864] and a '**permanent war economy**'[865] came to merge so coherently with the interests of **capitalism** that it is now basically impossible to disentangle them. In this light, a dynamic and informal coalition of material and political interests callously, exploits conflicts and fuels lies, racism and fear, including fear of losing jobs. The interests span the operations, industries and financial speculations related to militarism and war, which are 'argued for' and promoted by politicians and media. In turn, the same politicians and media are financially backed by the interests related to militarism and war— which have no shortage of funds as their trade 'requires' huge amounts of resources. And, as some technological spin-offs can be offered to non-military industries, such as aeronautics, the few critical voices can be silenced. As in the colonial period, in the vicious, self-perpetuating, destructive cycle of a permanent war economy, personal and political fortunes are made but normal citizens and nature get trapped. Moreover, as in the colonial period, the patterns of domination between countries replicate themselves *within* countries. The living conditions of the economic elites in countries of the Global South, North, West and East have come to be quite similar… as have the conditions of most of their underprivileged. Progressively, this has morphed into the emergence of a **transnational elite class** linked in political-economic-cultural ventures that transcend State boundaries.[866]

Various processes of **manufacturing consent**[867] have been crucial for the consolidation of power systems in the post-modern era. Under the banner of democracy, major corporation and investment firms have become increasingly able not only to control the economy and decide who can occupy executive positions, but also to dominate the 'agenda-setting media'[868] and impose sharp constraints on acceptable narratives and ideologies. First and foremost, such narratives and ideologies need to be "indoctrinated" into the "political class"— the small percentage of people in every country who keep informed and participate actively in political life (e.g. teachers, managers, writers, journalists, entrepreneurs, politicians). Once this is done, consent is basically already "manufactured", as the rest of the population, the much larger percentage of those who generally "follow order", is usually too busy trying to survive to pay attention, let alone think critically, about narratives and ideologies. Yet, and paradoxically, they are the ones who are the first to pay and pay the most for economic and political choices.[869]

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862   *Ibid.* Among the most profound critiques of cultural imperialism is the one offered by Césaire (1950).

863   Johnson, 2006. The USA has more than 800 military bases on foreign soil (Vine, 2019), many more than Britain, France, Russia and China combined. Foreign intelligence operations throughout the world include extrajudicial killings (https://www.ohchr.org/en/special-procedures/sr-executions), mass disinformation practices (Ireton & Posetti, 2018), manufactured terrorism (Aaronson, 2013) or manufactured other threats (e.g. presence of 'weapons of mass destruction'), as well as mass incarceration (Sawyer & Wagner, 2024).

864   Hedges, 2022a.

865   Melman (1970) quoted in Hedges (2022a).

866   This transnational elite often evades legal frameworks and influences State governments in ways that are all but democratic. Enlightening, if grim, examples are offered in the first of the lectures collected in Chomsky (2014).

867   Herman and Chomsky (1988) wrote an influential treatise about this, which discusses how owning agenda-setting media, being in control of advertising or being a donor to major cultural institutions like universities creates deep complicity between power and the media. The complicity creates 'official accounts' and 'scoops', accredits experts and discredits or seeds doubt about the sources of information that do not fit the dominant narratives. Provided that the media is also seen as limitedly independent and fighting power (non-monolithic), success in making the public acquiescent and docile is basically assured. As Chomsky (1998, p. 43) later said: "…the smart way to keep people passive and obedient is to strictly limit the spectrum of acceptable opinion, but allow very lively debate within that spectrum—even encourage the more critical and dissident views. That gives people the sense that there's free thinking going on, while all the time the presuppositions of the system are being reinforced by the limits put on the range of the debate". Tools in manufacturing consent via the media include: selection of topics; distribution of concerns; emphasis; allowing limited alternative voices of dissent within an overall framing of issues; filtering of information; bounding of debate within limits; asking or ignoring questions; and— importantly— creating suitable enemies (e.g. 'communism', 'terrorism', 'immigrants'). In this light, major news agencies create 'history' and shape what counts as 'reality' in ways that fit the interests of the controlling powers— the corporations and financial institutions that control governments as well as production, consumption and commercial values. In the words of Chomsky, "The general population doesn't know what's happening. And it doesn't even know that it doesn't know."

868   Such media span major newspapers and books but also radio and TV programmes, movies, videogames, social media and the Internet in general. Agenda-setting media have powerful links to academia, politicians and the military. For instance, MacLeod and Alford (2019) see the popular media in the USA as an extension of the National Security State. As US military intelligence has been influencing thousands of movies, TV shows and videogames—e.g. by rewriting and approving scripts for positive depictions of its national military industrial complex— they conclude that "Hollywood is hopelessly intertwined with the CIA".

869   Herman & Chomsky, 1988.

From the early days of neocolonial post-modernity to the time of writing, **hegemonic discourse and practices** have expanded from indoctrination in school education, army training, newspaper headlines and 'evening news'[870] into threats fabricated to justify military expenditures and interventions,[871] mainstream media that merges politics and entertainment, psychologically-targeted messaging via social media, the visual arts, advertising and more. Through all of this, citizens accept 'facts', values and decisions that are all but locally observed, espoused and controlled— including about territorial governance. As they accept that the world is divided between good and evil and friends and foes, as they accept that governments act, or do not act, on budgetary choices, trade agreements, economic boycotts, permanent war, environmental disasters and climate change… so they accept that more dams are built, watercourses channelled, exotic tree varieties planted, and new land cadastres set in place. The end result has been, among much else, the maintenance and normalisation of **inter- and intra-country imbalances of power**.[872]

Among the *early* elements of hegemonic discourse that strongly emerged after the end of World War II has been the idea of the world comprising **developed and underdeveloped**[873] nations, whose many 'gaps' could be remedied by 'international aid'[874] and international lending (with creation of debt, structural adjustment programmes to follow, etc.). Similar **claims to knowledge and attributions of ignorance**, which had been crucial for colonialism, remained in neo-colonialism.[875] Intertwined with **racism**,[876] these claims and attributions have come to affect the thinking and behaviour of everyone, in the dominant as well as in the dominated classes. An insidious element in that is the ubiquitous division between 'material reality', of which nature is supposed to be part, and 'cultural reality', a metaphysical phenomenon that assigns meaning.[877] Arguably, this is one of the deepest aspects of the *hubris* of modernity, the belief that there is only one form of rational thinking and that the 'reality' perceived by modern actors is the **one and only possible reality**, to be uncritically imposed upon others, in the past[878] as in the present.[879] In the words of Greg Anderson: "The effective critique of our present conjuncture must begin at the ontological and metaphysical level", questioning in the first place "how we determine what is normal, natural and even inevitable" and promoting pluralism,[880] mutual respect, equity, and a humane approach to the multiplicity of worlds that make sense to different peoples.[881]

870   See, for instance: Peled-Elhanan, 2012; Savaş, 2018; Ireton & Posetti, 2018.

871   See Aaronson, 2013. Importantly, as noted by Chomsky (2014), World War II taught important lessons to politicians and corporate managers. The immense expenditures of the United States to sustain the war effort sent the nation into a period of prosperity never before experienced. Such efforts conveniently required a tight, centralised control of the national economy. If this control could be maintained, the armaments industry could be used as "automatic stabiliser" and politicians and corporate managers had all to gain from that. The emergence and consolidation of this 'military Keynesianism' had enormous consequences. In the words of Chris Hedges (2022a, p. 33) the "pimps of war" have become a "State within a State" in the USA. No matter "how wrong they are, how absurd their theories, or how many murderous military interventions go bad", a "cabal of warmongering pundits, foreign policy specialists and government officials" remain "lavishly funded by the defence contractors" and "year after year, debacle after debacle, smugly dodge responsibility for the military fiascos they orchestrate" (ibid, pp. 37 and 42).

872   Chancel & Piketty, 2021.

873   Sachs W. (2020) notes that US President Harry S. Truman, in his inaugural address to Congress, referred to the home of more than half the world's people as "underdeveloped areas".

874   See Rahnema, 1983a.

875   Hobart, 1993. See also the indispensable Césaire (1950).

876   For Vartija (2019), trends central to modernity have created the conditions for racism ("prejudice concerning ethnic descent coupled with discriminatory action") and allowed it to become systematic and widespread. He quotes authors who describe racism as a product of the European mercantile class that fuelled the slave trade and generated modern capitalism and authors who stress that it could only consolidate as a consequence of the modern concept of 'human equality' (benevolent people embraced segregation as "races should be separate because they are equal but different") and by using the new language of the sciences (e.g. Darwin's theories reinforced the ideas of hierarchy and different rhythms of human progress and civilisation.) Other authors he discusses argue that 'pre-modern' thinkers, from ancient Greek philosophers to medieval theologians, subscribed to a 'protean' view of identity (i.e. identity can continuously change) rather than the fixed view implicit in racism. Only the modern and immutable view of race, in combination with Malthusianism and nationalism, could generate the virulent forms of discrimination and crime that culminated in last century's genocides. Remarkably, today's racism may be increasingly based on supposed purity of 'culture' rather than of 'biological race'.

877   Anderson, 2018.

878   Anderson (ibid) calls for re-imagining the past "as a site of metaphysical multiplicity, diversity and variability", taking seriously the possibility of "…many different ways of being humans in many different worlds".

879   For Anderson (2023) the 'objective' world of 'scientific facts' that emerged from modernity has been imposed by colonial adventures all over the globe, so much so that it now seems deeply baked into the minds, bodies and ways of life of most people. Only conscious acts of decolonisation may open minds to the plural realities that made sense, and may still make sense, for different cultures and people.

880   Pascual *et al.*, 2021; Escobar, 2020.

881   Feyerabend, 1999; Anderson, 2018.

Modernising/neo-colonial/development forces were fully unleashed after the end of World War II, when State-supported interventions took centre stage in many world regions, accompanied by **politicians** and **bureaucrats** often allowed to behave in **arrogant ways**. A telling account by Madhav Gadgil reveals practices that were common in the Western Ghats of India in the 1970s,[882] but could have been recounted from countries all over the world. As agents of the Forest Department and road construction engineers advanced over the hills to make sure that villagers moved away from sites of dam construction, they were accompanied by timber and coal merchants. Together, they 'bought' all the valuable trees from the villagers for next to nothing... and later blamed them for deforestation. Forest Guards imposed their parasitic presence in villages and demanded free food and drinks in exchange for no services. Some even carelessly marked trees for felling in the sacred groves of the local communities— the few intact forest patches that host local deities and had never been felled in human memory. These sacred groves were repositories of local biodiversity, besides being spiritually important and an essential source of medicinal plants, firewood, leaf litter and water, strenuously defended by the local communities. For the Forest Department, however, they were just "stands of overmatured[883] timber".

This is the kind of **utilitarian rhetoric** that powerfully emerged after World War II. The advocates of 'rational' exploitation of 'natural resources', 'green revolution', 'progress' and economic 'development',[884] and the promoters of "the more growth the better"[885] clearly had the upper hand. But the discourse accompanying development initiatives seemed **also humanistic-oriented**. It spoke of meeting human needs, enhancing health and education opportunities, securing food, water, energy and infrastructure. It used a benign lexicon of 'cooperation', 'participation', 'democracy' and 'benefits'. Were those words sincere or even realistic? For many, indeed they were, and the amount of ingenuity, work and goodwill that went into the development enterprise should be enormously respected and in no way underestimated. In fact, as we will later discuss, some indicators of human development, such as health and literacy, continued to globally improve in the second half of the 20th century.[886] With that, however, immense human suffering and inequality of life conditions persisted, side by side with unprecedented wealth and productive capacities. The global inequality[887] that is a defining feature of the contemporary world put down solid roots in the second half of the 20th century, alongside the birth of progressive concepts like 'global equality', 'global justice' and 'one Earth'.[888]

For some commentators, the benign lexicon of development that focused on meeting human needs was part of a *corrupt* and **numbing language** that established and nourished its own truth and the institution to impose it.[889] The "professionally-trained developers that recognized the 'needs', elaborated the strategies, designed the blueprint for action, prepared, proposed, financed, implemented and evaluated the projects" were a "freemasonry of experts", an army imposing one dominant power and uniform culture over many diverse communities and lifestyles.[890] Yes, on the fringes of the development discourse there were also dreamers who called for *dignified* systems of production and consumption, which would *engage* the concerned communities, maintain pride in

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882   Gadgil *et al.*, 2021.

883   This term is meaningless in ecological terms. Forestry practices that adopt it inevitably impoverish forests as they remove an entire and particularly rich phase and element of the spatial and temporal mosaic of natural forests.

884   Wolfgang Sachs (1992 and 2020) calls the second half of the 20th century the "age of 'development'" and offers an illuminating analysis of the development discourse, a web of key concepts depending on tacit assumptions where 'knowledge as power' has been deployed over the diversity of worldviews that used to make sense of the world. The ethnocentric and violent nature of this discourse is clearly illustrated.

885   Rostow, 1960.

886   See https://ourworldindata.org/a-history-of-global-living-conditions accessed 2024.

887   As well described by Christiansen and Jensen (2019), global inequality is inequality among all the world's people as if they all were living within one nation. It is often calculated using the Gini-coefficient but, increasingly, global inequality is seen as multidimensional— an historical process that concerns not only economic assets but capabilities in general (Sen, 1992), political and institutional aspects, and human rights. For a more conventional treatment of inequality between the rich and poor nations see Seligson (1984).

888   Christiansen & Jensen, 2019.

889   Rahnema, 1983a.

890   Ibid.

cultural diversity, seek *liberation* from imposed models and *prevent or minimise the environmental and health impacts* engendered by the new technologies…[891] But they were kept, indeed, on the fringes.

One overriding focus of the hegemonic discourse about development is the idea of **'fighting poverty'**— the topic that has occupied development theorists, planners, and practitioners from the end of World War II to the present (see the number one goal in the current 2030 Agenda for Sustainable Development). Poverty is a difficult concept to define. Different cultures and times have had profoundly diverse perceptions of what constitutes 'poverty', closely related to diverse worldviews and systems of values. Among much else, those perceptions span voluntary and involuntary, moral and immoral, absolute and relative aspects of poverty. They span situations where poverty coexists with careful environmental care (see Picture 9), and situations where poverty coexists with terrible environmental conditions, not necessarily by choice or by action of the poor. All these perspectives have generally been subsumed by modern 'development experts' under an all-powerful **definition of poverty in monetary terms**, to which solutions are to be found via the direct or trickle-down effects of economic growth.[892] The fact that diverse communities might be able to secure their livelihoods directly from nature, that they might manage land, water, plants, animals, seeds and livestock breeds, that they might be proud of such livelihoods and have a very diverse understanding of what 'poverty' is… all this is considered secondary or irrelevant.

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891   Examples include Farvar & Milton, 1972; Schumacher, 1973; Gran, 1983; Korten, 1984; Brown, 1985.
892   Rahnema (1983b) also uses the term 'modernisation of poverty'.

Territories of life

The standard recipe to end poverty has been to move away from 'unemployment and rural stagnation'[893] by creating the conditions for employment, specialisation, comparative advantages, trade integration and growth. It has been assumed that this model is *effective*, that it may be implemented as a *technical-managerial operation*, quite apart from politics, and that it is everywhere *desirable*. Economists further considered that the poor have a short-term focus, cannot manage risks and have high fertility rates— all of which may be bad for their quality of life but, it was highlighted, it is surely also bad for the environment.[894] Others pointed to the frequent correlation between poverty and environmental degradation as revealing a direct causality, likely mediated by "burgeoning population... poor productivity... poor health... poor education".[895] Still others simply took for granted the existence of a vicious cycle: poverty promotes poor environmental management, which causes environmental degradation, which deepens poverty.[896] From all this one could argue that the poor are "primitive, backward, uneducated, unconscious of their long-term interests, even dangerous to themselves and to their nation if not properly framed and directed"[897] and that **fighting poverty is also good for the environment**.[898]

How should we interpret, however, those situations where capital acts as a force of environmental degradation? Richard Peet and Michael Watts ask: "how can poverty explain [...] toxic dumping in Nigeria or urban water pollution in Penang?".[899] In situations such as these— and they are not few— *blaming* the poor amounts to blaming the victims. Even more importantly, questions are brushed aside regarding all those situations where **poverty is a by-product of existing power structures**, which take advantage of 'natural resources' to enrich themselves and leave local residents in worse conditions than before. Industrial extraction of oil, gas and minerals well illustrates the 'resource course' phenomenon, the undeniable coincidence of poverty and environmental degradation in resource rich-areas, the Niger delta being a sad example. Could it be justifiable, in such cases, to promote development initiatives that will be used as tools for socio-political legitimation of the elites in power? Could it be justifiable to back with support the very people who create and perpetuate poverty, who will use that support to keep themselves in power? Reflecting upon questions such as these, it may seem that the very idea of 'poverty', and the burden of the State and donors to remedy it through development, economic growth and international aid, may, in themselves, be **constructs of modernisation**.[900]

However they began, the ideas of poverty and economic development have become extremely powerful. In the international arena, they often resemble an **obsessional myth**— a race to imitate the dominant economies and devalue the capacities of all modest, autonomous, independent, time-tested lifestyles. Foraging, shifting cultivation, mobile pastoralism, or any kind of simple and *autonomous* living in direct dependence with nature (see Part I of this work) have generally been seen as backward and undesirable. Politicians, bankers, bureaucrats and development experts decided that, if self-sufficient communities in charge of their own territories and livelihoods may be classified as 'poor' in monetary terms, they are fair game for interventions. Development and

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893   Todaro, 1985.
894   For Dasgupta and Mahler (1994), poor people are supposed to be closely dependent on their immediate surroundings for their livelihoods and pushed by need to consume all they can, with a short-time horizon and aversion to investments and risks. In this light: "poverty, high fertility rates and environmental destruction fuel one another"— another way of saying that poverty is a cause of environmental degradation.
895   Mellor, 1988. See also the more balanced Dasgupta (1995), for whom the positive correlations among poverty, fertility and deterioration of the local environment cannot reveal causal connections, but only supports the idea of a positive-feedback process. A scathing analysis of the view of society implicit in literature with titles ranging from 'road to survival' to 'lifeboat ethics', from the 'tragedy of the commons' to the 'population bomb' has been offered by Bookchin (1995). Bookchin stressed that the Malthusian perspective implicit in such literature generated cynical, racist, elitist, misanthropic, reactionary and criminal ramifications through the years. He expressed particular distress noting that the anti-humanist perspectives inherent in these works flourished freshly after the pain and horror of World War II. With Bookchin, others passionately fought the Malthusian views through arguments, even resorting to civil disobedience to be able to speak at international conferences (Taghi Farvar, personal communication, 2010).
896   Blaikie & Brookfield (1987) quoted in Peet & Watts (1996b).
897   Rahnema, 1983b.
898   Mink (1993) offers a complex recipe based on overall macroeconomic growth supplemented by interventions to alleviate the risks of the poor, secure their rights to natural resources, and provide them with services in education, health and family planning. All these interventions are expected to be a win-win for poverty alleviation and environmental protection.
899   Peet & Watts, 1996b, p. 10.
900   Rahnema, 1992.

economic growth in general are expected to create the **opposite of poverty, defined as 'income' and 'jobs'**. The fact that the natural environment of communities and their self-sufficiency, cultures and 'moral economies'[901] stand in the way and need be sacrificed is not seen as a sufficient reason not to act. Nor is a sufficient reason the fact that employment for some is expected to be accompanied by unemployment and underemployment for others. In this way, communities with their own territories, livelihoods systems and desired futures have been disrespected and disempowered both in the South and North of the world.[902] Their cultures— unique languages, worldviews, knowledge, capacities— have been assumed to be unimportant, often for the simple fact of not having been recorded on paper or quantified by State operators. And the 'unquantified' breakdown of lifestyles and loss of cultural or spiritual values and territories[903] has not been, and hardly could have been, 'compensated'.

For Majid Rahnema, **communities** at the grassroots were **infantilised** by development interventions and deprived of their creative possibilities to find the most effective and self-reliant solutions to their needs in their context.[904] Often, they were also **re-engineered** into new institutions (committees, resettled villages) designed to fit the operations of externally-designed and controlled projects and programmes[905] rather than the concerns of local societies. In fact, huge resources have been funnelled by nation States and their financial supporters into **development projects incompatible with pre-existing social-ecological systems**, which dismantled such systems as part of their functioning. Another result of development projects has been the growth of the complexity and power of national and international bureaucracies and their global processes "at the expense of local and regional systems, losing autonomy and self-sufficiency".[906] And another result has been the accumulation of economic and political power in the hands of the companies that control technology and packaged solutions to problems— such as the 'green revolution'.[907] Large agrochemical companies started producing designer seeds, fertilisers and pesticides, while banks financed irrigation schemes and pushed loans designed to lock in the farmers with agrochemicals. After the convenient enticements into a dependency system, there was hardly any way out. Although some farmers could ultimately benefit, many others became fully dependent on loans and the vagaries of the market. It is estimated that debts contributed importantly to the high suicide rate observed among farmers across the end of the second millennium.[908]

The consequences of the development era are many and incredibly complex. Yet, while the achievements of technological innovations and the advances they brought us are highlighted in full view, the human tragedies engendered by development initiatives have rarely been recorded or discussed.[909] It is as if only one kind of reality deserves to exist— that of the dominant countries and classes— modernised, urbanised, comfortable, powerful and self-satisfied. As noted in Bertold Brecht's *Threepenny Opera*, set to unforgettable music by Kurt Weill, it is often the case that very few people emerge into the limelight of history while immensely vast numbers remain, and with them their **pain and sacrifices**, **hidden in darkness**.

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901   On this, see the enlightening study by Watts, 1983a.
902   Rahnema, 1992.
903   At the time of writing, this is a fact for many communities where young people have become unwilling and incapable of living satisfactory lives in the very environments where their ancestors possibly thrived. They only dream of jobs in cities or abroad and many fall prey to depression, alcoholism, violence, suicide or accidents in desperate journeys of migration.
904   Rahnema, 1983a.
905   Lecomte, 1986. Examples are also discussed in Borrini-Feyerabend and Farvar (2011).
906   Rappaport, 1993.
907   Glaeser, 1987.
908   E.g. in India, where about 400,000 peasants killed themselves between 1995 and 2018, often by deliberately ingesting pesticides (Kannuri & Jadhav, 2021).
909   Berger, 1976.

Whose development?

The first decades following World War II are often called 'the era of development', marking a period of responding to the need for post-war reconstruction and structuring post-colonial independent States all over the world. It was then that 'development' was theoretically conceived[910] and fuelled by powerful technology and capital. Specifically, development was *not* envisioned as an endogenous socio-cultural and economic process, unique to each country or people, but as a system of "universally applicable technical interventions intended to deliver some badly needed goods to a target population".[911] A typical example of such interventions are the more than 45,000 large dams erected on rivers in the second half of the 20th century[912] in 140 countries— interventions that well exemplify the stark contrast between the **winners and losers of 'development'**.

Large dams provide electricity for industries, mining and capital cities and thus generate jobs, lucrative managerial positions and new comforts for urban residents. They also submerge upland valleys, dry-up floodplains, ecologically disrupt rivers, displace people, and thwart traditional pastoralism, agriculture and fishing based on seasonal flooding and estuarine and near shore reproduction areas. These emblematic projects improve the economic conditions and social services of the affluent (e.g. by enhancing services, facilities and opportunities in urban areas) but reduce the livelihood options, economic returns and health of the 'marginal' people living there. Much of these costs are related to the diminished ecological integrity of the ecosystems that used to secure local livelihoods,[913] but the rapid imposition of socio-cultural change is also destructive. In the early 1990s, Wolfgang Sachs summarised the phenomenon as follows: "Capital, bureaucracies and science-intensive solutions… produced a tremendous loss of diversity […] They smashed the old ways… [while] the new ways were not viable".[914]

The World Commission on Dams reports that, in just a few decades after the end of World War II, 40 to 80 million people *upstream* were directly resettled because of dam construction.[915] In fact, by **2010**, a conservative estimate of the number of people affected by alterations of natural flow patterns *downstream* of major dams reached 472 million.[916] These numbers are staggering. We tend to overlook them as most such impacts were suffered by people hidden from view, poorly organised, lured and pacified by clever politicians, outrightly brutally repressed, or simply ignored and left to find their own solutions to mounting problems. While **some impacts were sudden, others developed slowly**, through decades of painful economic and social turmoil.[917] Some impacts were insidious and poorly understood, as when development interventions introduced **new health problems** because of changes in land and water use,[918] changes in local biodiversity, new behaviours and new sources of

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910   E.g. by Rostow (1960).
911   Escobar (1997b). In the same article he offers this powerful summary: "At times, development grew to be so important for Third World countries that it became acceptable for their rulers to subject their populations to an infinite variety of interventions, to more encompassing forms of power and systems of control; so important that First and Third World elites accepted the price of massive impoverishment of selling Third World resources to the most convenient bidder, of degrading their physical and human ecologies, of killing and torturing, of condemning their indigenous populations to near extinction; so important that many in the Third World began to think of themselves as inferior, under developed and ignorant and to doubt the value of their own culture, deciding instead to pledge allegiance to the banners of reason and progress, so important, finally, that the achievement of development clouded awareness of the impossibility of fulfilling the promises that development seemed to be making."
912   World Commission on Dams, 2000.
913   Horowitz, 1995. A well-rounded analysis of the 'dependency theory' of development (Cardoso & Faletto, 1979) describes relations of powers within countries that leave room for an interplay among a variety of actors and modes of productions. This may result in improved conditions for specific individuals and countries closer to the 'dominant core'... but is still likely to produce a worsening of the conditions of many, or most.
914   Pages 3, 4 and 35 in Sachs (1992).
915   World Commission on Dams, 2000.
916   Richter *et al.*, 2010.
917   Oliver-Smith, 2001.
918   E.g. water resources development in tropical environments is a strong risk factor for schistosomiasis— a serious disease that affects a quarter of a billion people worldwide (https://www.who.int/news-room/fact-sheets/detail/schistosomiasis, accessed 2024). A typical example is the Diama dam in the Senegal River basin described later in the paragraph (see Dumas *et al.*, 2010).

pollution.[919] For instance, the incidence of diseases like schistosomiasis and malaria has substantially increased in populations affected by ecological disruption in tropical countries.[920] In specific cases, this led to local health *disasters*, as in the areas that used to be part of the Senegal delta and suffered a major ecological disruption due to the Diama dam. More than 80% of the residents in the communities affected by the ecological damages were also affected, year after year, by devastating epidemics of schistosomiasis.[921]

Policies and large-scale projects to sedentarise mobile pastoralists in arid and semi-arid environments have similarly led to negative health impacts, conflicts, and ecological and socio-cultural losses,[922] with Iran offering a remarkable example. Reza Shah— a military leader who rose to power in a coup d'état in 1921— wanted to establish a stronger central power in the country, a goal that required curbing the power of the mobile pastoralist tribes. Initially motivated by military concerns,[923] his authoritarian 'sedentarisation policy' was later maintained by his son Mohammad Reza Shah[924] in order to "remove an impediment to rapid growth and

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919   As an example of a disease introduced by a specific environmental change see: N'Goran *et al.*, 1997. An illuminating general discussion is provided in chapters 3 and 4 of Haines and Frumkin (2021).

920   Steinmann *et al.*, 2006.

921   Specifically on this health impact, see Shaikh *et al.* (2018). The tragedies associated with large-scale development projects are rendered more acute by the fact that often not only the costs proved more substantial and diverse than expected, but the benefits are routinely overstated and, when they materialise, short-lived. In the Senegal delta, agricultural production was artificially supported by injections of financial resources for a few years... but those will need to be repaid with interest for decades by people who did not reap any of the ephemeral 'benefits'. In a similar vein, and under different political regimes, the Aral Sea of Central Asia has been devastated by water diversions for cotton irrigation. Like in the Senegal River basin, the soil quickly became salinised (Aladin & Potts, 1992), on top of which dust storms ripped away the humus from the land, causing health problems for the local residents exposed to dust and agrochemicals.

922   Ellis & Swift, 1988; Chatty & Colchester, 2002; Fan *et al.*, 2014. Early 'savant' multidisciplinary perspectives exist that— alongside an illustration of the complexities of social-ecological change in historically rich and ecologically unforgiving environments (UNESCO, 1959)— describe sedentarisation of nomad pastoralists as "as inevitable as it is desirable". Indeed, the appreciation of traditional mobile pastoralists is a recent phenomenon. See also the section on mobile pastoralism in Part I of this work.

923   Mobile pastoralism is adopted as it is the most sensible livelihood strategy in semi-arid environments, but mobility per se also has military and political implications, for both offensive and defensive uses. For instance, the benefits of mobility include the capacity to use surprise as a tactic to attack or retreat from battle. In general, it secures to nomadic Tribes a measure of independence that the early 20th century 'modern State' considered unacceptable. See Salzman (1971).

924   Mohammad Reza Shah remained in power from 1941 to 1979.

modernisation of the country".[925] The policy was implemented through forced relocations, blackmailing and imposition of agricultural lifestyles unsuited to both the people and the land *regardless* of being severely damaging for the livelihoods and social organisation of hundreds of thousands of mobile pastoralists.[926] The tribes that attempted to resist were treated with a harshness "not even suffered by the Indians of America".[927]

Similar if not larger losses have occurred where industrial fishery operations and trade infrastructures were boosted at the cost of artisanal, small-scale fisheries;[928] where large-scale monocultures and cattle grazing took the place of forests and wetlands;[929] or where environments were affected by new industries or oil, gas and mining operations— from the Niger delta to West Asia, from India to the Amazon region and mining sites throughout Africa.[930] While ecological problems were apparent from the early days of the new development interventions, few could foresee that their cumulative impacts would reach the current level of multiple planetary crises.[931] Recent reports have highlighted the worrying **decline in functionality of ecosystems** and species diversity,[932] including diminished resilience that aggravates all problems related to climate change. The health burden of ecological change does not affect everyone equally but it will only increase if the planetary crises are not resolved.[933] Pollution, for instance, is reported to cause every year three times more premature deaths than AIDS, tuberculosis and malaria together and 15 times more than all wars and other forms of violence combined.[934] Part of **global pollution** is not attributable to modernisation and development *per se* (e.g. air pollution by open fires to clear agricultural land or stimulate pasture) but part clearly is (e.g. air pollution caused by power plants, transport and industry emissions; soil and water pollution deriving from extractive industries, factories, input-intensive agriculture; coastal and ocean pollution by plastic residues; etc.).

'Public health benefits' are often brought in as justification for 'economic development'. The argument is that economic development is positive and desirable because it improves **public health and quality of life**. This is inferred by comparing data of Gross Domestic Product (GDP) and average life expectancy, which have tended to grow together in the development era.[935] Even disregarding the difficulty of identifying overall indicators for the rich concepts of 'development' and 'health' and relying on two variables only— GDP per capita and life expectancy— the relation is complex.[936] While in some countries the trends in these overall indicators have been positive for both variables during some decades, inter-country comparisons show that several poorer and 'less developed' countries have feared equally well, or better, than richer ones.[937] It is true that State governments and aid initiatives have invested in health care facilities and provided life-saving interventions, like mass vaccination. But it is also true that public health improves not because of health care facilities *per se*[938] but via improvements in the fundamental determinants of public health,[939] including nutrition, safe water supply

925   F. Firoozi quoted in Salzman (1971, p. 325).
926   See Foran (1993) pp. 324–325 (thanks to Ali Razmkhah for suggesting this helpful reference).
927   Ibid (p. 225).
928   Crona *et al.*, 2015; de Melo *et al.*, 2016; Berkes, 2021. *Very* complex schemes even overlap industrial unsustainable fishing in the wild with fish farming off the Chilean and Peruvian coasts (Urbina, 2019).
929   E.g. La Plata River Basin, which covers about one quarter of South America, originally included huge wetlands, dry forests and grasslands. Much of it is today under soy monoculture and cattle grazing (Schlindwein *et al.*, 2021).
930   These impacts— poorly studied almost everywhere— do not spare the Global North: see Goldenberg *et al.*, 2010. A study of the "immense" environmental, economic and health impacts of a supposed relatively benign industrial production can be accessed here: https://groundwater.kerala.gov.in/wp-content/uploads/2018/04/report-of-high-power-committe-to-assess-the-extent-of-damage-caused-by-coca-cola-.pdf
931   See Steffen *et al.*, 2015; IPCC, 2021a and 2021b. Among the few who rang early alarm bells were Bookchin, 1962; Carson, 1962; Commoner, 1972b; Farvar & Milton, 1972; Meadows *et al.* 1972. The Club of Rome has followed the pioneering work of Meadows *et al.* (1972) with regular comprehensive updates.
932   Millennium Ecosystem Assessment Program, 2005; IPCC 2021a; IPBES 2019. As described by IPBES (2019), key drivers also include land-use change, unsustainable exploitation of species, pollution, invasive species, etc.
933   Haines & Frumkin, 2021.
934   Landrigan *et al.*, 2018, quoted in Haines & Frumkin, ibid.
935   See WHO, 1992 and https://ourworldindata.org/grapher/life-expectancy-vs-gdp-per-capita?time=1543.2018 accessed 2024.
936   Césaire (1950, page 43) was among the first to point this out. See also: Borrini, 1985; Berthélemy & Thuilliez, 2013
937   Caldwell, 1986; Kuhn, 2010.
938   This has been well known for decades (see, for instance: Sanders, 1985; McKeown, 1988).
939   For a discussion and references see: https://www.who.int/news-room/questions-and-answers/item/determinants-of-health accessed 2024.

and sanitation, air quality, housing and transportation facilities, communication services, safe storage of food, weather and disaster forecasting, etc. These improvements require resources… but they result from political decisions more than anything else.[940] In this light, the idea that development interventions and GDP growth are justified by public health benefits appears disingenuous.

As many countries improved the fundamental determinants of public health during the era of development, some even took strides in personal rights, workers' rights, education opportunities, social welfare, declining casualties of violence and wars, and diminishing gender, race or caste discrimination. These achievements, which can be broadly characterised under **'respect for human rights'**, have positive consequences for public health and quality of life and constitute a major success that accompanied the development era. This success, however, is not a consequence of economic development, as the respect of human rights and GDP are *not* correlated.[941] Rather, it is a consequence of the active engagement in environmental and social justice of innumerable activists, legislators, worker unions, organised peasants, fisherfolks and pastoralists, health and legal professionals, students and teachers, environmentalists and disarmament activists, youth, women and societies at large. Economic development has likely contributed to literacy and other factors that facilitate striving for human rights, but fairness in distributing the costs and benefits of development, sharing in decision-making power and respect of human rights have always demanded organising, mobilisation and struggles.

Broadly understood as a result of economic development *and* political engagement at various levels in society, the enhanced health and quality of life of millions of people throughout the world are a magnificent accomplishment, which can only be celebrated. It should be clear, however, that such success is still incomplete and far from being equitably distributed,[942] as improvements have been disproportionately enjoyed by affluent countries and citizens within those countries. Data like GDP per capita and life expectancy reveal only average results and the growth in domestic production has been harmful to life in particular contexts. National statistics can conveniently disguise much local misery and pain. Health and quality of life improvements are also dangerously **unsustainable** as they have been paralleled by a decline in the integrity of nature.[943] For instance, among the primary sectors that contribute to national GDPs are **extractive industries**,[944] like mining and oil and gas industries, or the unsustainable exploitation of fish, timber or land. The environmental, health and social impacts of such industries in the concerned communities do not diminish the GDP…and may actually increase it.[945] Such impacts may have started in the colonial era, but they continue to our days, when the pace, reach and penetration by the financial and political might of unsustainable industries, the demand for resources and the technology to extract them have only increased.[946]

Through time, the companies that control major industries have increasingly operated transnationally, backed by political (and sometimes military) power and by international financial markets.[947] Adding to the direct environmental, health and social impacts in the communities where they operate, the political volatility intertwined with their practices[948] has favoured **insurgencies** and the penetration of terrorist organisations

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940   While health and economic indicators are generally correlated, the countries that experienced the most impressive health gains in the 20th century— Cuba, Sri Lanka, Kerala, China, Iran— were not necessarily the richest but the most committed (WHO, 1992).

941   See https://ourworldindata.org/grapher/human-rights-index-vs-gdp-per-capita accessed 2024.

942   Improvements in health indicators must be seen in the context of persistent inequities (George, 1977; Haines & Frumkin, 2021).

943   See the early work by Bookchin, 1962; Carson, 1962; Commoner, 1971 and 1972b; Farvar & Milton, 1972; and Meadows *et al.*, 1972. For more recent data and broader analyses, see: IPBES, 2019; SCBD, 2020; IPCC, 2021b. Haines & Frumkin (2021) discuss the environmental trends that are leading to overshoot our 'planetary boundaries' (Steffen, 2015).

944   Acosta, 2013.

945   See the powerful quote by Robert Kennedy reported in footnote 855.

946   Arguments can be made that local mitigation measures are at times taken, and that extractive industries bring gains in health and quality of life for many citizens in a given country. While this is true, it is also true that there are direct costs for the health and quality of life of many others, which is not ethically defensible when such costs could be prevented or remediated (see, for instance, George, 1977).

947   Soederberg, 2004.

948   Watts, 2009.

(especially in remote areas, but not solely). By choice or by necessity, insurgents are likely to engage with **organised crime**, such as drug production and trafficking, arms sales, large-scale commercial poaching, kidnapping and other criminal activities. Many national and sub-national governments fail to effectively address these complex situations… when they are not captured themselves. The results are decades of conflicts and human suffering.

Only a few communities have managed to rid themselves of organised crime in their midst by arranging their own self-defence, including by **armed guards**, as did the Cherán community in Mexico or the neighbours of Alto Fragua-Indi-Wasi National Park in Colombia (see case examples 10 and 11).[949] This has many drawbacks, and may hardly be defensible when measures are drastic and crude against the people apprehended.[950] In the absence of protection by the State, however, some of these forms of community self-defence have achieved results.[951] Remarkably, some community defence operations are carried out exclusively by non-violent means.[952] All community-based operations, however, are 'on another planet' compared to the vested interests of the **military–industrial complex** that has grown in unison with the growth of GDP[953] and have come to deeply influence the media, politicians and public policies since World War II. While this is not the place to discuss them, its influence and power[954] and the fact that military land use is estimated at 6% of terrestrial surface[955] constitute one of the elephants in the room when analysing the meanings and consequences of development for territorial governance.

In 1975, still in the early decades of the 'development era', the Dag Hammarskjöld Foundation published an influential small volume entitled *What now? Another development*.[956] The work was to catalyse efforts towards alternative initiatives and included an ample spectrum of voices— from Indigenous leaders to scientists, from politicians to journalists, from anthropologists to liberation theologians.[957] Most of them called for a meaningful and central role of the concerned **communities** in development interventions, including via approaches that empower them to **ask research questions** and use research results (see Picture 11).[958] 'Science for the people' 'rapid rural appraisal', 'participatory rural appraisal', 'action research' and 'participatory learning and action' were beginning to be discussed and practised, in those years, among academics, NGOs and communities.[959] Novel attitudes were called for— including humbleness, respect, and engaging the expected 'beneficiaries' in decision-making in order to both improve the understanding of the contexts of intervention and enhance the meaning and effectiveness of their results. Some farmers, local food producers, landowners, users of soil, water, plants and animals and restorers of local biodiversity also mobilised on their own and called for a recognition of their environmental 'stewardship'.[960]

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949   In Latin America, the people who organise themselves to prevent trespassing and illicit activities in their territories often go under the name of Indigenous guardians (guardias indígenas). In Cherán (see case example 10) they are called rondas comunitarias.

950   Conflicts that are about the very survival of people may become violent and even lethal… but not always. The Zapatista vision of justice rarely involves corporal punishments, but always actions to repair the damage caused to individuals or the community (David Barking, personal communication, 2023). Some 'Indigenous guardians' in the Amazon region do not carry arms and are trained in positive non-violence (see footnote 952).

951   Examples are the peasant surveillance (rondas campesinas) of Peru, which emerged when peasants started resisting the Shining Path guerrilla movement in the 1980s. See also the end of Part IV in this work.

952   The Indigenous guardians (guardias indígenas) of the Nasa people of Colombia have long been resisting drug traffickers and other violent groups in their midst by non-violent means exclusively, a strategic approach that has shown advantages and limitations (see: https://www.iwgia.org/en/news/4379-indigenous-governor-murdered-in-colombia-the-limits-of-the-nasa-people%E2%80%99s-resistance.html accessed 2024.

953   Military expenditures depend upon, and influence, GDP, but they are also influenced by many other factors, including the presence of active conflicts. See also Carlitz (2022).

954   The Stockholm International Peace Research Institute (SIPRI www.sipri.org) reports that, in 2023, the world's military expenditure was 2.24 trillion US$ (information compiled only from open source data).

955   Zentelis & Lindenmayer, 2015.

956   Dag Hammarskjöld Foundation, 1975.

957   The International Foundation for Development Alternatives (IFDA) was set up in 1976 to contribute to the movement towards 'alternative' development (e.g. with security based on disarmament and non-alignment and the civil society playing more active roles). From 1976 through 1991, IFDA published its very rich Dossier of reflections and experiences. In 2024, most issues can still be consulted online: https://www.burmalibrary.org/en/category/ifda-dossier-international-foundation-for-development-alternatives-ifda

958   Khor, 1979; Gran, 1983.

959   See, for instance: Lewontin, 1982; Chambers, 1992; Altieri, 1983.

960   Jackson *et al.*, 1984.

The limited number and political clout of the alternative voices just described makes them notable mostly as statements of solidarity although, for a decade or two, there was a hope that the new attitudes might also influence mainstream development. If they had done so, they would have stigmatised arrogance and inequities[961] and contributed to more **self-reliant and 'eco-societal development'**,[962] respectful of cultural diversity and quality of life. As a matter of fact, in those decades some bilateral and multilateral aid[963] organisations and NGOs started talking about involving the 'beneficiary communities'. Possibly under the weight of evident problems, even the World Bank employed more environmentalists and anthropologists and developed specific policies for projects requiring resettlements[964] and projects affecting Indigenous peoples.[965] For a few years, the World Bank even reduced funding to major projects such as large dams.[966] But the voices for alternative development remained **at the fringes** and hardly any major agency was willing to go beyond a veneer of 'community participation'.[967]

By the turn of the millennium, major World Bank investments in large dams were well up again,[968] while State governments continued to be the main recipients of enormous financial resources for interventions ostensibly designed to meet the needs of their people, and especially 'the poor'. In this way, initiatives in energy, agriculture, fishery, animal husbandry, food industry, mining, infrastructure, housing, forestry, tourism, and all possible other variants of 'development' continued to be promoted in a top-down fashion, generating important social and environmental impacts, and debt burdens as collaterals. And, at times, they were paired with conservation initiatives.[969] For Tariq Banuri (1995), the **structural problems** embedded in the very nature

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961   Lipton, 1977.
962   The term is first used by M. Taghi Farvar in his article in the collection published by Matthews in 1976.
963   Interestingly, the term disappeared after the turn of the millennium and others have taken its place (e.g. cooperation).
964   The World Bank, 2004.
965   A summary of the World Bank policies and lessons learned thereby is available in Inspection Panel, 2016.
966   Richter *et al.*, 2010. This included stopping financing of what is now the Julius Nyerere Hydropower Project in Tanzania (see below). Many considerations, however, contributed to the decisions about dams.
967   Horowitz, 1990.
968   See the instructive graph in Figure 1 of Richter *et al.* (2010, p. 16).
969   Through time, many well-meaning people became involved in so-called integrated development and conservation projects (ICDPs), but— as Banuri stressed— the overall framework was biased. The 1968 Conference on Ecological Aspects of International Development was the first to raise the alarm (Farvar & Milton, 1972) and in the words of Farvar (ibid, p. 970) "There is clearly an obligation to let the world know the truth about the bill of goods we have been sold in the name of progress and improved standards of living." See also Cardoso and Faletto (1979). Besides contradictory results, a simple comparison between the levels of investment made on economic development and environmental conservation initiatives well reveals their relative importance for decision-makers.

of the development enterprise— the neo-colonial attitude of the development experts and their associated power systems— were *bound* to damage the environment and diminish the capacities and rights of customary communities. Without pulling his punches, he summarised: "…development is a disaster and has unleashed untold miseries on unsuspecting populations".

Was there **any reasonable hope** that matters would end up differently? Was there a hope that extractive industries, mega-infrastructure and other development initiatives would respect environmental and social criteria[970] and the diverse cultures and rights of the affected communities in the poor and marginal sectors of society? For some specific interventions, such as large dams, guidelines were developed via serious technical debates and participatory processes.[971] Was there a chance that those guidelines would be respected, lowering the socio-cultural, health and environmental impacts of the dams? Given the momentum of industrial development and its financial backing, it might have been reasonable to doubt it. As it turned out, many concerned officials in government, industry and financial institutions simply chose *not to apply* the guidelines, and millions of people continued to be negatively affected by dams (large numbers of other people, of course, also continued to benefit).[972]

Where are we today? Let us consider just one example. After decades of discussions, the 2017 decision of the late Tanzanian President John Magufuli to build the massive Julius Nyerere Hydropower Project on the Rufiji River— expected to become the ninth largest in the world— might have been taken with national priorities and strategic agreements in mind, but surely was not taken by any act of informed self-determination of the traditional institutions of the more than 100,000 people who will bear the costs of the trade-offs among the water, energy, food, environment sectors,[973] and even the tourism sector,[974] in the Rufiji basin. Serious environmental[975] and socio-economic impacts are expected from the building and operation of the dam and annexed hydroelectric facility, road access and transmission infrastructure. Many people will need to redesign their lives according to the new conditions. John Magufuli died less than four years after his decision, but the governance institutions of communities in the Rufiji basin will deal with the mega dam's consequences for much longer.[976] At the time of writing, the dam has just become operative[977] and the communities are expected to face the drying-up of wetlands and small lakes, the end of seasonal flooding beneficial for agriculture, and reduced freshwater to sustain the more than 50,000 ha of the delta mangroves essential for Tanzania's fisheries. Yet, as the reservoir has been filling, there are already those who tout the prevention of seasonal flooding downstream as a sign of progress. If climate change does not interfere, the dam will also produce 'centralised energy' for Tanzania's political governments to distribute… but the country will need to repay the huge costs of dam construction and face the ecological and social impacts adding to the social instability of a very young society for years to come. A choice in favour of decentralised energy production and consumption (solar, etc.) would have envisioned a different future and invested in a different kind of society.

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970   The UN 1972 Conference in Stockholm brought to light the need for environmental impact assessment (EIA) studies as part of many eligibility criteria. Through time, the environmental and social standards to be respected by development projects were substantially refined (see, for instance, World Bank, 2016).

971   World Commission on Dams, 2000.

972   Moore at al., 2010. This special issues of Daedalus, accessed 2024, is also relevant and informative: https://www.amacad.org/daedalus/water-security-africa-global-climate-change accessed 2024.

973   Duvail *et al.*, 2014.

974   E.g. the reefs of Mafia Island— a famous tourist attraction— are part of the Rufiji Basin and it is not known how they may be affected by the changed flow regime and sediment load.

975   For instance, the dam affects the biodiversity of the Selous World Heritage Site by reducing forest and riverine habitats and altering hydrological patterns.

976   Beyond the poorly studied social and environmental impacts, it is not clear what might be the consequences of phenomena like droughts, sedimentation and fluctuating energy markets.

977   See https://www.arabcont.com/English/Release-2024-1994 accessed 2024.

Whose economy?

Development is often overpowering in a *physical* way… an image that comes to mind is that of a powerful bulldozer shaping the landscape. A less apparent aspect of modernity that has similarly profoundly affected rural communities and their territories is the **monetisation** of the economy. The term 'monetisation' represents the process by which cash or fees come to be charged for goods or services that used to be free or exchanged in local webs of reciprocities and 'moral economies'. In this sense, monetisation is one of the foundational ideas of capitalism, which substitutes 'money' for all other types of value and allows monetary profits to be derived from any type of investment. As it overpowers the qualitative aspects of the economy, monetisation is a **flattener of social relations**, an eraser of the unique patterns of intertwined production and consumption that emerge to fit specific historical and ecological conditions. An example can best explain why monetisation may be at the root of some of the calamities affecting people, such as famine.

In the 1903–1960 period, the British acted as colonial power in what is today Northern Nigeria, forcing the monetisation of the economy of traditional Hausa societies. As discussed by Watts (1983a), this was done by *introducing monetary taxation on an ancient 'moral* economy', based on networks of vertical and horizontal relations of mutual allegiance and support. Such an economy was not 'moral' in the sense of being benevolent, but in the sense of having coevolved with local *mores*. The imposed changes (e.g. rigid monetary taxation, export commodity production, callous pre-harvest timing of taxation, debt traps, land sales, hired farm labour) generated what Michael Watts calls a profound "loss of autonomy" in what were "low-risk, autarkic communities" and "turned apart a social matrix of kin affiliations and obligations".[978] While issues of access and allocation of goods affect livelihoods in all economic systems, Watts well describes why only a social crisis[979] could transform a relatively common ecological crisis (the droughts of the late 1960s) into the devastating famine of the early 1970s. He explains that the famine was generated not because *the ecological crisis was particularly severe but because the local moral economy* could no longer mobilise to prevent its consequences.[980] The **famine** was a **social-ecological disaster** rather than an ecological crisis *per se*. This offers a stark omen for the forthcoming periods of heightened risks due to climate change and other ecological problems.[981]

The monetisation of the global economy fits well the current processes of **commodification of nature**,[982] a phenomenon whose roots intertwine with the enclosure of the commons that took place in Europe and in colonised countries, as we touched upon earlier. The enclosures facilitated the identification of units of land and natural 'resources' to treat as commodities for rent, sale or collateral. As happened for the enclosures themselves, the creation of 'natural commodities' was then seen as a benign phenomenon ushered in by modernisation— the 'creation' of new economic value, which could be made productive, quantified and exchanged. Today, we still hear that "nature needs a proper economic valuation" to be effectively conserved, without which it is bound to be neglected and damaged.[983] The basic argument is that environmental goods and services are scarce,

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978 Watts, 1983b.
979 *The crisis is still ongoing today. At the time of writing, violence is rampant in Northern Nigeria.*
980 Watts, 1983a.
981 Watts, 1983b. Incidentally, the nearly complete monetisation of today's global economy may aggravate people's vulnerability to environmental threats. But we do not have to wait for ecological disasters to identify pernicious results of market penetration. As cash crops for export are introduced in rural areas, domestic food production generally suffers, with negative consequences for the health and nutrition of local women and children (Turshen, 1977). A possible explanation sees cash crops managed by the men in the family, who often use cash for their own 'personal needs'. In the absence of markets, women tend to have more control of land use and produce food for family consumption.
982 See Bermejo (2014) and Smessaert *et al.*, 2020. Others, such as Mariki (2016), also use the term 'commercialisation of nature'. The two terms seem interchangeable as a 'commodity' is an object of 'commerce' by definition.
983 An instructive timeline of emerging interest in ecological economics and ecosystem services is reported on page 10 of Kill (2014). The Millennium Ecosystem Assessment (2001–2005) was an early, major initiative that stressed the economic valuation of nature. The influential Economics of Ecosystems and Biodiversity (TEEB) Report followed in 2007.

choices and trade-offs about them are inevitable and— if not properly valued or if market failures allow free-riders to prosper— such goods and services will be sacrificed, and nature with them.[984]

While the basic argument is sound, complexities and counterarguments abound. A fundamental question is articulated by John Bellamy Foster (2002), who sees commodification as fundamentally incompatible with ecologically sound behaviour.[985] He stresses that the environment is much more than a commodity, as it sustains life itself and has invaluable intrinsic value. In this light, he asks, how could intrinsic values be privately appropriated and 'monetised'? For Foster, it is exactly the current widespread practice of giving a price to broken bits and pieces of nature that is at the root of our ecological predicaments.[986] Equally important objections include unresolved questions of *equity* today, and the distribution of the *intergenerational costs and benefits* of interventions, the fact that separating and abstracting natural elements from their contexts can **obscure origins and relations**, and the fact that valuation is invariably followed by monetisation and, most likely, privatisation, alienation, financialisation, etc. A dramatic example, strenuously resisted in many countries, is the privatisation of water.[987] Another example is the practice of off-setting— when environmental offenders buy themselves out of their responsibilities by investing resources to protect nature 'elsewhere'. It is doubtful that problems generated in a location can be compensated by something done elsewhere. Locally, the loss remains. Elsewhere, the compensation is often to be demonstrated, especially in terms of sustainability (e.g. who will care for the trees a few years after planting?). Ultimately, the efficiency and desirability of commoditisation processes are questionable because of their associated **perverse effects**[988] on ecosystems, wellbeing and self-determination of people.

Economists have valiantly tried to take some complexities into account[989] but it is worth quoting at length the following dilemma, which was already evident from a World Bank paper published at the time of the Earth Summit of 1992: "….Indigenous peoples— in contrast to Western economists and development planners— do not view land as a 'commodity' which can be bought and sold in impersonal markets, nor do they view the trees, plants, animals and fish which cohabit the land as 'natural resources' which produce profits or rents. To the contrary, the Indigenous view— which was probably shared by our ancestors prior to the rise of the modem industrial market economy— is that land is a substance endowed with sacred meanings, embedded in social relations and fundamental to the definition of a people's existence and identity. Similarly, the trees, plants, animals and fish which inhabit the land are highly personal beings (many times a 'kinship' idiom is used to describe these beings) which form part of their social and spiritual universes. This close attachment to the land and the environment is the defining characteristic of Indigenous peoples; it is what links together, in a philosophical and cosmological sense, numerous geographically disparate and culturally diverse peoples throughout the world." [990]

If this quote is exceptionally clear, it is not equally clear whether the incompatibility between the perception of nature as "provisioning resources and services" and the perception of nature as "kin to peoples" has ever been

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984   Pierce, 1992. Elsewhere in this work our preferred term is 'gifts of nature' instead of 'goods' and 'services'.

985   *Foster sees as* key concern the 'type of interaction' between humans and nature. For him, the commodification of nature is a crisis of values, arising from the domination of market values over all others and the only solution to our ecological predicaments is a 'moral revolution' in the relationship between people and nature. Of course, identifying a problem is not synonymous with finding a solution.

986   Ibid. Some contemporary scholars outrightly advocate for a non-monetary future as the best chance to achieve socio-political and economic equality and ecological sustainability (Nelson, 2022).

987   Bieler, 2021.

988   Smessaert *et al.*, 2020.

989   Pierce, 1992. In 2010, efforts even produced a new definition of 'poverty' via the Multidimensional Poverty Index (MPI) meant to measure acute multidimensional poverty by assessing deprivations in health, education and standard of living (incidence and intensity). The UNDP regularly publishes the MPI of the 100 most severely affected countries. See https://hdr.undp.org/content/2023-global-multidimensional-poverty-index-mpi#/indicies/MPI accessed 2024.

990   Davis, 1993 (the extract is from the paper's executive summary).

properly addressed by economists. Exactly as in colonial times, today it is possible to generate profits from nature without ever touching or seeing the ground, for instance by investing in a variety of more or less complex financial products offered by the stock markets.[991] For the supporters of the economic valuation of nature, even custodian communities have much to gain, as they could claim compensation for their role as managers of nature. A mechanism to ensure that is called **'payments for ecosystem services'** (**PES**). In a nutshell, PES are economic incentives offered to those who maintain or enhance the 'services' provided by specific ecosystems.[992] Crucially, payments are to be made not so much for the benefits accrued locally, but to secure the benefits enjoyed by distant others— who would otherwise receive them as 'free-riders'. While this principle is fair, not all PES incentives are fair, well applied or effective. Some focus on sheer economic efficiency while others privilege ecological sustainability and a just distribution of benefits.

Some PES programmes are major, like the Conservation Reserve Program established in the USA in the aftermath of the Dust Bowl phenomenon— an environmental disaster that affected several US States and Canadian provinces in the 1930s. Widespread land erosion caused by inappropriate agricultural processes combined with drought and windstorms to generate immense dust storms. The damage to the ecosystems was so severe that it affected all agriculture across millions of hectares of prairie. Hundreds of thousands of people were forced to migrate. After this, the US government paid many billion US$ to rent land from landowners so they would keep it covered with plants to control erosion, improve water quality, and provide habitats for waterfowl and wildlife. Results were appreciable although, since then, the region is still referred to as the 'Dust Bowl' region. A similar, even more expensive PES initiative was implemented in China in the first decades of the new millennium: the Grain for Green programme. The programme involved about 124 million farmers and offered grain in exchange for *not* clearing forested slopes for farming. The programme (which we discussed in Part I of this work regarding its impact on the Dulong people), has been successful in reducing erosion and preventing part of the siltation affecting rivers, streams and dam reservoirs.

PES initiatives similar to the two just described, including some applied country-wide, have been implemented in many countries.[993] Researchers are still trying to draw lessons from them, including about payment for *multiple* 'services' and biodiversity restoration vis-à-vis the sources, conditions for the payments, and characteristics of the beneficiary communities. Rather than generic recommendations in favour of, or against them, it seems reasonable to see payments for ecosystem services as one of the many tools (e.g. legislation, taxation, land tenure policies, coordination among governmental agencies) by which objectives relating to land and the environment in general are pursued in any given situation.[994] Crucially, there should be **safeguards** to impede any PES schemes that shift governance decisions towards economic profit and away from local livelihoods and wellbeing.[995] If economic profit becomes paramount, custodian communities are likely to lose control rather than receive benefits.

How would that 'loss of control' take place? The fact of valuing nature in economic terms may lower and disregard all non-economic values embedded in nature— from cultural to political, from affective to identity-related,

991 Webb, 2021. This is further discussed in the section entitled 'A recognition crescendo with uncertain outcomes' in Part IV of this work.
992 Redford & Adams (2009) provide a general discussion of PES, Fripp (2014) a tool for field implementation and Martin-Ortega and Waylen (2018) a range of definitions and perspectives. See also Martinez-Alier & Muradian (2015).
993 Several examples and references in: https://en.wikipedia.org/wiki/Payment_for_ecosystem_services accessed 2024.
994 Barton *et al.*, 2013.
995 On this, see Sullivan, 2009.

from aesthetic to moral and spiritual.[996] The idea that nature has market value and all human behaviour vis-à-vis nature can be translated into money may trample everything else, not necessarily because money is what people consider most important, but because money has the propensity to ally itself with **expediency, political power and 'achievers' at all costs**. Many Indigenous peoples and local communities who draw their livelihoods directly from nature lead their lives following values at least in part incommensurable with economic pricing. An illustrative example is provided by the Indigenous Maya community of Xcalot Akal, in Mexico (case example 29). The community may succeed in maintaining a difficult balance between contrasting values but is likely to be displaced if material poverty disempowers it from its governance role. If the financial mentality does not manage to corrupt the custodians themselves, all the cultured, independent communities who wish to carry on with their lives without fitting the dominant economic model still run the risk of being treated as 'irrelevant'…or even as a 'problem' to be solved. Xcalot Akal is likely to be spared this only so long as their land— held as commons—remains undivided under collective ownership.

Since 2007, the career banker **Pavan Sukhdev** and UNEP led the way with a well-publicised and well-funded initiative that developed a report entitled *The Economics of Ecosystems and Biodiversity* (TEEB). The report had multiple follow-up initiatives, providing impetus to *national accounting of natural capital and ecosystems* in several countries and to 'habitat banking' and biodiversity offset schemes.[997] If the idea of economically valuing, monetising and commercialising nature has been subject to objections[998] and provided limited ecological results,[999] its progress has nevertheless been steady. Importantly, while discussions about this are not new, the **inclusion of 'natural assets' in the mainstream financial economy** has just emerged. Since October 2021, an economic venture called **Intrinsic Exchange Group** (**IEG**), **bringing together long-term investors in nature and conservation organisations, is pioneering a 'new asset class' based on nature and** the functions that support life.[1000] The economic **benefits they refer to are those that can be attributed to some specific natural units— like** carbon capture, soil fertility, water purification, etc. Those benefits are to be quantified and new '**natural asset companies' are expected to incorporate the** rights and authority to manage the units and maximise the ecological (and economic) performance of their assets.[1001]

In partnership with the New York Stock Exchange, IEG is expected to list the new natural asset companies for trading, enabling the conversion of natural assets into financial capital. The owners of the assets will report the costs and benefits of producing natural goods and services and engage in consequent financial transactions. According to IEG, the "intrinsic and productive value of nature" will provide an "immense store of reference values" based on what makes life possible and underpins all other asset classes and the world economy in its entirety.

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996   The 'commodification of nature' is seen by some as equivalent to twisting environmental sentiments to the service of capitalism. Through commodification, elements of nature become vehicles for the realisation of profit in the market, a fact that is "inherently anti-ecological" as it ignores and simplifies complex relations and cannot fully appreciate the functioning of ecosystems (see, for instance, Bermejo, 2014). As noted by Polanyi (1944, p. 76) treating nature as a commodity leads to its pollution and overuse with serious eventual damage to human life ("To allow the market mechanism to be sole director of the fate of human beings and their natural environment… would result in the demolition of society. Nature would be reduced to its elements, neighbourhoods and landscapes defiled, rivers polluted… the power to produce food and raw materials destroyed…"). The emphasis should be on the adjective 'sole', as commodification may often be positive within limits and in the presence of safeguards.
997   Kill, 2014.
998   For instance, see Redford and Adams (2009) on the many non-economic values of nature and the volatility and unecological perspectives of markets. Neil Dawson (personal communication, 2022) expresses environmental justice considerations ('whose values are concerned here?'), noting that markets are unlikely to fairly represent the values of all concerned communities. On this see also Bermejo (2014) and Matulis (2014).
999   Kill, 1914.
1000   The site https://www.intrinsicexchange.com/ accessed 2024 lists in its 'team' some major conservation organisations and investment companies as 'supporters and investors'.
1001   This is a massively complicated task, if not a contradiction in terms.

Case example 29.

Will the ancient milpa livelihood system overcome new threats? A fragile but inspiring balance maintained by the Xcalot Akal community, Yucatan (Mexico)[1002]

Xcalot Akal ('two lagoons together') is an Indigenous Maya community more than 100 km from the Campeche State capital of San Francisco, in the Mexican Yucatan peninsula. Distinctly rural and comprising only 26 families, Xcalot Akal is remarkable for the **Maya linguistic proficiency** of all its residents. It is also a highly marginalised community, classified by government as having limited social opportunities and skills, and poor access to basic goods and services. Established in 1947 by families seeking cultivable land, in 1972 it received a basic **recognition as** an *ejido,* with a total area of 3,688 ha. All land in the ejido is held in common, and it is valued by the community as its 'territory of life'.[1003]

Today, the community has bonded with the territory and has a deep sense of its inter-dependence with it. It understands, for instance, that the integrity of the territory depends on the care and good management by the community, while the health of the community depends on the care and protection by the local guardian spirits of plants and animals.

The community livelihood is based on the milpa— the ancient livelihoods system typical of Mesoamerica. The term milpa describes a **shifting cultivation** process, but also the cultivated fields themselves and the sociocultural interactions among farmers, and with the crops and the land, that sustain all dimensions of local livelihoods. Engaging together in the *milpa* production is a sacred act, which binds the family with the community and the universe in a spiritual and social communion as important as economic production.[1004] The *milpa* is initiated by clearing a portion of forest with a carefully-managed fire and seeding it with a diversity of crops and varieties of each crop, including maize, avocados, squash and beans, but also melon, tomatoes, chillies, sweet potato, jícama, amaranth and mucuna. No pesticides are used. After a couple of harvests, the land is left fallow for several years, while it continues to produce a diversity of species and varieties during a relatively rapid forest regrowth.

Among the benefits of using fire in this setting is the contribution to nutrient flow and long-term soil fertility of biochar, which is charcoal produced by low-temperature pyrolysis.[1005] In fact, properly managed milpa result in **long-term carbon sequestration and enhanced soil fertility**, supporting a rich vegetation. An example of 'agroecology at its best', milpa is usually associated with densely forested areas. One could say that milpa has become an integral element of the natural forest cycle, which moves from the first year of cultivation, mostly to produce corn and associated foods like beans and squash, through successive stages supporting a variety of other plant and animal species used as construction materials, firewood, fodder, medicine, wild foods and ceremonial instruments… and then back to forest. The latter forest stage, however, depends on some forests remaining in the landscape to conserve the seeds, pollinators and animal life essential for forest regeneration.

In Xcalot Akal, the milpa system produces eleven varieties of corn. Another appreciated product is wild meat, from deer, wild turkey and peccary found in secondary forests and agricultural land. Complementing the milpa is the solar, a home garden where families grow domestic

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1002   Based on a 2019 report for the ICCA Consortium by Alvaro Mena Fuentes, Albert Chan Dzul, Nora Tzec and Manuel May. The picture of a Mayan ceremonial offering at a sacred site is courtesy of the Xcalot Akal community.
1003   The term is used by some Maya Indigenous peoples in Mexico, including those who reported on this case.
1004   Nigh & Diemont, 2013.
1005   Ibid.

and wild plants. In all, the community uses 99 varieties of crops, and most of its families depend exclusively on such crops for their daily food.

The community institution that serves as the highest authority and regulates decisions and rules that apply to the territory of life is the *ejidal* **assembly**, made up of 26 ejidatarios from the 26 main families. As a result of discussions about the need to strengthen internal governance, the number of ejidatarios has recently been doubled, following an agreement that each ejidatario admits one more person of their choice, commonly one of their children. Another result is the Indigenous Plan for Governance, developed through a commission elected by the ejidal assembly, with broad recognition and participation of women. Under the active governance and management of the community, 87% of the forest is well conserved in different successional stages (some of which with no evidence of recent intervention). Today, however, 43% of the total conserved area is under a **payment for environmental services** (**PSA**) programme agreement, which financially rewards the community for its role in water and soil protection. The remaining portion of the territory is under mechanised agriculture, in part used as commons and in part rented out to groups outside the community, such as the Agricultural Industrial Unit of Women.

The territory of life and the food and livelihood security of Xcalot Akal face several **threats**— both internal and external to the community. The **PSA agreement**, although a sovereign decision of the ejidal assembly of the community, is de facto undermining the continuity of ancestral management, as it **forbids** *milpa* operations in the reserved territory. Another threat is the arrival of Mennonite communities, who rent land to establish **monocultures** that include **transgenic soybean and hybrid corn**, use high doses of fertilisers and pesticides and, in addition to deforesting land, eliminate water bodies and archaeological remains. The government policies, and the perverse incentives that back them up, underpin and fuel these threats. Internally, a major threat is the weakening of ejidal governance institution by **political parties** and the erosion of local knowledge and intergenerational communication.

Aware of all these threats, the ejidal assembly has agreed to act within the community but also outside, in alliance with other communities and organisations. Internally, it is now including young people and women as ejidatarios, holds a seed festival where native seeds are exchanged and is engaged in mapping the sacred sites of the community (archaeological sites, water bodies, sites of collection of medicinal plants). Externally, as a member of various associations, it participates in communal celebrations and national policy advocacy. It is not yet clear whether and for how long the custodian community will manage to retain its capacities and characteristics faced by its many threats. The balance it currently maintains appears both inspiring and fragile.

Figures 4 and 5 illustrate the envisioned **financialisation of nature,**[1006] whereby companies are to be created to govern and manage natural assets and generate financial profits for their shareholders by holding and exchanging such assets. Noticeably, in the 2021 version of the scheme (Figure 4) the 'owners' of a natural asset company are described as explicitly including 'citizens', presumably such as the communities collectively owning the land. In the 2022 version of the same scheme (Figure 5), however, the mention of 'citizens' has disappeared and 'local communities' are noted only as 'receiving a share of the benefits'. The IEG website accessed in 2024 has no scheme at all. These changes are telling about who is in charge of the rules of the game… and how such rules may evolve fast.

Figure 4. An insider's view of how 'natural asset companies' can be created (from Intrinsic Exchange Group website https://www.intrinsicexchange.com/, accessed 2021)
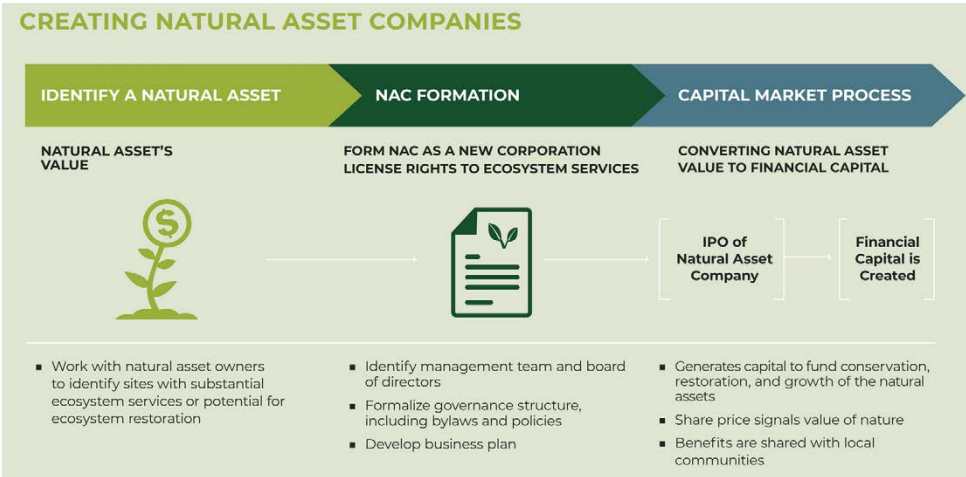
Figure 5. A revised insider's view of how 'natural asset companies' can be created (from Intrinsic Exchange Group website https://www.intrinsicexchange.com/nacs, accessed 2022)

1006 Financialisation may be understood as a process of increasing influence of financial actors, institutions, markets, and discourse over society's perception of and approach to nature. Some interpret it more narrowly, as relating only to trading and drawing profits from 'ecosystem service' units (Kill, 2014 and references therein). The market instruments that lead to financialisation of 'natural assets' include initiatives such as Reducing Emissions from Deforestation and Forest Degradation (REDD) and its various incarnations, where payments reward national improvements in reduced CO2 emissions.

For some supporters of the economic valuation of nature, it is simply logical to 'invest in nature' and to generate profits from nature as a 'new asset class'. Even if unsustainable uses of the 'assets' are set aside,[1007] nature maintains great economic appeal for sectors such as industrial food production, water supply and tourism, and for emerging markets related to carbon sequestration, pollination, biodiversity conservation, etc. Proper economic valuation would bring order to the system and prevent free-riders. For some critics, however, the dangers would also be major. Who will decide what in nature has *value* and what does not, who gets *access* to what functions of nature, or even who gets access to nature itself?[1008] The investors may set the prices and disproportionately reap the benefits. The very same investors and interests responsible for environmental crises and associated climate change may thus engage in a new, possibly unprecedented frenzy of investments, taking advantage of the new scarcities engendered by the very environmental crises and climate change they contributed to create.[1009] In this perspective, the overall result of market valuation of nature— with related commodification and financialisation— may well be a **further shift of governance away from those most caring and most directly affected towards those best able to leverage capital**. Remarkably, a recent analysis of the trustees governing the world's largest conservation NGOs found that about half of them are closely linked to the finance industry, including executive officers of investment banks and capital firms.[1010]

Whose democracy?

Monocultural language and education policies, mass media dominated by superficial content and consumerism, political parties with little allegiance to specific places and people, social media regulated by algorithms— all examples of the modern **persuasion channels** that convey the dominant narratives[1011] of contemporary societies, based on economic growth and individual consumption, freedom, mobility and privacy. Not surprisingly, traditional governance institutions based upon stability, shared values and solidarity have weakened. Only in a few cases, such institutions show surprising resistance and capacity to rebound. For instance, modern institutions may be visibly run by political parties 'above ground' while traditional institutions remain like vigorous rhizomes, exercising their powers 'below ground'.[1012] More often, however, the value systems that used to support traditional institutions are deeply affected by socio-economic change. The institutions end up relinquishing a large part of their authority and responsibility or adopting themselves the practices and mores of modern institutions.

A common modern institution governing a territory in representative democracies is a group of **elected individuals**, backed by **political parties** and assisted by a bureaucracy of **technical experts**, and national and international partners and allies. Experience with this model has accumulated for several decades in some countries, while in others the development is relatively recent. In either case, the model is widely considered

1007   An element of 'natural asset companies' criticised by the conservative right because "unsustainable activities like mining, industrial agriculture, grazing, hunting [...]are all that makes land valuable for ordinary human beings" (emphasis added; https://youtu.be/Gzu92fc6URk accessed 2024).
1008   Webb, 2021. A crucial observation about this was earlier made by Spash (2011): "That the numbers [of evaluation exercises] are crude and lack theoretical foundation is actually almost irrelevant. Once in print they can be used and cited, for whatever ends seem suitable [...] the real aim is not to demonstrate that Nature has value... [but that] ...values need to be 'captured'."
1009   Webb, 2021.
1010   Wan, 2023. This finding does not imply a conflict of interests but points at an uneasy alliance between the mission of safeguarding nature and the mission of maximising profit, including via the financialisation of conservation. The same analysis highlights the power imbalance between the millionaires and billionaires who oversee agenda-setting conservation organisations in the Global North and the marginalised communities asked to make sacrifices to 'conserve nature' in the Global South.
1011   As described by Galbraith (1958), the industrial society is wedded to an ideology of economic growth that equates happiness with consumption and possession. For him, the simplistic assumption that "more-is-better" in all circumstances is a 'core idea' and reveals a pernicious system of values, promoted through advertisements by the industrialists that control political power. The consumerist ideology pushes people to comparatively neglect the development of their own culture and even their human relations. Adding a remarkable dimension to this, Slavoj Žižek (2002, p. 2) believes that the ideology that structures our political life is lodged in our unconscious and made up of fiction ("we 'feel free' because we lack the very language to articulate our unfreedom").
1012   See prior footnote 220. This phenomenon of dual power (apparent and effective) is surely not new, and its lack of transparency remains highly questionable.

preferable to all others,[1013] even if far from offering perfect results. Ideally, political parties would constitute themselves freely by a combination of reference values and transparent interests and are kept in check by independent judicial and law enforcement apparatuses. In practice, many are backed by **vested interests** and attract voters by a variety of disputable practices, including political promises that have little to do with real intentions. Voter information is embedded in the mentioned processes of **manufacturing consent**, including irrelevant noise, disinformation and information designed to elicit anger and fear.[1014] The independent judiciary supposed to survey and keep politicians 'in check' is often nominated by, or somehow dependent on, the parties themselves.[1015]

Politicians include thoughtful and generous individuals of integrity, but also an inordinate number of opportunists and unscrupulous profiteers,[1016] and the administrative subdivisions that regulate the ways they are voted in may be moulded to fit party objectives rather than local socio- environmental situations.[1017] Relatively frequent elections ensure that decisions are oriented to the short-term and often reversed, and a 'permanent election campaign mood' favours power games at the expense of thoughtful governing. Further, the **mediatisation of politics** has recently collapsed politics and entertainment into a 'politainment' world,[1018] where it is eminently difficult to distinguish what is true (or good, or meaningful) from what *looks* true (or good, or meaningful… or is simply eye-catching). Investigative journalism, culture, academia, activists and even religious institutions can do much to expose false information and wrongdoings… but vested interests and organised crime have ways to infiltrate them as well. In the meantime, the **bureaucracies** in charge of the agencies and organisations that regulate forestry, fisheries, agriculture, protected areas, water supply, tourism, etc. become ***de facto* holders of *power* over the natural environment**, which may end up "…diminishing the skills, agility, initiative and morale of their intended *beneficiaries*."[1019]

The relations established between political coalitions in representative democracies and the territories they administer rarely possess the depth of those ingrained in local, customary institutions. The sheer number of decisions they take, the size of their possible consequences and the time horizon of reference are different. When **decision-makers,** such as politicians or bureaucrats, are **not touched in a direct and personal way** by the environmental and social consequences of their decisions, they can follow broad and distant goals while sacrificing local livelihoods and values, no matter how unintentionally. In this sense, **extractivism** and neo-extractivism[1020] appeal to both the right and left of the political spectrum. An example is *the Carajás Project* complex, which has been *causing major* social and environmental damage among Indigenous peoples and peasant farmers in the States of Pará and Maranhão (Brazil).

1013   An often mentioned quote by Winston Churchill recites: "…democracy is the worst form of government except for all those other forms that have been tried…".

1014   Herman & Chomsky, 1988; Martel *et al.*, 2020.

1015   In the USA, the judges of the Supreme Court are nominated by the president and approved by elected politicians. In Switzerland, the top judges are elected by political parties. A Swiss referendum in 2021 failed to secure the election of judges by ballot among a pool of highly qualified individuals. Clearly, political parties do all they can to remain in control of the judiciary.

1016   Political profiteering may allow elected politicians to amass wealth, grant positions of power to allies and even achieve/buy legal immunity. 'Machiavellianism' is defined as a personality trait that describes a propensity to seek power and engage in manipulation to retain power. Caprara and Silvester (2018) report that US presidents who scored highly on Machiavellianism (and thus typically have "a less conventional view of morality, show lower levels of empathy, and are more willing to lie and exploit others in order to achieve personal goals") tend to be considered as "more successful and charismatic politicians".

1017   In the USA, this goes under the name of 'gerrymandering' and influences a process of drawing voting districts that takes place every 10 years.

1018   Nieland, 2008. This statement is not fair to the politicians who try their best for the common good but must confront 'politainment' displayed against them. They may thus adapt their messages along the same vein in ways that are irrelevant, when not negative, for real lives, but consequential for election results.

1019   Scott, 1998, p. 349.

1020   Acosta, 1913. Acosta describes neo-extractivism as the 'contemporary version' of extractivism that emerged under progressive South American governments (e.g. in Venezuela, Ecuador and Bolivia) at the beginning of the new millennium. The prefix 'neo' refers to the enhanced presence and active role of the State in extractive initiatives, which nevertheless remained subordinate to international markets and transnational capitalism, fragmenting territories and generating social and environmental impacts. As the immediate revenues were used to finance social programmes, neo-extractive policies gained a measure of social legitimacy, regardless of expected impacts and costs in the long term.

The gigantic *Carajás Project* complex serves one of the largest open-pit iron mines in the world, in the Amazonian State of Pará. Mining *began there in the 1970s, during the military dictatorship, but continued under all the governments that followed, including that of Lula da Silva's Workers' Party, after the turn of the millennium.*[1021] Under all political regimes, t*he same family oligarchy and industrial company remained in control of the project and its immense economic benefits, while the complex expanded in size, contributing to making Brazil a mining giant. Besides the* huge iron mine, *the complex* includes a 900-kilometre railway, linking to a major port at São Luis do Maranhão (see Picture 12). To supply the iron mine and other bauxite projects, it became 'necessary' to construct the Tucuruí hydroelectric plant, with a capacity of 8,300 megawatts. The Tucuruí dam— at the time of its building, the largest ever in the tropics— displaced 30,000 people upstream and created ecological havoc. The reservoir site had not been cleared of timber prior to filling and the decaying, floating vegetation in a large and stagnant warm water body provided an ideal habitat for mosquitos, which became an unbearable nuisance and a source of vector-borne diseases.[1022] Downstream, altered and diminished water flow and pollution severely damaged all agriculture-based livelihoods. The new, poorly skilled jobs in mining attracted a flow of very poor people from the rest of Brazil, seeding large-scale deforestation as well as cultural disruption and violence. Air and water pollution have been uncontrolled for years and trains four-kilometres long constantly cross the landscape transporting the mined ore and creating barriers for people and animals alike…

1021   See Zibechi, 2014. And, of course, under the following right-wing Bolsonaro government.
1022   Oliver-Smith, 2001; Fearnside, 2001.

As few custodian communities have managed to resist the 'development' onslaught on their land, few have managed to resist the onslaught of party politics and private interests on the traditional organisations in charge of such land. Those who did, or did in part, often possessed some form of **collective legal tenure** to their territory— be it terrestrial or coastal and marine— which kept traditional governance institutions alive and functioning. Some, like the governing *ejidos* in Mexico or *sato-umi* in Japan, were offered collective legal tenure by the State and managed to make good use of it. Others fought for years, often with the support of non-governmental organisations who helped them to understand and take advantage of the national legislation and policies that could favour their empowerment. With diversely robust outcomes, national and international policies have been broadly leveraged in Colombia, Ecuador, the Philippines and Indonesia and in specific situations in Peru, India and China.[1023] Other communities have maintained their *local institutional space* in touch with, but clearly separated from, modern political institutions.[1024] Still others have maintained a strenuous resistance against political parties or State administrations.[1025]

One of the aspects of governance institutions of custodian communities that seem the most difficult to accommodate for modern States is their **collective nature**, *as if their very existence would offer an* **'alternative' to**, *or escape from,* **State authority and private property**. *In this sense, extensive resources such as fisheries, forests or pasture may resist the impact of modernity more effectively because they are best governed collectively.*[1026] Remarkably, *instead of responding to community requests for collective land titles*, some governments have issued a tsunami of small private titles for individuals [1027] in forest environments. This, for instance, took place in the region of Huánuco in Peru. Between 2013 and 2018, the Huánuco authorities issued thousands of individual land titles, attracting migrants from many regions of Peru. The idea was to provide an alternative development strategy to counteract illicit drug production, but the results have proven extremely disappointing, as the individual titles contributed to land grabbing by outsiders, deforestation, proliferation of coca leaf production and hundreds of clandestine labs operating in the area.[1028]

With national specificities, land privatisation processes are taking place in other countries in the Amazon region— often implemented without a clear view of the consequences, despite the available scathing analyses of some of the possible results.[1029] One of the powerful forces **driving dispossession** is the global tendency to create **land markets**, so that land can be leased, sold or even expropriated and put into so-called 'productive use' to 'unlock its value'.[1030] The World Bank and International Monetary Fund are key actors in this, as they push to privatise and commodify land and encourage agribusiness expansion— a pattern found in Ukraine as in Zambia, in Burma/Myanmar as in Brazil.[1031]

Collective legal tenure, however, is **not** a **sufficient** condition for success, as demonstrated by those ejidos that did not fare well1032 or remain in precarious balance today under the assaults of many forces (see case example 29). Strictly speaking, legal tenure is **not even** a **necessary** condition, as spiritual, cultural and livelihoods bonds can provide a community with strength and legitimacy at times more powerful than legal

1023   Specific examples are described in Borrini-Feyerabend *et al.*, 2010.
1024   In this work, see case examples 1 for Spain, 2 for Türkiye, 5 and 28 for Greece, 7 for Italy, 14 for Tanzania, 15 for India, 18 for Iran, 26 for Guatemala, 29 for Mexico and 30 for Peru.
1025   This takes very diverse forms in diverse circumstances. In this work, see case examples 3 for Burma/Myanmar, 9 for the Philippines, 10 for Mexico, 11 for Colombia, 16 for Namibia and 24 for the USA.
1026   This is synthetically recalled in the conclusions of Robinson (2019).
1027   See Pérez, 2021. The titling initiatives were financed by Peru's National Commission for Development and Life Without Drugs (DEVIDA), with financial support from international donors including the US Agency for International Development.
1028   Ibid.
1029   Löhr, 2012.
1030   Mousseau *et al.*, 2020.
1031   Ibid.
1032   See the broad analysis by Merino and Martinez (2014).

rights. The community of Bogdan, in Türkiye's Black Sea region, is a case in point. Up to 2007, the Muktar (headman) of Bogdan and the entire village had managed to prevent any destructive use of their dense hilltop forest as "the forest is too important to secure water and non-timber products, and to prevent flooding of our agricultural fields".1033 Officially, their forest was governed by a governmental agency, and that agency had foreseen harvesting timber from Bogdan's forest… but the community's will to conserve it was so strong that, up to 2007, it had managed to prevail (see Picture 13). Given the relentless 'development' interventions in Türkiye in recent decades, we may only hope that this is still true today.

In view of the immensely powerful changes that have accompanied modernisation throughout the world, even the most basic analysis reveals the importance not only of legality, but also of **legitimacy**[1034] *for governing institutions at all levels.* It is true that many well-intentioned people have supported the political processes ushered in by modernisation, and those political processes have often sought the **empowerment** of individuals, including women and minorities. This, however, has often led to a veneer of change only, as the capacity to vote does not regularly and effectively translate into a capacity to move the compass of power. With voting, there must be **a chance** for diverse groups **to organise** themselves and exercise a **countervailing influence** to organised capital.[1035]

1033   Grazia Borrini-Feyerabend, field interviews and personal observations, 2007.
1034   Berger & Luckmann, 1966.
1035   Andrias and Sachs (2021) stress that organising should occur not only among workers, but among all sort of disadvantaged groups, including tenants, debtors, welfare beneficiaries and others.

For citizens far from, or at the periphery of, affluence and power, the consequences of modernity have also included significant **disempowerment**. We may see improvements in wellbeing if we compare pre-modern and contemporary *urban* citizens in *rich* countries, but doubts arise as soon as we compare pre-modern rural citizens and their contemporary descendants in degraded rural environments or squalid and polluted urban peripheries.[1036] Many of these people suffer today because of the environmental impacts mentioned above, but also because of **cultural losses** (e.g. loss of collective identity, social morality, vision, meaning…)[1037] and **losses in terms of collective self-determination**.[1038] While no general statement is possible for such complex and context-dependent issues, it is worthwhile to promote awareness, learning and institutional flexibility, in particular when societies include groups with very diverse political, economic and cultural features.

Principally as a consequence of colonial dominations and wars, many countries, today, lump together ethnic groups with diverse languages, religions and cultural histories. Such multiculturality is an opportunity but also a great challenge, as many issues and conflicts arise when societies are composed of one or more majority groups and minority groups of diverse ethnic, religious, linguistic and other characteristics. In such cases, some authoritarian and democratic regimes alike have paternalistically imposed the will of the majority "for the good of the minorities", succeeding in *repressing* ethnocultural groups.[1039] Through coerced assimilation of minorities into a central State, forced migration, or even apartheid, ethnic cleansing and genocide, authoritarian and pseudo-democratic governments have denied cultural diversity and violated individual and collective human rights.[1040] There *must* be better ways! Some affirm that socio-political frameworks of **multicultural democracy** provide alternatives to representative democracy, avoid repression, and conform to broad values of justice and peaceful coexistence. Multicultural democracy calls for due recognition of the autonomy of different ethnic groups ("**epistemological egalitarianism**")[1041] and for fair intercultural negotiation of interests and responsibilities ("**deliberative democracy**").[1042] Such new frameworks are particularly arduous, but promising, wherever there is a history of discrimination and oppression between cultural groups, as multicultural democracy seeks ways to peacefully combine cultural diversity and self-determination.

Self-determination is the crucial concept to understand and uphold here, but also the most challenging. On the one hand, the concept is **fully embraced by the United Nations**.[1043] On the other, it is rarely appreciated by State governments, despite the fact that only a small minority of the groups that seek self-determination seek political independence from the State. The concept itself is challenging, as it takes on different meanings and involves different institutional requirements depending on concerned groups. Some focus on maintaining or restoring their **culture** (language, values, traditions, religion, ceremonies, ways of living…). Others seek some

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1036   On the comparative benefits and costs of development for rural and urban citizens see Lipton (1977).
1037   Berger, 1976.
1038   See Sen, 1999.
1039   Valadez, 2018.
1040   For a recent overview see Amnesty International (2023).
1041   Public deliberation should not be confined to purely cerebral, disputative discourse. It should enhance mutual sympathy and emotive understanding of each other's life circumstances, values and concerns, including modes of reasoning and the consequences of racist and prejudiced attitudes and stereotypes (see again Valadez, 2018).
1042   Deliberative democracy demands an in-depth understanding of policy options, a capacity for mutual respect and compromise, and an understanding of the collective good. This can lead to 'consensus' (see: https://www.seedsforchange.org.uk/consensus accessed 2024) or at least to deliberations set out in structured public settings that are reflective and respectful. This can at least lead to some mutual understanding even when entrenched positions and past history render cooperation very difficult to achieve.
1043   Article 1 of the UN Charter of 1945 calls for "respect for the principle of equal rights and self-determination of peoples…". Article 1 of both the UN International Covenant on Economic, Social and Cultural Rights and the UN International Covenant on Civil and Political Rights of 1966 also state that "All peoples have the right to self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social, and cultural development."). The International Court of Justice recognises the right of self-determination as "…one of the essential principles of contemporary international law" and described as "irreproachable" the assertion that the right of peoples to self-determination has an erga omnes character (see https://www.icj-cij.org/case/84 accessed 2024). Self-determination is also recognised in international law as a right of process, which is proper to peoples (not to States or governments). Thus, the right to self-determination is an erga omnes 'hard' right, although a right to process, not to outcome, and a wide range of possible outcomes depend on the situation, needs, interests and conditions of the concerned parties (refs here: https://unpo.org/article/4957 accessed 2024). Self-determination is explicitly at the core of the UNDRIP and implicit in the demands of many non-Indigenous custodian communities in the UN Declaration of the Rights of Peasants (https://www.ohchr.org/sites/default/files/Documents/HRBodies/HRCouncil/WGPleasants/A-HRC-WG-15-1-2_En.pdf accessed 2024).

form of **autonomous governance over land and the material basis for livelihoods**. Still others aim at a separate **deliberative body** that may secure a level of **political autonomy**. For many Indigenous peoples and communities, self-determination includes diverse and specific combinations of the three, as a way of securing survival for their natural and cultural, material and immaterial heritage and preventing *de facto* assimilation.[1044] For instance, *ethno-nationalists* (e.g. Catalan nationalists) focus on maintaining their traditional **language** and **mores**, but also some kind of **separate deliberative body**, possibly within a larger federal structure. Other groups feel they have an exceptionally strong bond with their territories of life and their **cultural rights and food security** require a formal recognition of their control over their material basis for livelihoods.[1045] Other Indigenous peoples are adamant that their territory should be governed by an autonomous political structure (such as a tribal council or Indigenous parliament) which may exist in parallel with the State, although as collaboratively as feasible. The Karen people of Burma/Myanmar and the Wampís Nation of Peru offer excellent examples of such positions (case examples 3 and 30 in this document).

Any group that seeks recognition and some form of self-determination as part of a State (or beyond) needs to offer a rationale and justification for that. Some Indigenous peoples and ethnically self-defined groups stress that some level of autonomy is needed to safeguard their *cultural integrity*, or to provide them with *reparatory justice* for violations that happened in the past, including being evicted from their territories for the establishment of protected areas. In some cases, it is also possible to argue that they possess some *unique knowledge and mētis* to manage the biocultural diversity and ecological functions in their territory.[1046] In this sense, their **'biocultural rights and responsibilities'** are **fundamental to justify** some form of social 'positive discrimination' in their favour and their **desired level of self-determination**. This rationale is based upon the recognition of the value of *conservation by cultural communities* ('community conservation' in short) and will be discussed in the following section.

Overall, the concept and emerging practice of multicultural democracy may offer a glimpse of *new* institutions able to **combine self-determination** in socially and ecologically coherent territorial units **with 'human'** (and humane) **values** and principles upheld at larger regional or planetary level. Depending on the viewer, this may appear as an unrealistic utopia… or as one of the few political frameworks compatible with a sustainable future. The latter view is well expressed by Murray Bookchin: "…a balanced community, a face-to-face democracy, a humanistic technology and a decentralised society" need to be taken at the heart of a revolutionary approach to solve our social and environmental crises, as "…they belong not only to the great visions of a human future— they constitute the preconditions for human survival."[1047]

1044 Self-determination may also mean maintaining the capacity to define 'self-determination' in any changing context.

1045 See the case of the Djola people who established the Kawawana community conserved area in Casamance (Senegal) described in Part IV. The Djola could argue they are an Indigenous people, but even a 'local community' could make a case that its distinct culture is so connected to a particular place that its members' ability to continue to enjoy and perpetuate their culture depends on protecting its relationship with that place. In such case, some human rights tribunals and other bodies have held that States cannot take actions that would adversely impact that relationship without the free, prior and informed consent of the community. The leading case is Saramaka People v Suriname, decided by the Inter-American Court of Human Rights in 2007 (John Knox, personal communication, 2023).

1046 Some Indigenous commentators oppose any such discourse, as it seems to pose a conditionality for the rights of Indigenous peoples, which for them should be recognised 'unconditionally' (Delfin Ganapin, personal communication, 2023).

1047 Citation from Bookchin's 1965 essay entitled "Ecology and anarchy" quoted on page 273 of Graham (2009).

To speak of the natural death of village communities in virtue of economic laws is as grim a joke as to speak of the natural death of soldiers slaughtered on a battlefield.

Peter Kropotkin, 1902

The discovery of community conservation

The understanding of the conservation value of the careful, sustainable and in many ways protective interaction of communities with their natural environment is a recent phenomenon, traceable for **just about fifty years** in reports and specialised literature (see below) under the broad term of **'community conservation'**. That the **idea** is **young** is understandable. After all, the concept and practice of 'conservation of nature' as many understand it today have been unfolding only in the last couple of centuries.[1048] And the fact that local communities have comparative advantages in conserving the natural environment that supports their livelihoods has taken time to be acknowledged. Moreover, 'community conservation' has been differently perceived and framed by *outsiders*— naturalists, governmental agencies, NGOs, conservation professionals, political activists, religious leaders, artists… and by *insiders*— local communities and Indigenous peoples as custodians of their territories.[1049] While the diverse perceptions and frames could be entangled, the former were more easily recorded than the latter. The latter were at times described and interpreted by observers (e.g. anthropologists) but started to surface globally only recently, helped by social media and the possibility for custodians' representatives to travel and speak on behalf of their communities at international meetings and conventions.[1050]

To illustrate the phenomenon, we will report below both the voices of observers who wrote about conservation of nature in general and did, or did not, recognise the value of resident communities as governing and managing agents. We will also report the voices of the custodians themselves, those who self-identify as such and are mutually recognised by their peers. These diverse voices have highlighted different aspects of 'community conservation', contributing distinctive meanings and consequences.

Some of the scholars who wrote eloquently and at length about the birth of the conservation movement do not mention 'community conservation' at all— neither as a historical phenomenon nor as a concept. For instance, Sir Martin Holdgate recounts that the conservation movement we know today was born in the last couple of centuries with roots in three main sources: "…the rediscovery of the romantic in nature; the scientific exploration of the natural world; and the revulsion at the cruel destruction of some wild species, especially birds."[1051]

1048 Merchant (1980) describes John Evelyn (1620–1706) as one of the first 'conservationists'. In his volume Silva, A Discourse of Forest Trees and the Propagation of Timber in His Majesty's Dominions he decried the havoc caused by those who exploited the natural forests of England to extract timber for shipbuilding and other early industrial uses of wood and other natural products. Similar issues were even earlier noted by the Republic of Venice which promulgated rules for the conservation of oak forests to protect stands precious for shipbuilding. When discussing the origins of 'conservation', the philosopher king Ashoka of India, who forbade the killing of animals not destined to be eaten, is also often recalled. 'Conservation' as land-use category, however, is a much younger concept, as discussed in this section and in Part I of this work.

1049 Anthropologists describe these different perceptions and frames as etic and emic, respectively.

1050 See case examples 9 and 23 (part a. and part b.) in this work. See also this short movie describing territories of life in the words of their custodians: https://youtu.be/70mt7bozJb8?list=PLuBpRnNXhKyQciWz4bRRdPqtLBaT5tdts accessed 2024. The websites of organisations such as the ICCA Consortium (www.iccaconsortium.org) and its members, IIFB (https://iifb-indigenous.org/ accessed 2024), LifeMosaic (https://www.lifemosaic.net/ accessed 2024) offer many other rich videos where custodians explain their work.

1051 Holdgate, 1999, p. 3. Remarkably, Sir Martin Holdgate himself— serving as Director General of the International Union for Conservation of Nature (IUCN) from 1988 to 1994— established the IUCN's first Social Policy Programme and explicitly allowed it to focus on 'community conservation'. Grazia Borrini-Feyerabend negotiated such an orientation with him in the process of being hired as Head of that programme, in 1993. In the early 1990s, IUCN was thus open to community conservation approaches, although still as contributions to the mainstream rather than major elements per se. From 1993 to 1997, the IUCN Social Policy Programme highlighted a variety of social factors promoting sustainability in conservation (Borrini-Feyerabend with Buchan, 1997) and focused on 'collaborative management' of protected areas (Borrini-Feyerabend, 1996). The latter subject provided— in theory and practice— an early step towards clearly distinguishing 'management' from 'governance' and understanding 'governance' as a crucial factor in determining conservation outcome. See also Tables 1 and 7 in this work.

These sources can be identified in the works of influential philosophers (e.g. Rousseau, Thoreau, Haeckel…), writers and poets (e.g. Goethe, Emerson, Whitman, Thoreau, Muir…) and naturalists who accompanied the journeys of colonial conquest and trade (e.g. Banks, Darwin, von Humboldt and less well known others[1052] who wrote about the ecological devastation of colonial exploitations). Also important was the work of naturalists like Linnaeus, Marsh, Leopold and Odum, and of 'managers' like Pinchot, who laboured to use the gifts of nature in wise ways. Many pioneer conservationists lamented inexcusable excesses, such as the devastation of bison in the USA, big 'game' in Africa, egrets for the fashion industry and the passenger pigeon shot to extinction by careless hunters.[1053] Some conservation sentiments were said to be motivated by a **mystical** and rather exclusionary desire to **protect wilderness**, and others by a **rational/utilitarian** will to **use sustainably** the **beautiful and productive countryside**.[1054] 'Community conservation' is nowhere mentioned.

Mystical or utilitarian, all conceptual origins of 'conservation' had to coexist with a **mercantilist vision of nature**, one of nature transformed and used to generate wealth in processes of modernisation of the economy and social development.[1055] For centuries, human communities had *occasionally* used fossil fuels, like coal, oil and gas.[1056] In the 19th century, however, the invention of the steam engine and other machines made possible an exponential, self-feeding extraction of fossil fuels for the industrialisation processes. This brought about the dramatic improvement in the capacity to produce, process, transport, market and consume goods and services, resulting in the increase in total population, and the accumulation of financial, political, military[1057] and 'cultural' power at the root of the current unprecedented wealth, consumption, environmental crises and climate change prospects.[1058] Rural communities bore the brunt of this dramatic change[1059] as part of processes that Peter Kropotkin recalls as follows: "The village communities had lived for over a thousand years […] But as the value of land was increasing in consequence of the growth of industries, and the nobility had acquired, under the State organisation, a power which it never had had under the feudal system, it took possession of the best part of the communal lands, and *did its best to destroy the communal institutions*".[1060] It is thus not surprising that the **role of traditional communities as caretakers of nature** appears **absent** from the perspective of the visionary conservationists of the 19th and early 20th century.

Many early conservationists were cultivated and generous gentlemen who spared no resource or effort to highlight the problems of nature in an increasingly industrialised world, and to organise, nationally and internationally, to tackle them.[1061] But the gentlemen did not see any role for human communities living with nature in traditional ways… if and when they even considered the *existence* of such communities.[1062] Presumably, they were influenced by the 19th century's anthropologists who espoused a view of **linear human progress from *savagery* (hunters and gatherers) to *barbarism* (early agriculture) to *civilisation* (urban life)**.[1063]

1052 Examples include Alexander Gibson, Edward Percy Stebbing and Dietrich Brandis.

1053 For an account of the complexities involved see https://www.si.edu/spotlight/passenger-pigeon accessed 2024.

1054 This dilemma is also exemplified by the chapter titles of a book by Thomas (1983): "Town or country?", "Cultivation or wilderness?", "Conquest or conservation?", "Meat or mercy?".

1055 As described by Merchant (1980) the utilitarian vision of conservation preceded the others.

1056 Simmons, 1989.

1057 Robinson W., 2018.

1058 IPBES, 2019.

1059 See Polanyi (1944). In the late 20th century, the "poor" could also be seen as 'responsible' for environmental degradation, see Mink (1993) and Dasgupta and Mahler (1994).

1060 Kropotkin (1902, reprinted 1955, p. 236, italics added). Kropotkin has a moving description of the ways by which, for centuries, peasant communities in various European and Asian countries and in North Africa resisted their dispossession and tried to keep alive, via mutual aid, the fabric of their rural societies.

1061 Holdgate, 1999; Adams, 2004. Most of the earliest mentioned conservationists were all men. Merchant (1980) reports that women activists of the Federation of Women's Clubs established in 1890 in the USA supported the preservationist movement for parks and wilderness areas led by John Muir and Frederick Law Olmsted, which eventually split from the more managerial and utilitarian wing headed by Gifford Pinchot and Theodore Roosevelt.

1062 1063 In 17th century England, peasants could be treated as 'peons at the disposal of gentlemen'. Take, for instance, this quote: "Many gentlemen ceased to live in the middle of the village and distanced themselves by removing to the centre of a landscaped park, if necessary [by] obliterating or removing the village so as to provide a sense of space and separation." (Thomas, 1983, p. 203).

1063 Morgan, 1877. Incidentally, this view was also a powerful justification for colonialism.

Moving from the 'irrational', magical, and superstitious beliefs assumed to characterise 'less civilised' people to the 'rational' and scientific thought posited for modern conservationists could be seen as a sure progress in conserving nature. As appealing as this argument might have been in the early 20th century, it became less and less credible after the ravages of two world wars, and in light of post-modern philosophy and cultural anthropology, fast evolving following the work of Boas and Mauss.[1064] The study of a variety of cultures in different geographical environments gave a better appreciation of the ingenuity, richness and intrinsic social and environmental meaning of their associated worldviews and institutions.[1065]

A notable culmination of the efforts of pioneer conservationists in the 20th century was the 1948 establishment of the International Union for Conservation of Nature[1066] (IUCN) in Fontainebleau (France). To underscore the little attention it paid to 'community conservation', the very first IUCN Resolution mentioning 'local communities' was approved only ten years later, during the **1958** Sixth IUCN General Assembly in Athens. Revealingly, Resolution 5 recommends using "...**expert advice and assistance to *instruct* local communities** to understand and actually carry out sound methods of conservation by which their available natural resources are to be improved and developed".[1067] This paternalistic attitude whereby local communities cause problems and 'experts' need to bring solutions to them will continue to be part of some conservationists' thinking for decades to come. Remarkably, the first UN Conference on the Human Environment, held in Stockholm in 1972, stressed that "the protection and improvement of the human environment [...are] the duty of all Governments" and its declaration, principles and dense action plan do not once mention local communities as a relevant actor or source of knowledge and capacities.[1068]

An alternative vision emerged in a formal report a few years later. In **1975**, the Charter for Nature approved on the occasion of the 12th IUCN General Assembly in Kinshasa,[1069] and specifically Resolution 5,[1070] stressed: "... the **value and importance of traditional ways of life** and the skills of people which enable them to live in harmony with their environment... [as well as] the vulnerability of Indigenous peoples and the significance they attach to land ownership". Because of this, "...governments should maintain and encourage traditional methods of living and customs which enable communities to live in harmony with their environment [...] education should emphasize ecological principles from local cultures and traditions [...] governments should devise means by which Indigenous peoples may bring their lands into protected areas without relinquishing their ownership, use, and tenure rights [...] to the lands they have traditionally occupied". The same Resolution 5 also stressed that: "...peoples should not normally be displaced from their traditional lands [...and] their natural values should be respected and integrated in the early planning stage of every urban or industrial

1064   Throughout his work, Boas strongly argued against racism and 'social evolution' theories and for understanding cultures in relation to their unique environments and historical settings. For him, the people hitherto considered objects of ethnographic study were instead subjects, endowed with creativity, agency and capacity to teach. And the work of Mauss focused on the complexity and multiple values (e.g. economic, religious, aesthetic, social) of human exchanges and gifts in diverse cultures. After them, most anthropologists based their analyses on models informed by political ecology and political economy (see Horowitz, 1995).
1065   See Geertz (1973, p. 5). The very existence of diverse 'cultures' calls into question the notion of progress.
1066   The original name was International Union for the Protection of Nature, later changed to Conservation.
1067   Italics added. All IUCN Resolutions and Recommendations are available from a searchable repository (e.g. by year and topic) hosted by IUCN at https://portals.iucn.org/library/resrec/search accessed 2024.
1068   United Nations, 1973. If it bypasses entirely 'community conservation', the report mentions the need for "local labor, material and expertise" and has the merit of setting the basis of environmental justice in its first principle (p. 4), which reads: "...Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and wellbeing, and he bears a solemn responsibility to protect and improve the environment for present and future generations. In this respect, policies promoting or perpetuating apartheid, racial segregation, discrimination, colonial and other forms of oppression and foreign domination stand condemned and must be eliminated."
1069   IUCN, 1975, p. 151.
1070   As noted, for the full text of the Resolution, see the IUCN repository https://portals.iucn.org/library/resrec/search.

development scheme".[1071] While this perspective was not the central preoccupation of the Charter and while several issues were refined only years or decades later,[1072] **the kernel of understanding communities as key actors in conserving nature is fully present here**, as is the understanding of the pernicious impacts that development initiatives inflict upon them.

If the "three main sources" recalled by Sir Martin Holdgate were possibly sufficient to explain the motivations of conservationists in the early 20th century, this was no longer true in the post-World War II era, when most custodians, scholars and activists became fully aware of the negative consequences of rampant 'development'. By the 1960s and 1970s, it was commonly known that industrial production and consumption were damaging the living environment of everyone, in the North as in the South of the world.[1073] Some devoted themselves to study the environmental and social impacts of development, hoping to prevent negative impacts in the future.[1074] On the grounds of such studies, by the early 1970s some scholars were asserting that serious negative impacts were "*systematic* consequences", an indication of "deep faults in our approach to development".[1075] And some stressed that development interventions were designed by experts with "beams in their eyes".[1076] It is in this light that many awoke to a new crucial reason to pursue **conservation** as **a response to the deleterious impacts of development** upon ecosystems, species, genetic diversity, human health and the climate.[1077] Remarkably, this dovetailed with the counter-culture movement of the 1960s, a "polymorphic wave of revolt against traditional societal attitudes and values"[1078] that swept the industrialised North and expressed itself in new music, new poetry, activism against social inequities and war, strong spiritual tendencies, and new consciousness about environmental issues.

What was included in the new understanding of 'conservation' as a response to the ills of development? Under the flag of the counterculture movement, we can identify **diverse streams** of **environmentalism**.[1079] One comprised the scientists, experts and citizens at large who focused desired action on managerial and techno-logical improvements towards "better development" and "better living". This stream of **reformists** advocated

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1071   It is worth noting that the Charter for Nature also recommends that "isolated indigenous cultures are allowed to continue to live on the lands they have traditionally occupied" (IUCN, 1975, p. 161) and the adopted Work Principles include the idea that "in studying, planning and implementing projects, every effort shall be made to involve the local populations to participate so that their needs, opinions, ways of seeing, aspirations, and knowledge are taken into account" (ibid, p. 173). As part of the technical discussions, John Morton Boyd convened a group that stressed "the real costs and environmental impact of corporate development decisions on people and communities" and called for "a change of values or ethics". The group noted that "rural people and particularly tribal people are very conservative by nature. They realize that they are dependent on their immediate environment and wise use of its resources to safeguard their livelihoods". It also affirmed that "developers must appreciate the conservation values of rural people [...], not enforce their ideas on them [and] only say what they know better" (ibid, p. 300, italics added).

1072   For instance, Resolution 7 of the 1981 IUCN General Assembly of Christchurch noted that "human societies are rapidly losing their original spiritual dimensions, self-reliance and wisdom as they change from traditional lifestyles to modern ways of life [and become] increasingly dominated by urban society". It recommended to "...take into account the still existing very large reservoir of traditional knowledge and experience within local cultures which must provide a significant basis for the evolution of future management policies and planning actions" and to "provide means for local people who maintain ecologically sound practices to play a primary role in all stages of development in the area they identify with [and in] shaping and implementing conservation strategies, programs and plans." In 1988, Resolutions approved by the General Assembly of San José began to call attention to some 'development' initiatives that were, or could be, seriously damaging to the environment and the rights of Indigenous peoples and local communities. Resolutions in the following three IUCN General Assemblies also elaborated on the role of local communities and Indigenous peoples and stressed their capacities and rights to "sustainably use natural resources".

1073   A well-known example is Carson (1962) but a few months earlier Bookchin (1962) had also published a remarkable treatise where he spelled out the new ills affecting individuals and societies as a consequence of development. By the 1960s, people alive today still remember that they could hardly breathe in the Ruhrgebiet— the industrial centre of Germany. By the 1970s, the effluents from chemical industries had rendered unfit for consumption the fish from the Rhine River, which historically hosted massive salmon runs. Industrial, agricultural and domestic waste became a serious problem all over the industrialised North, and major industrial accidents, like those of Seveso (Italy, 1976), Love Canal (USA, 1978) and later Bophal (India, 1984), alerted public consciousness.

1074   Bookchin, 1962; Carson, 1962; Commoner, 1971 and 1972b; Farvar & Milton, 1972; Ball, 1975; Bodley, 1975; George, 1977; *Davis, 1977;* Goudie, 1981 (and references therein).

1075   Commoner, 1972a.

1076   (Myrdal, 1968). This means that experts were imposing, possibly unconsciously, the biases embedded in their professional outlooks.

1077   Population growth, the growth of consumption and the consequences of waste and pollution on human, animal and plant life were the main considerations at the beginning of systematic efforts to assess the damage and remedies for industrial uses of nature. Climate change was a much lesser worry, but not absent. For instance, climate change risks were mentioned in the pioneering report by Meadows *et al.* (1972) to the Club of Rome. The view of "conservation as a reaction to the negative consequences of development" is described and commented upon, among many others, by Merchant (1980), McCormick (1986), Colchester (2003) and Adams (2004).

1078   Dasmann, 1974.

1079   Devall, 1980.

for more protected areas[1080] but also for improved landscape planning, less pollution, more organic farming, reducing waste products and more recycling.[1081] They opposed nuclear weapons and nuclear power and war in general,[1082] asked for weapons factories to be converted into peaceful production and advocated for creating, as soon as possible, the conditions for sustainable living on the planet.[1083] All this helped to redefine development as an approach to politics and the economy that **"serves human needs and the needs of the environment rather than 'the industrial State'"**.[1084] As part of that, contemporary societies could take inspiration from traditional societies, adopting some of their practices. For instance, the **traditional environmental knowledge**, skills and capacities of pre-industrial cultures (and preliterate peoples) were re-evaluated and highlighted.[1085] Some reformists were also adamant in calling attention to the need for population control.[1086] And, while some stressed that people's movements were central to advancing the needed new policies and ideas,[1087] others advocated for authoritarian systems, deemed the only ones able to take the needed reforms to completion.[1088]

For other streams of environmentalism, adjustments and reforms to the growth-oriented, industrial societies were clearly not enough. The **'deep ecology'** movement,[1089] for instance, emphasised the spiritual and ethical dimensions of the relation of people with/in nature and the need to renew such personal, spiritual relations first and foremost. Deep ecologists opposed the narrative that humanity is in charge of nature and nature exists for humanity to exploit, which they saw as a by-product of the dominant Judeo-Christian worldview.[1090] They advocated for a new understanding of humanity[1091] and for economics to be subordinate to ecological-ethical criteria. For them, the industrial society was far from the end goal everyone should work for. Rather, societies should aim at soft energy paths and appropriate technology to enable a **"return to the land"** and sustainable lifestyles in **"decentralised villages"**,[1092] where people may practise organic, labour-intensive agriculture, hunting and gathering, and develop themselves through spirituality, various forms of leisure, and the arts. In this perspective, 'wilderness' demonstrates its deep wisdom via the stability of natural processes untouched by humans, and vast areas of the planet's biosphere should be maintained off-limits to industrial exploitation and large-scale human settlements, protected by some sort of a "wilderness police".[1093] Deep ecologists considered that a smaller human population should roam the planet and envisioned a utopian world that prioritises social-ecological wellbeing over corporate profits, over-production and excess consumption. To approach this, however, they deeply distrusted governments, political compromise and even environmental professionals.[1094] While for them **ecological resistance** was a must, they chose *not* to organise politically and

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1080   Nash, 1967.
1081   Commoner, 1971; Ridgeway, 1970.
1082   The environmental consequences of war— horrendous in all cases— became dramatically visible after the use of Agent Orange during the Vietnam war— a moment of new awareness of the links between politics and the global environment that is coming to fruition today with the concept of 'ecocide' (Zierler, 2011). Review by R. Alan Hester, 18D, MA.
1083   Amory Lovins *et al.*, 1980.
1084   Commoner, 1972a.
1085   In the words of John Milton "... the post-World War II idea that traditional societies can and should be overhauled overnight has not only proved virtually unachievable, but perhaps undesirable" (p. xiii in Farvar & Milton, 1972, italics added). See also Berkes and Farvar (1989).
1086   Ehrlich & Ehrlich, 1970; Ehrlich & Holdren, 1971.
1087   Holsworth, 1979.
1088   Robert Heilbroner, quoted in Holsworth, 1979.
1089   See, for instance, Naess (1973). A useful review of the early key tenets of deep ecology is in Devall (1980).
1090   White, 1967. In this influential article, White stressed the historical origins of environmental crises in "orthodox Christian arrogance toward nature", and a remedy in a different kind of spirituality (or worldview): the humility and "pan-psychism of all things, animate and inanimate" espoused by Saint Francis— described as ideal patron saint for ecologists.
1091   Devall (1980) quotes Spinoza, for whom man is a "temporary and dependent mode of the whole of God/Nature".
1092   Dasmann, 1974.
1093   Devall, 1980.
1094   Devall (1980) quotes a 1976 lecture by Raymond Dasmann where he states that environmental professionals "do not raise embarrassing issues [...] do not question the system [...] and recognize the 'economic necessity' that is destroying most of nature on our planet".

most of them maintained their radical and revolutionary nature within the sphere of personal worldviews and behaviours.[1095]

In contrast, the school of thought known as **'social ecology'**[1096] stressed the need for collective political organising. It emphasised the political dimension of the damage that development was inflicting upon the environment and people, and it saw solutions only in political action. Like deep ecologists, social ecologists called for a sweeping change in mainstream worldviews and narratives. They similarly rejected people's domination over nature, but they also rejected nature's domination over people, seeking *complementarity* between humans and nature. And complementarity, for them, could only be achieved by **people behaving as moral agents**, for instance when rejecting all hierarchical lines of supremacy or inferiority and acting to **"diminish needless suffering"**, **"engage in ecological restoration"** or **"foster an aesthetic appreciation of natural evolution in all its fecundity and diversity"**.[1097] For social ecologists, ecological problems could not be confronted by changes in personal attitudes and behaviours only— as the system could easily counteract or coopt all of those.

Many social ecologists adhered to the work of Murray Bookchin,[1098] who saw social conflicts at the core of ecological problems. He criticised, in particular, the hierarchical mentality and class relationships that permeate industrial expansion, markets and 'progress' promoted by corporate powers, invariably paid for by nature's integrity and people's health. If the causes of environmental degradation rest with the unjust, hierarchical relationships in capitalist societies, solutions must be alternatives to that, nourishing spontaneity, mutualism and solidarity. Accordingly, environmentally sound living must be rooted in **decentralised, non-authoritarian, small-scale communities and systems of production**, able to embrace diversity, complementarity and a sound level of autonomy.[1099] That change may only be brought about by well-organised collective action, using **direct democracy**[1100] in decision-making and seeking direct democracy for all major decisions in society. The theory of social ecology is quite clear and its wide appeal continues today.[1101] Its application in practice,[1102] however, has been relatively limited— an indication of its own limitations and/or the challenges facing any radical alternative to the current system of power.

1095   Some deep ecologists united under the banner of Earth First!, a loose network of autonomous groups devoted to the radical protection of wilderness and wildlife, no compromise accepted. Others integrated various forms of eco-feminism, or animal rights movements. Critics of the deep ecology movement (e.g. Morris, 1993) challenge the idea that humans should 'obey' the 'laws of nature', as that may imply that children should be left to die because disease and hunger are natural checks that help to maintain the 'balance of nature'. They note that deep ecologists "have no really 'deep' critique of the State, empire, technology and capital" and that not humans per se but the capitalist system reduces both nature and human beings to commodities, destroying the cultural integrity of communities and devastating the natural world through deforestation, monoculture and pollution.

1096   In the words of Murray Bookchin (1993), social ecology "...recognizes the often-overlooked fact that nearly all our present ecological problems arise from deep-seated social problems. Conversely, present ecological problems cannot be clearly understood, much less resolved, without resolutely dealing with problems within society".

1097   Bookchin (1993).

1098   Social ecologists are also referred to as eco-anarchists (see Macauley, 1988).

1099   Bookchin (1980) describes an eco-community as a "decentralized community that allows for direct popular administration, the efficient return of wastes to the countryside, the maximum use of local resources... [...] yet large enough to foster cultural diversity and psychological uniqueness."

1100   Social ecologists distinguished themselves from welfarists and Marxist socialists by refusing the dependency on growth and technological innovation and stressing direct democracy and communitarianism. Constructive critics like Andrew Light (1989) note that— despite its calls for political action— social ecology is not a movement but a theory, and that it has come to be represented almost exclusively by Bookchin's work. Digressions and diversions from his thinking were quickly rebuffed, rejected or frustrated by Bookchin himself, in particular when coming from those perceived to be in the camp of 'deep ecology', but not only. Ultimately, Light maintains that the entire school of thought stagnated and became "ideologically isolated as the work of one man alone" (ibid, p. 11) failing to develop through critical and constructive dialogue with other views. This is particularly regrettable as Bookchin was among the very first— if not the first— powerful critic of the ecological consequences of unbridled development and his analysis of social-ecological alternatives is particularly inspiring. Bookchin's most profound weakness is said by Clark (1998) to be his "abstract idealism [...] away from an active and intelligent engagement with the complex, irreducible dimensions of history, culture and psyche". Understandably, it must have been difficult for Bookchin to have been the prophet of political ecological awareness only to see some of his contemporaries reducing that to a vague feeling of pantheism, irrelevant for the rest of society.

1101   E.g. by adherents to the Transnational Institute of Social Ecology (https://trise.org/ accessed 2024).

1102   Bookchin took inspiration from the Paris commune of 1871 and the collectives of 1936 in revolutionary Spain. While he was alive, however, he did not inspire large-scale social experiments but only relatively small-scale efforts, such as self-organised 'affinity groups' that sprouted as part of the anti-nuclear movement of the 1980s. Bookchin's ideas were later embraced by the Kurdish leader Abdullah Öcalan and are said (ibid) to be applied today by Kurdish communities in the Rojava region of northern Syria and in Turkey. In a similar vein to Bookchin, thinkers such as Cornelius Castoriadis and Hannah Arendt also advocated for direct democracy as an alternative to representative 'democracies'.

In all, several streams of environmentalism that emerged in the decades after the end of World War II appear to perceive **'communities' as key actors in solving environmental ills**. The reformists stressed food production and problem-solving based on local, small-scale technology and sustainable living. The deep ecologists advocated for decentralised villages where spirituality and a simple life could be developed by individual choice. And the social ecologists perceived communities as absolutely central to autonomous, non-authoritarian, solidarity-based lifestyles. From appreciating ecologically sound living in rural settings it is not a large step to realising that 'traditional communities' ought to be praised and supported for the role they play for the conservation of nature.[1103] It is to be guessed, however, whether and when this realisation came to the **attention of policy-makers**. The environmentalists who enthusiastically mobilised in support of the United Nations Conference on the Human Environment, held in Stockholm in June 1972, were largely disappointed.[1104] Yet, a substantial change in perspective about the role and capacities for conservation of local and traditional communities is evident when we compare the 1958 IUCN Resolution 5 of Athens and the 1975 IUCN Resolution 5 of Kinshasa, as mentioned at the beginning of this section. Possibly that change of perspective remained for a long time confined to some environmentalists. The extent to which policy-makers at large may have been influenced at the time— or may even be influenced today— is still unclear.

We take he IUCN Kinshasa Resolution 5 of 1975 as the starting point of a series of policy statements, global events and pioneer publications— listed as a timeline in Table 1— that deal with recognising the meaning and value of 'community conservation'. We will later discuss some of these in more detail, but it is useful to have a sense of the timeline as it clearly shows the progress in recognition— particularly in terms of territorial conservation results— even if that progress was never smooth, and qualms and oppositions were encountered all along the way.

Table 1.

A timeline of selected global policy statements, events and pioneer publications concerning the meaning and value of *community conservation*[1105]

1975	The IUCN 12th General Assembly in Kinshasa approves its Charter for Nature and IUCN Resolution 5 on protection of traditional ways of life— both statements include the kernel of understanding Indigenous peoples and rural communities as key actors in conserving nature;
1981	The IUCN 15th General Assembly in Christchurch approves Resolution 7 on traditional lifestyles and local people in conservation and development;

1103   By the 1980s, the term 'traditional ecological knowledge' was widely in use (Berkes, 2012).

1104   Dasmann (1974) notes that the results of the United Nations Conference on the Human Environment, held in Stockholm in June 1972, proved a major disappointment for those who had expected more than 'business as usual' as delegates were hardly accessible for environmentalists to engage them in discussion. For the reformists, however, the creation of the United Nations Environment Programme was victory enough. See also footnote 1068.

1105   This list— undoubtedly incomplete— highlights events, policy statements and publications that make a case for the global value of community governance for conservation (note that the term 'management' was used to also mean 'governance' up to the early 2000s). Events and publications with regional or sectoral focus are not included, nor are the many publications, resolutions and events that focus on recommending the 'participation' of Indigenous peoples and local communities and the recognition of their rights and knowledge regardless of their conservation value or in view of their capacity for 'sustainable use' only. All CBD COP results are available from the CBD website (https://www.cbd.int/cop/) and all IUCN Resolutions (https://portals.iucn.org/library/resrec/search) and IUCN Best Practice in Protected Area Guidelines (https://portals.iucn.org/library/taxonomy/term/35899) from the IUCN Library Service.

1985	IUCN publishes *Culture and Conservation: The Human Dimension in Environmental Planning,*[1106] illustrating examples of the conservation role of *traditional cultures;*
1986	The Conference on Conservation and Development (Ottawa, Canada) discusses *common-property, self-determination and cultural diversity* as supportive of 'management of natural resources';
1987	IUCN publishes *Conservation with Equity,* Proceedings of the 1986 Ottawa Conference on Conservation and Development,[1107] including discussion of social self-determination and cultural diversity issues; The United Nations publish *Our Common Future,* also known as the Brundtland Report,[1108] which includes statements of concern about small and isolated "vulnerable groups" that "live in harmony with the environment" and about "empowering people's organizations"; yet, the call for action of the Brundtland Report by-passes community conservation entirely;
1989	Belhaven Press publishes *Common Property Resources*: *Ecology and Community-Based Sustainable Development,* whose introduction[1109] highlights the conservation value and 'ecological sustainability' of commons regimes;
1990	The Primary Environmental Care Workshop (Siena, Italy) defines the primary environmental care approach, and the *Workshop Proceedings*[1110] distil its conditions for success; Cambridge University Press publishes *Governing the Commons: The Evolution of Institutions for Collective Action;*[1111] Integrated conservation and development projects (ICDPs)— large-scale but often not 'integrated' and hardly influenced by the custodians of local territories— absorb resources and accumulate experience… but also confuse the language of 'community conservation';[1112]
1991	IUCN, UNEP and WWF produce *Caring for the Earth: a Strategy for Sustainable Living,*[1113] whose chapter 7 is dedicated to 'Enabling communities to care for their own environment' via the primary environmental care approach; The *Summary* of the Strategy— its only element translated into several languages and widely diffused— includes only a few words on community conservation;
1992	The UN Earth Summit and Convention on Biological Diversity focus on action by State governments; only CBD article 8j (on traditional knowledge for *in situ* conservation) and articles 10c and 10d (on customary sustainable use and restoration of degraded environments) make reference to community action; The primary environmental care approach is included in Agenda 21— the non-binding Plan of Action of the UN Earth Summit; Local 'Agenda 21' plans are encouraged for all CBD signatory countries;
1993	The IUCN Social Policy Programme is established and allowed to focus on community conservation;

1106   McNeely & Pitt, 1985.
1107   Jacobs & Munro, 1987.
1108   World Commission on Environment and Development, 1987.
1109   Berkes & Farvar, 1989.
1110   Borrini, 1991. See also Pretty and Gujit (1992).
1111   Ostrom, 1990.
1112   See, for instance: Alpert, 1996; Newmark and Hough, 2000; Hughes & Flintan, 2001; IUCN CEESP, 2003; Brechin *et al.*, 2003a.
1113   IUCN, UNEP and WWF, 1991.

1994	The IUCN 19th General Assembly in Buenos Aires approves Resolution 23 on the importance of community-based approaches;
	Island Press publishes *Natural Connections: Perspectives in Community-based Conservation*;[1114]
	Earthscan publishes *The Wealth of Communities;*[1115]
1997–2000	IUCN, WWF International and other organisations curb their initiatives on collaborative management, equity and social sustainability in conservation and re-focus their social concerns on 'poverty' as a root cause of environmental problems;
	The primary environmental care approach is quietly dropped from policy statements for bilateral and multilateral assistance;
	Progress of Agenda 21 is reported as 'uneven'; with very few reports of Local Agenda 21 plans being developed, supported and implemented outside of Europe;
1999	UNEP publishes *Cultural and Spiritual Values of Biodiversity*;[1116]
2000	TILCEPA (Theme on Indigenous and Local Communities, Equity and Protected Areas) is self-established as first IUCN Inter-commission working group, with members from CEESP and WCPA;
2003	IUCN CEESP publishes Policy Matters 12 on *Community Empowerment for Conservation*;[1117]
	The IUCN World Parks Congress in Durban highlights community conserved areas and the importance of diversity and quality of governance for protected areas;[1118]
	Some conservationists resent the growing attention to communities as agents of conservation;[1119]
2004	The *IUCN Best Practice Protected Area Guidelines Series* No. 11 stresses community conserved areas and protected areas under shared governance;
	IUCN approves Resolution 3.012 on governance for conservation;
	IUCN approves Resolution 3.049 on community conserved areas;
	The CBD Programme of Work on Protected Areas includes Element 2 on Governance, participation, equity and benefit sharing;
2006	IUCN WCPA publishes a special issue of *Parks* on *Community Conserved Areas;*[1120]

1114   Western & Wright, 1994. Note, in particular, Western (1994).
1115   Pye-Smith & Borrini-Feyerabend, 1994.
1116   Posey, 1999.
1117   IUCN CEESP, 2003.
1118   The Proceedings of the Congress are available from: https://portals.iucn.org/library/node/8662
1119   See, for instance Terborgh (2004).
1120   Kothari, 2006.

2008	CBD COP 9 invites Parties to "recognize the contribution of 'Indigenous and local community conserved areas' in national protected area systems";
	The IUCN General Assembly in Barcelona approves as policy the 'IUCN Matrix',[1121] which legitimises governance of protected areas "by Indigenous peoples and local communities";
	IUCN approves Resolution 4.049 on Indigenous peoples' and community conserved territories and areas;
	The ICCA Consortium is established as a voluntary association of organisations and individuals supporting equity in conservation (first meeting takes place on the occasion of the IUCN Assembly in Barcelona);
	The Global ICCA Registry[1122] at UNEP WCMC begins collecting data on ICCAs/territories of life;
2010	CBD COP 10 introduces and promotes "other effective area-based conservation measures" alongside protected areas (Aichi Biodiversity Target 11);[1123]
	The ICCA Consortium is officially established in Geneva (Switzerland) as a global association under Swiss Law to support the appropriate recognition of, and support to, ICCAs/territories of life;
2011	*IUCN Guidelines for Protected Areas Legislation* include protected areas "governed by Indigenous and local communities";[1124]
2012	CBD COP 12 recognises (although not prominently) the need to "appropriately recognize" ICCAs "without interfering in customary governance systems";
	CBD Guidelines 64 *Recognising and Supporting Territories and Areas Conserved by Indigenous Peoples and Local Communities* highlights positive examples of ICCA recognition at national level;
	IUCN approves (among other aligned Resolutions) Resolution 5.094 on respecting, recognising and supporting ICCAs;
2013	*IUCN Best Practice Protected Areas Guidelines Series No. 20*[1125] describes diversity and quality of governance in theory and practice, including for ICCAs/territories of life;
2014	The IUCN World Parks Congress Sydney pledges to "enhance diversity, quality and vitality in governance" of "protected and conserved areas";[1126]
2015	Inception of Phase I (2014–2020) of the Global ICCA Support Initiative (GSI)— an initiative of the GEF Small Grants Programme implemented by UNDP and financed by the German government;[1127]
2016	IUCN establishes a new membership category for Indigenous peoples;[1128]
	IUCN approves Resolution 6.030 on ICCAs overlapped by protected areas;

1121   Dudley, 2008.
1122   See https://www.iccaregistry.org/
1123   Target 11 of CBD Strategic Plan for 2010–2020 (Aichi Target 11) in CBD Decision 10/2 of 2010 (CBD, 2010) https://www.cbd.int/sp/targets/rationale/target-11/ accessed 2024.
1124   Lausche, 2011.
1125   Borrini-Feyerabend *et al.*, 2013.
1126   Andersen & Enkerlin Hoeflich, 2015.
1127   The Global ICCA Support Initiative (GSI) was approved in 2014 as a partnership between the ICCA Consortium, UNEP WCMC, IUCN and UNDP. Delivered through the UNDP-implemented GEF Small Grants Programme (SGP), Phase I of GSI covered 26 countries, assisting them to implement the CBD Aichi Biodiversity Targets in the 2010–2020 decade.
1128   IUCN Resolution 6.004 approved by the 2016 IUCN General Assembly.

2017	A Global Alliance of Territorial Communities (GATC) asks for legal rights to land and a dedicated funding facility for Indigenous 'guardians of the forest';[1129]
2018	CBD COP 14 welcomes *voluntary guidance* on protected area governance and equity;[1130]
2021	The ICCA Consortium publishes *Territories of Life: 2021 Report;*[1131] WWF International *et al.* publish *The State of Indigenous Peoples' and Local Communities' Lands and Territories;*[1132] IUCN approves Resolution 2020-118 on recognising and supporting IPLC's rights and roles in conservation; At UNFCCC COP 26, a coalition of governments and private donors pledges 1.7 billion US$ over four years towards climate solutions led by Indigenous peoples and local communities;[1133]
2022	CBD COP 15 prominently recognises the role of Indigenous peoples and local communities as "custodians of biodiversity and partners in conservation, restoration and sustainable use";[1134]
2023	The Global ICCA Support Initiative (GSI) is re-financed and extended for 2023–2028.[1135]

Table 1 is inevitably incomplete, and the sections that follow will strive to add telling details about selected topics and countries. It can already be gathered from Table 1, however, that the 'discovery' of community conservation as a policy approach has been significant, but has also taken considerable time and has been accompanied by reservations and controversies. Revealingly, the remarkable change in **rhetoric** that transpires from the listed policy decisions and documents has **rarely** been **promptly translated into coherent practice**. At the time of writing, the community conservation approach remains unevenly accepted and its field-based support relatively scarce and rarely appropriately delivered. Throughout the years, however, the mounting recognition of both the many impacts of development initiatives and the important conservation capacities of local communities has meant that some such communities had more arguments to resist undesired change and/or negotiate desired change in specific initiatives. It also meant that— facing the multifaceted ongoing revolution of 'development'— they had a better chance of preserving or being allowed to hybridise some desired aspects of their traditional lifestyles, modes of livelihoods, customary territories and governing institutions.[1136]

Many conservation scholars and practitioners, however, have maintained a focus far from community conservation. The realisation that the development enterprise could not be stopped nor could its **unavoidable environmental**

1129   The GATC press release of 2017 is no longer available online. Accessed in 2023, the revised GATC website (https://globalalliance.me/) called, among others, for land rights and "direct access to climate funding". In 2024 the same website specified this further as "adequate, direct, accessible financing to support self-determined climate actions".

1130   CBD, 2018b; CBD, 2018a.

1131   ICCA Consortium, 2021. See also the short video : https://youtu.be/70mt7bozJb8?list=PLuBpRnNXhKyQciWz4bRRdPqtLBaT5tdts accessed 2024.

1132   WWF International *et al.*, 2021.

1133   https://www.fordfoundation.org/the-latest/news/governments-and-private-funders-announce-historic-us-17-billion-pledge-at-cop26-in-support-of-indigenous-peoples-and-local-communities/ accessed 2024.

1134   The CBD Kunming-Montreal Global Biodiversity Framework includes in Target 3 a clear reference to recognising "indigenous and traditional territories" and the related collective rights (CBD, 2022). Its Article 22 pledges to "ensure the full, equitable, inclusive, effective and gender-responsive representation and participation in decision-making, and access to justice and information related to biodiversity by Indigenous peoples and local communities, respecting their cultures and their rights over lands, territories, resources, and traditional knowledge, as well as by women and girls, children and youth, and persons with disabilities and ensure the full protection of environmental human rights defenders". Compared with the scant recognition of any community capacity for conservation in the original text of the Convention, Article 22 may even seem a bit of an overkill… or a repository for all kinds of pleas from civil society.

1135   Phase II of the GSI is aligned with CBD Kunming-Montreal Global Biodiversity Framework (CBD, 2022) and expected to unfold from 2023 to 2028, possibly extending coverage to 50 countries. Support to ICCAs/territories of life will contribute to Targets 3 and 22 and cross-cutting targets 21 and 23 of the Global Biodiversity Framework. It will also support custodians under the UNFCCC Paris Accord.

1136   It is difficult to separate 'resistance to development' from larger processes of resistance to colonisation or the socio-political movements proper to each people or region. Information may be found in historical accounts or accounts by engaged anthropologists (see Scott, 1985 and Escobar, 1997a). Some broad reviews also exist (e.g. Oliver-Smith, 2001).

damage, prompted them to concentrate efforts on saving *some* elements of nature (species, habitats, areas, territories)[1137] crucial for biodiversity and ecological functions.[1138] This implied, first, identifying those species and ecosystems— in terrestrial, freshwater, marine, coastal and high seas environments— that might still be governed and managed 'for conservation'. Secondly, it implied convincing national governments to safeguard them in effective ways, often by establishing **protected areas**.[1139] The resident communities in the protected areas— very much like the resident communities in areas earmarked for 'development'— were told either to relinquish their customary territories[1140] or to significantly modify their lifestyles, modes of livelihoods and governing institutions for the superior good of conserving nature. In light of today's acknowledgement of the value of conservation *by* communities, we wonder whether many protected areas could not have been established with better agreement and support from the concerned resident communities… and we regret that this was, too often, not even imagined, let alone attempted.

"Forests and rivers are our brothers… territories are sacred…"[1141]

The appreciation of traditional lifestyles that surfaced from the early 1970s resonates remarkably with the forces of internal and external decolonisation that characterise part of the 20th century— the Gandhian non-violent resistance in South Africa and India, the liberation theology and social science currents in Latin America, some experiments in African socialism and Islamic revival in Asia, the anti-war, anti-nuclear, women's liberation, and New Left movements in the West… Of relevance are also the Indigenous peoples' organisations and associations that developed in the 1970s in several countries,[1142] at times with support from groups in the Global North appalled at the atrocities that kept being committed against Indigenous peoples in the Global South.[1143] These movements, which can only be briefly mentioned here, emerged and developed differently in diverse national contexts. We will touch upon the case of Brazil— unique but revealing.

From 1964 to 1985, **Brazil** was under a **brutal military dictatorship** that pushed for rapid economic growth via chemical and petrochemical plants, one nuclear plant, major hydropower dams and biofuel from sugarcane, used to power mining, weapon manufactures[1144] and large-scale agriculture.[1145] The economic growth, enjoyed by the urban affluents, also resulted in massive environmental degradation and pushed millions of 'new poor' to seek their livelihoods as precarious settlers in slums (*favelas*) in urban peripheries, waiting for a land reform that never took place. With time, the mounting consciousness of the degrading effects of pollution prompted agitation and discussions among academics and intellectuals, and ten ecological organisations joined forces to produce an **ecological manifesto.** The *Brazilian Ecological Manifesto: the End of the Future?*[1146]

1137   In CBD parlance, these types of conservation interventions are referred to as 'area-based'.

1138   The choice of 'separating' conservation areas from the rest of society goes hand in hand with minimal restrictions to destructive behaviour outside such areas— arguably one of the reasons for the current widespread ecological problems.

1139   A brief history of the key concerns in the minds of managers of State-declared protected areas is available in IUCN WCPA (2010a). After much attention to definitions, nomenclature and strict preservation needs, the IUCN World Parks Congresses that took place after the 1990s became more open to conservation as a component of sustainable development, introducing considerations of equity and diversity and quality of governance. Meanwhile the coverage of protected areas on the planet has grown steadily (see https://www.protectedplanet.net/) and, at the time of writing, a new global treaty has just been approved for governing biodiversity beyond national jurisdiction (BBNJ), which will likely establish protection for 30% of the 'high seas'.

1140   With regard to protected areas, the phenomenon has given origin to the term 'conservation refugees' (Geisler, 2003; Dowie, 2011).

1141   Quote from the Altamira Declaration of 1989 (Diegues, 1998).

1142   The associations include the International Indian Treaty Council (IITC, established in 1974), the World Council of Indigenous Peoples (WCIP) and the Consejo Indio de Sud America (CISA). The Council was established in 1975 and lasted only a little more than 20 years. It had contrasts with IITC, which was closer to the non-aligned movement. The contrasts deepened at the time of the Contra war in Nicaragua, with Indigenous peoples supporting opposing sides. IITC developed a first draft of what was to become the UN Declaration on the Rights of Indigenous Peoples (Dahl, 2009).

1143   One of the organisations that provided crucial support was the International Working Group for Indigenous Affairs (IWGIA). IWGIA established in 1968 to document atrocities committed in several countries in South America with the "knowledge and consent of relevant government officials and missionaries of various denominations" (Ibid). It later became a large, membership-based NGO of anthropologists and others who work in partnership with Indigenous peoples to promote the recognition and respect of their rights, stressing self-determination and the right to govern specific territories.

1144   Although a 'developing nation', Brazil was in the 1970s among the first five weapons producers in the world (Viola, 1988).

1145   Often established upon the land damaged by colonial sugar cane plantations.

1146   Lutzenberger, 1980.

courageously appeared in 1976, when political repression was at its highest. It advocated for **more humane and ecologically sound ways of life** and set as a model the village life of Indigenous peoples and small-scale subsistence farmers— considered to be the only true **alternative to a predatory relationship with nature.**

While the Manifesto could change little in the short term, when the military dictatorship gave way to the New Republic, in the mid-1980s, it contributed to the so-called **'social ecologism'**. This was a movement that combined the political values of social and environmental justice— in particular access to land, water and food— with a sincere appreciation of the essential ecological functions of nature.[1147] In 1989, the National Council of Rubber Tappers and organisations such as Peoples Affected by Dams and Artisanal Fishermen coalesced with diverse associations of Indigenous peoples to release the Altamira Declaration: "…the forests and rivers are our brothers…[our] territories are the sacred home of the Creator, they cannot be violated"—[1148] a call that was nourished, heard and amplified by liberation theologians.[1149] During the 1980s and 1990s, two phenomena thus become visible in Brazil (and can also be discerned in other national contexts).

The first phenomenon is the spontaneous resistance to environmental destruction and local land and re-source grabbing by some **organised rural communities** among those directly and often drastically affected. As part of this, small-scale fishers in riverine communities (*varzeiros*) in the Amazon region established their own **'fishing reserves'**. By 'closing their water bodies', the *varzeiros* rebelled against the large landowners that blocked access to their fishing sites, but also refused entry to commercial fishers using industrial fishing methods.[1150] Much better known than the fishers are the **rubber tappers** (*seringueiros*) and their charismatic leader Francisco Alves Mendes Filho, known as Chico Mendes. The rubber tappers and Chico Mendes struggled to preserve traditional livelihoods against encroaching ranchers, reclaiming the Amazon land that had been theirs for generations.[1151] Helped by groups connected with liberation theology and international environmental NGOs like Friends of the Earth, they fought back against the ranchers, both physically and by arguing that their own lifestyle was fully compatible with the ecological processes of the rainforest. One of their legacies is the conception of **extractive reserves** (*reservas extrativistas*), today a legal category in the protected area system of Brazil. In many ways, the rubber tappers and Chico Mendes made visible a powerful **connection between struggles for social justice and environmental health.** When Mendes was murdered by the ranchers who had repeatedly threatened him, he became a globally renowned symbol, a martyr for environmental *and* social justice.[1152]

Similar struggles were taking place in other countries, as in India, where Chipko was a nonviolent, decentralised and broadly autonomous movement by rural villagers that developed in the 1970s in the State of Uttarakhand, in the lower Himalayas. The villagers there fought to protect trees and forests from the commercial logging sanctioned by the Indian government. They became famous for the particular resistance technique of 'hugging trees', enacted by village women to impede loggers. The villagers wanted to preserve trees for local subsistence uses, but also for their ecological functions, in particular water retention and soil creation. The movement was broadly successful: it led to the cancellation of logging permits in the 1970s and 1980s and inspired ecological

1147   Viola, 1988. See also Harper and Rajan (2004). See this also in light of the school of thought known as 'social ecology' described in the preceding section.
1148   Diegues, 1998. The water bodies included some floodplain lakes.
1149   Connor, 2011.
1150   Diegues, undated, likely 1995.
1151   The fathers of the seringueiros had migrated to the Amazon in the late 19th century and— after the end of the rubber boom— remained in small communities along the river, practising subsistence farming by Indigenous methods. Often, they were forced to remain as they were at the brutal end of a debt bondage system close to virtual slavery.
1152   Brazil took the unusual step of naming its protected areas service after him.

movements in India for years to come. Similar cases of spontaneous resistance to destruction continue to this day throughout the world and community environmental defenders continue to pay a high price for that.[1153]

A second phenomenon that also became visible in Brazil during the 1980s and 1990s is the **emergence of** what could be understood as **moral economy**— the appreciation of a way of living that emphasises the centrality of the land ("land is life") and the communities living on and of it. Fighting against endless violence and targeted assassinations,[1154] land occupations started taking place in Brazil from the 1970s. The occupations were carried out by the *Movimento dos Trabalhadores Rurais Sem Terra* (MST, Landless Peasant Movement[1155]) and had the critical support of the *Comissão Pastoral da Terra* (Pastoral Land Commission). The Pastoral Land Commission[1156] believed that **land is a gift from God**, not a commodity, and **farmers** who produce for their families are the **proper stewards of nature**.[1157] As hundreds of thousands of families obtained use rights to land (more than the total land of Ireland was re-distributed) and established their own government-sanctioned agricultural settlements, the movement saw **ecological sustainability** as **one of the 'justifications' for land occupations**.[1158]

1153   Global Witness, 2021.
1154   The Communidades Eclesiales de Base (CEB, Grassroots Ecclesial Communities) were communities organised around their common needs and faith (Wolford, 2003). Thousands of assassinations of land defenders and human rights defenders have been recorded in Brazil since the second half of the 20th century. Many of those killed belonged to the CEB and the perpetrators include the military, police and hired assassins (Connor, 2011).
1155   See https://mst.org.br accessed 2024.
1156   Founded in 1972, the Pastoral Land Commission is a large network of clergy, including some bishops, as well as lay people, including theologians, sociologists and lay workers from rural areas (see Connor, 2011).
1157   Wolford, 2003.
1158   Harper & Rajan, 2004. The concept of 'environmental equity' was also developed and used in this sense.

With that justification in mind, the MST also participated in fights against mining and large dam projects, like the Belo Monte Dam complex that affected the Xingu River in the Amazon region.[1159] Their moral economy also offered inspiration to those in the Global North who understood— in the **'lucidity interval'** between the UN events of Stockholm 1972 and Rio 1992— that **an 'ecological conversion' is possible only based on a cultural and social revolution**.[1160] While the Catholic Church hierarchy opposed the MST ecological activism for decades, the doctrine of current Pope Francis is implicitly aligned with it, as it embraces both its "option for the poor" and "ecological care for the creation".[1161] Not many of today's secular ecologists, however, clearly advocate for the cultural and ethical grounds needed for success in ecological policies.[1162]

Meanwhile, in the international policy arena...

What did the 'lucidity interval' produce in terms of international policy for the conservation of nature? A document called *World Conservation Strategy* emerged in 1980 from a mix of diverse interests, levels of ecological awareness and values assigned to nature.[1163] The strategy was a synthesis of a large consultation process organised by international conservation organisations like IUCN, WWF and UNEP.[1164] Today, the Strategy is mostly recalled as providing an appealing and conciliatory definition of 'conservation': "a positive endeavour" which includes and embraces "…preservation, maintenance, sustainable use, restoration and enhancement of the natural environment".[1165] But, in the context of the times, the Strategy did prompt new thinking. For instance, IUCN and conservation bodies such as the Secretariat of the Ramsar Convention started exploring "**wise use** of natural resources", "**community-based** approaches to conservation" and "**active participation** of local communities and Indigenous peoples".[1166]

The 1980s also saw the attention of professionals broadening to the contextual diversity and cultural and political aspects[1167] of 'conservation'. Activists and anthropologists began focusing on the **association between biological and cultural diversity**— the bewildering mosaic of ecosystems and linguistic, cultural and spiritual values that evolved *as part of nature*— and the importance of **local and Indigenous knowledge** as a repository of precious experience and wisdom, intrinsically different from 'scientific' blueprint management practices.[1168] From this early work, they soon moved to produce maps of **indicators**, highlighting impressive overlaps between biological diversity and language diversity.[1169] Others reported on the multiple characters of traditional ways of living and their associated worldviews, spirituality, moral economies and relational values.[1170] Meanwhile, many Indigenous peoples themselves were organising to assert the value of their cultures and ways of relating to people and the environment while seeking unity of political discourse and demands.

1159   Connor, 2011. During a procession led by a Franciscan monk, Connor reports that the crowd asked God for forgiveness of environmental sins, including mining, deforestation, and fertiliser and pesticide use. At other stops, they celebrated the rural workers, family agriculture, and the rights of women and children. For Connor, the Catholic Church of Brazil has allowed the people to articulate opinions and emotions against mining and placed them in a larger, philosophical framework of respect for God's creation. Other Christian theologies (e.g. evangelical movements, the "theology of prosperity") justify and accept industries like mining because of the economic benefits they bring.

1160   Langer, 1996.

1161   Pope Francis, 2015.

1162   Alexander Langer (1996) was one of the thinkers who stated this earlier and most clearly. At the time of writing, Jeffrey Sachs (2020; 2023) offers similar, cogent views accompanied by specific proposals.

1163   IUCN, UNEP and WWF, 1980.

1164   The United Nations Environment Programme (UNEP) was created after the 1972 UN Conference of Stockholm and was the first systematic UN-level effort that sounded the alarm on the environmental consequences of 'development'.

1165   IUCN, UNEP and WWF, 1980.

1166   All these terms are found in IUCN Resolutions and Recommendations of the corresponding years (see the searchable repository hosted by the IUCN portal https://portals.iucn.org/library/resrec/search).

1167   Friberg *et al.*, 1978. See also Cernea (1985).

1168   The Declaration of Belém of 1988 (available from https://www.ethnobiology.net) stressed the link between biological and cultural diversity and inspired generations of ethnobiologists. A powerful compendium of relevant concepts and work is offered by Posey (1999).

1169   Maffi, 1998; Oviedo *et al.*, 2000. For a country-based example, a rich analysis of biocultural diversity in Mexico is available in Boege (2008).

1170   Gray, 1999.

They were to ask for, and persistently negotiate, the adoption of the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) and the establishment of UN bodies dedicated to issues of specific Indigenous concern.[1171] Their territories and ancestral domains— they would stress— needed first and foremost to be "demarcated and recognised under their control and management".[1172]

Overall, the role and experience of Indigenous peoples and local communities in the governance of territories were being re-evaluated. Through centuries, it had been common property regimes regulated by local institutions and based upon local knowledge that had ensured livelihoods security, prevented and reconciled local conflicts, and allowed using the gifts of nature in sustainable ways. As noted by Berkes and Farvar (1989), the typical **traditional governance institutions** involve flexible teams at the sub-village or sub-tribal level taking decisions in customary ways and acting according to local culture, values and rules. The management systems enacted in their territories— they stressed— are crucial for community livelihoods and thus **conservation-oriented *by necessity*,** usually including social sanctions to prevent excessive individual gain or waste of the gifts of nature. They also noted that the 'conservative' orientation of traditional institutions was causing tense situations vis-à-vis governmental agencies, much more inclined to bend to economic interests and to support 'economic progress'. Yet, **governmental agencies** were maintaining **exclusive decision-making and narrative power** about national and international policies *for conservation*. The dominant discourse maintained the assumption that government professionals, guards and the military called to assist them are unequivocally devoted to conservation, while local communities tendentially avoid rules and draw as much as possible from nature. In the 1980s, after all, the (in)famous paper by Garrett Hardin on the tragedy of the commons[1173] was still on everyone's lips… as it was going to be de-bugged[1174] only in the 1990s.

Many other disciplines and bodies of knowledge were being re-evaluated in the 1980s— noticeably public health. A process of reflection had brought the World Health Organization to identify a new strategic approach to attain health goals by the year 2000.[1175] This approach, which came to be known as **primary health care**, motivated a world-wide movement of professionals, activists and organisations that recognised health as a socio-economic issue and a human right, highlighting the need to invest in preventing problems and overcoming health inequalities. For that, basic health services needed to be offered with the strong engagement of the beneficiary communities ("people have a right and duty to participate individually and collectively in the planning and implementation of their health care, with a focus of action in their community").[1176] The primary health care approach called for major policy changes, focusing on improving living environments in rural and urban areas. It was being argued that environmental integrity is part of the foundations of public health, productivity and wellbeing ("all human beings have the fundamental right to an environment adequate for their health and wellbeing"[1177]). Fully in line with primary health care, a **primary environmental care** approach was thus conceived in the late 1980s, whereby "communities organize themselves to care for

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1171   Cariño, 1999.

1172   Ibid.

1173   Hardin (1968) asserted that where individuals have access to natural resource in commons they act in their individual interest, i.e. they overconsume and do not invest in management— which results in a depletion of resources. This presumes that individuals are incapable of talking with one another, reasoning and agreeing on rules that would be advantageous for everyone. The surprising simplification adopted by Hardin remained unquestioned and affected policies for years, pushing for the privatisation of the commons even in ecological situations, like pastures, fisheries or forests, where the separate management of individual 'units' makes little sense.

1174   Feeny *et al.*, 1990. A more appropriate title for Hardin's paper would have been the 'tragedy of the open access'.

1175   Alma-Ata Declaration (WHO, 1978).

1176   Ibid.

1177   This principle is only proposed by the Brundtland Report (World Commission on Environment and Development, 1987). The world's citizens would have to wait until 2021 to see the UN recognise that a "safe, clean, healthy and sustainable environment" is "a human right" (United Nations Human Rights Council, 2021b). And, in 2022, even the UN General Assembly fully endorsed that right by adopting its Resolution A/76/L.75 (https://documents.un.org/doc/undoc/ltd/n22/436/72/pdf/n2243672.pdf accessed 2024).

their local environment while meeting their needs".[1178] It emphasised empowerment of **communities** to devise their own strategies, institutions and rights to **control land and the other gifts of nature** necessary for their livelihoods.[1179]

Another discipline that experienced an opening to decentralised governance is forestry. The ideas and practice of **community forestry**[1180] emerged in different places after the 1970s as a reaction to overexploitation from industrial logging[1181] and the very poor performance of centralised forestry bureaucracies.[1182] It could count on financial and technical assistance from international agencies and donors and was consistent with the recognition by State governments that they had limitations in managing forests and enforcing rules.[1183] In fact, governments were trying to manage some forests for conservation and others for industrial timber production… but neither met the local peoples' needs for forest products and services. Community forestry was the alternative. Broad initiatives began in Nepal, the Philippines and India with large-scale programmes that identified, and at times structured, **community user groups**. The groups would be assigned access and benefit rights, or renewable leases, to forest areas in exchange for some responsibilities (e.g. patrolling forests), under the supervision of State agencies. The practice expanded all over the world (e.g. in North and South America and Africa) via agreements and partnerships whereby forests 'remained' under State ownership, but communities obtained some access and management rights and better visibility as managers.[1184]

Seen in contrast with the colonial and post-colonial centralised control over forests, community forestry represents a step towards **fairer access and benefit sharing** for communities. It also tended to improve **ecological results**, putting to good use the communities' knowledge and skills, proximity to forests and traditional rules. Yet, given that forest communities had been using and managing forests for centuries or millennia, often regardless of historical successions of powers, community forestry was **also a way for State governments to effectively *gain*** rather than devolve **power** over forests. Some of the new hybrid governance institutions, in fact, managed to overpower customary institutions more effectively than any prior attempt at top-down control.[1185] Overall, positive community forestry results in ecological and socio-economic terms seemed to depend on the effective devolution of rights and the capacities of communities to develop technically sound and socially accountable organisations to defend their interests vis-à-vis others.[1186]

The definition of conservation offered by the 1980 *World Conservation Strategy* is a compromise that combines diverse visions and calls everyone to become conscious of the damages that humans inflict on the planet— the loss of habitats and species, the degradation of land, water and air, the alteration of climate— and to take positive action. The aims of the Strategy were the "maintenance of ecological processes and life-support systems" and the "preservation and sustainable use of the biological diversity on our planet". These aims did not command specific means of implementation in the 1980s, but they did so a decade later, when they were interpreted by the Convention on Biological Diversity.[1187] This interpretation was not a simple affair. Both

1178   The approach was initially proposed to the Office of Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OECD) by the government of Italy (MAE/DGCS, 1989), promising to create synergies among environment, development and public health interventions (Borrini, 1991).
1179   A volume of case examples produced in the early 1990s has just been re-issued at the time of writing (Pye-Smith & Borrini-Feyerabend, 2021).
1180   See the excellent review by Charnley and Poe (2007), broadly used throughout this paragraph, and Gilmour & Fisher, 1997. Other expressions for community forestry are social forestry, participatory forest management, etc.
1181   Poffenberger, 2006.
1182   See the work by Colfer referred to in Charnley and Poe (2007). Many of these bureaucracies were following in the footsteps of colonial institutions designed to extract timber and other products.
1183   Alden Wily & Mbaya, 2001.
1184   Shackleton *et al.*, 2002.
1185   Charnley & Poe, 2007, p. 324.
1186   Ibid.
1187   See http s://www.cbd.int/convention/ accessed 2024.

in the 1980s and 1990s, one could perceive a **vacillation in conservation discourse**, alternating between clashes and uneasy combinations of diverse views. A report published in 1987 and broadly known as the Brundtland Report[1188] offers a clear example of that. It includes innovative ideas about "empowering people's organisations" and other similar progressive statements,[1189] but also stresses that the people deserving such empowering are "few and isolated", and that the strategic approach of choice is "more development". As "environmental problems" result primarily from the "enormous poverty of the South", the document also implies that the "un-sustainable patterns of consumption and production in the North" may contribute, but are *not* the main culprit. "Sustainable *development*" is "the only solution".

An important document that was less ambiguous than the Brundtland Report and openly embraced the primary environmental care approach was a revised version of the 1980 *World Conservation Strategy* sponsored again by IUCN, UNEP and WWF on the eve of the Convention on Biological Diversity. Entitled ***Caring for the Earth***,[1190] this revised strategy document was produced in a more participatory way than the original one, keeping the needs of the Global South more clearly in focus. One chapter was fully dedicated to "enabling communities to care for their own environment", and one of the key recommendations was "securing community access to land and natural resources". The document also stressed the need to develop "more effective local governments" and envisaged that the subsistence lifestyles that demonstrated positive interaction with the environment— in particular the lifestyles of Indigenous peoples— could evolve by combining old and new approaches and demonstrate to all the possibility of **alternative ways of living**. It recommended that development assistance agencies commit themselves to supporting community action plans and collaboratively learning about the best ways of doing so.

Given all this potential for positive change, it is unfortunate that the revised strategy had much less resonance than the first. Sir Martin Holdgate spelled out some cogent reasons for that.[1191] It is also possible, however, that the effectiveness and equity concerns embraced by *Caring for the Earth* were **suffocated by the growing political and economic interests associated with conservation**. Why and how would it be so? The Convention on Biological Diversity was opened for signatures at the Rio Earth Summit in 1992 and soon became one of the UN Conventions with the largest number of Parties and State signatures. Its basic text is not a particularly inspiring statement. Heavy on State-centric provisions and light on issues of concern for local custodians, it clearly reflects the vision, experience and interest of the delegates representing signatory Parties. It was, nevertheless, crucial in prompting or accelerating conservation initiatives in many countries, including by aid agencies from the Global North engaged in assisting countries of the Global South. Thus, **conservation** was being defined by practice, and it **boomed as an enterprise**, with dedicated experts, university training and professional associations; international, national, governmental and non-governmental organisations, networks and alliances; dedicated implementing agencies, foundations and donors; and policies, initiatives and funds to channel substantial financial resources all over the world.[1192] The budget of IUCN tripled from 1987 to 1994.[1193] And the Global Environment Facility (GEF)— established at the Rio Earth Summit to support

1188   World Commission on Environment and Development, 1987. The report was an input to the UNEP's Environment Perspective to the Year 2000 and Beyond (EP2K for short) which attracted much less attention.

1189   E.g. "indigenous lifestyles offer many lessons to modern societies..." "communities [are] repositories of vast accumulations of traditional knowledge and experience"; "as formal development reaches more deeply into rain forests, deserts, and other isolated environments, it tends to destroy the only cultures that have proved able to thrive there"; "the starting point [...] is the recognition and protection of the traditional rights to land and the other resources that sustain their way of life, [and their] own institutions to regulate rights and obligations...[and the]... strengthening of local democracy".

1190   IUCN, UNEP and WWF, 1991.

1191   Holdgate, 1999 (pp. 209–2011).

1192   Holdgate (1999) traces the beginning of the global 'conservation enterprise', whose development today regularly mobilises billions of dollars in private and public financial flows (see http://www.thegef.org/ accessed 2024 and Bath *et al.*, 2020).

1193   Holdgate, 1999, p. 220.

the environmental conventions and fuel the conservation enterprise— has since mobilised **billions of US dollars** for projects and programmes.

After the Rio Summit, the **political impact of conservation** initiatives— and the related **governance shifts over large natural territories**— became major. As mentioned, a key factor was that the fresh attention and narrative were accompanied by a **flow of financial resources** that was **unprecedented** for environmental concerns, which prompted the creation or expansion of dedicated cadres in many countries. The size of the emerging conservation enterprise can be assessed by the fact that the mere administration of GEF has recently come to consume more than a billion US$ per annum.[1194] In turn, new agency departments, NGOs and individuals in the Global North emerged to 'promote conservation' in the Global South with the support of GEF and, as a sort of domino effect, new agency departments, NGOs and individuals in the Global South emerged to 'promote conservation' in their own country. In a number of post-colonial countries of the Global South, some new conservation cadres were chosen among the national elites, and especially the military elites, as environmental rules demand systems of surveillance and control and the extraction of fines, best enforced by armed guards.[1195] The overall result is that many agencies, NGOs and individuals secured jobs and privileges and/or control over the flows of financial resources and territories. With that, of course, also many genuine and important conservation initiatives, empowering processes and learning saw the light… the balance often depending on the quality and dedication of the individuals in positions of responsibility.[1196]

Those who have ever worked in field-based conservation initiatives in the Global South know the awkward encounters of comfortable 4x4 vehicles arriving with their cargo of government authorities and professionals into villages of very 'poor' people. The visitors may be looking for data, offering technical advice or kindly seeking the participation of the locals in their well-meaning initiatives. In this sense, exactly like 'development', conservation has been providing excellent justifications for initiatives that do good but also for initiatives that barely manage to hide paternalism and power consolidation at multiple levels. With time, many political aspects of conservation— including those just superficially mentioned— have been recognised and discussed.[1197] An intriguing association that could have been better examined, however, is the one between the **rising budgetary allocations** for conservation initiatives and the *hardening* **of conservation approaches**. For instance, at the end of the second millennium, when funding for conservation was climbing, narratives of 'management effectiveness' for protected areas[1198] and direct dependence of effectiveness on funding[1199] came to overpower again all possible niceties about 'community conservation'.

"We are the original conservationists…"[1200]

What kind of role, if any, was reserved in the Convention on Biological Diversity for custodian Indigenous peoples and local communities? It is fair to say that the Convention initially consigned the matter of community

1194   See GEF, 2021. The administrative budget of GEF is defined to include financing for staff, consultants, travel, publications and outreach, meetings, and general costs necessary for the operations of diverse funds.

1195   This statement cannot be generalised and, indeed, not all conservation cadres belong to national elites or the military. In some countries, however, this is frequent as personally observed by Grazia Borrini-Feyerabend in a number of countries from the 1990s through the 2020s.

1196   An unfortunate phenomenon, by no means unique to conservation, is that some of the best cadres may be offered attractive working conditions and salaries in international organisations and NGOs, contributing to a national brain drain.

1197   Examples include: Brockington, 2002; Chapin, 2004; Igoe & Brockington, 2007; Corson, 2010; Holmes, 2012; Fairhead *et al.*, 2012; Fletcher *et al.*, 2021.

1198   See Hockings *et al.* (2000), one of the first works that stressed the importance of professional management— and of evaluating professional management— for conservation results.

1199   Bruner *et al.*, 2001.

1200   Quote from M. Taghi Farvar, who stated this several times during the 2003 IUCN World Parks Congress in Durban.

conservation to **'traditional knowledge'**,[1201] even though Indigenous peoples and local communities[1202] were recognised as being *dependent* on biological resources and deserving some *equity* in sharing benefits from the conservation, sustainable use, wider application, and utilisation of their traditional knowledge, practices and innovations. This would be a most welcome international recognition if not for the perception that such 'traditional knowledge' seemed **implanted in mid-air**… as if its custodians had developed it, and could conserve it and innovate it, **without any territorial grounding**.[1203] There is no mention, in the Convention, of the territories where the holders of knowledge live, nor of the fact that they must have governed and managed such territories and their gifts of nature to generate and continue to evolve their 'traditional knowledge'. The Convention identified the importance of *in-situ* **conservation**, but its language and politics were controlled by government ministries and powerful NGOs, with little consanguinity with local custodians. Thus, *in-situ* conservation was originally interpreted as a call to establish systems of protected areas and buffer areas for sustainable development adjacent to the protected areas, implicitly assuming that government agencies would be in charge. That is all. As the implementation of CBD decisions involves funding, there was no space for 'wise use', 'empowering communities' and 'community-based conservation'. The **globalist/nationalist hegemonic edifice of 'conservation of biodiversity'** was run by government ministries and agencies[1204] and had little use for local custodians.

In light of the omissions in the text of the Convention, it is surprising that organised Indigenous peoples and local communities were given entry into CBD meetings and allowed to offer comments and advice on decisions.[1205] It is also surprising to find **'primary environmental care'** and other similarly empowering concepts included as part of the priority initiatives of the **UN Agenda 21**, the plan of action of the Conference on Environment and Development also approved at the Rio Summit of 1992.[1206] Prior to the Summit, some governments, UN agencies and NGOs had broad discussions about 'community conservation'[1207] and some innovative thinkers were beginning to highlight a variety of examples from the grassroots, deconstructing globalist/nationalist discourse.[1208] In the 1990s, however, no one yet advocated for recognising as 'conserved areas' the customary territories of custodian communities. Advocacy was restricted to **equity considerations** and processes of **'collaborative management'**,[1209] hoping that the **gradual and moderate approach** could convince even the hardliners of the conservation benefits to be harnessed by engaging custodians.

This was **not to succeed**. As the second millennium was coming to an end, the world of official conservation was not ready, not even for a gradual and moderate approach. The careful processes of learning about 'how best to support community conservation' advocated by the second World Conservation Strategy were not offered a chance. 'Primary environmental care' was quietly dropped from policy statements of bilateral and international agencies and even work on collaborative management was stopped in its tracks in both WWF International and IUCN.[1210] In hindsight, this seems an **effective backlash**. What caused it? Why was the end

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1201   Gadgil *et al.*, 1993; Berkes *et al.*, 1994. Interestingly, the term 'traditional knowledge' is now considered "not to appropriately reflect the importance of indigenous knowledge" and 'indigenous scientific knowledge' is to be preferred (Report of the Special Rapporteur on the Rights of Indigenous Peoples to the UN Assembly, 2022).

1202   At the time the expression was "indigenous and local communities"; the word 'peoples' was omitted, as not yet adopted by the CBD. It would only be adopted following United Nations, in 2007.

1203   Also in light of this consideration, in this work we prefer using 'local knowledge' instead of 'traditional knowledge'.

1204   See Escobar, 1998.

1205   With time, this gave origin to the International Indigenous Forum on Biodiversity (IIFB, https://iifb-indigenous.org/) and the CBD Alliance (https://www.cbd-alliance.org/).

1206   United Nations, 1992. This is an enormous action plan containing a bit of everything and its opposite— the delight and damning of all UN broadly participatory initiatives. It is also the case that Agenda 21 was developed at the end of the 1980s and beginning of the 1990s, when the conservation discourse was still relatively 'open'.

1207   E.g. UNICEF, IIED, OXFAM and IUCN. See also Thomson, 1991 and pages 132–133 of WHO, 1992.

1208   See for instance: Posey, 1985; Poffenberger, 1990; Murphree, 1991; Alcorn, 1993; Western & Wright, 1994; Pye-Smith & Borrini-Feyerabend, 1994; Warren, 1996; Alcorn, 1997; Ghimire and Pimbert, 1997; Poffenberger, 1997; Stevens, 1997; Escobar, 1998; Kothari *et al.*, 1998.

1209   See, for instance, Borrini-Feyerabend, 1996.

1210   Personal experience and communication with Michel Pimbert and M. Taghi Farvar in the late 1990s.

of the second millennium characterised by a **spike of regressive thinking** in the conservation arena? One of the key reasons has already been mentioned, namely the rapidly enhanced budgetary allocations that allowed the 'conservation enterprise' to boom and attract the interests and concerns of many social actors. Besides that, however, a few **tense and often unfriendly debates** also came into the open, dovetailing with community conservation issues. One such debate was about **strict protection versus 'sustainable use' of wildlife,**[1211] an issue that was, and remains, of major concern for local livelihoods and conservation prospects as it is for national sovereignty and international trade.

Already in the 1990s, some scholars considered 'sustainable use of wildlife' as a prime *strategic approach* for community conservation.[1212] A major justification is that local rural economies are based upon it, and they would collapse if sustainable use could not continue.[1213] Equally important, much of conservation *practice* is in the hands of communities willing to maintain environments as habitats for wildlife, for which sustainable use provides incentives that it is hardly possible to replace.[1214] Those opposing the use of wildlife, on the other hand, maintained that the conditions for the ecologically sustainable use of wild species should be scientifically known and secured *before* allowing the practice, which is often not the case. They stated that the precautionary principle should apply[1215] and protected areas and no-take zones ought to be established wherever possible. Some also asserted that sport hunting and the export of trophies— a lucrative wildlife use that can support management investments and community benefits— can also provide a cover for poaching and facilitate the illegal trade of precious materials such as ivory.[1216]

1211   See, for instance, Murphree (1991; 1997; 2004a) and Roe *et al.* (2000). Cogent, overall articulations of the issues concerning 'sustainable use' were later provided by Cooney, 2007 and Cooney *et al.*, 2018.
1212   Webb, 2002; Child, 2013. See also Roe *et al.* (2000).
1213   Makombe, 1993.
1214   Martin (1994) quoted in Allen and Edwards (1995).
1215   Allen & Edwards, 1995.
1216   This is still repeated today, see Lanius and Johnson (2020).

Starting from 1989, major **burns of confiscated ivory tusks** epitomised in spectacular fashion the opposition to poaching but also to sustainable use of wildlife, unfairly lumped as two faces of the same coin. Some of their organisers saw the burns as powerful statements in favour of conservation while their opponents lamented them as occasions to show off to conservation donors, deeply counterproductive as they enhanced the value of ivory for poachers and did nothing to diminish corruption among surveillance agents. Such controversies found an arena in international conventions— in particular the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)— where debates were fuelled by ideological positions, powerful economic interests and mythical symbols.[1217] They also took place inside conservation organisations and in mainstream media. Some animal rights advocates in the Global North had no scruples speaking against unprivileged communities living in daily contact with wildlife in the Global South. Only a few tried to find nuances in the debate. Even successful results in field-based sustainable use of wildlife[1218] left many unconvinced that community conservation had real value.

Another factor that may have played a role in the policy retreat from 'community conservation' at the end of the second millennium, was that some **Indigenous peoples' organisations** were then experiencing some **internal turmoil**.[1219] When the turmoil receded, the focus of the global movement was firmly placed on the establishment of a UN Permanent Forum on Indigenous Issues (UNPFII) and the finalisation and endorsement of the UN Declaration on the Rights of Indigenous Peoples (UNDRIP). Taking a role in conservation of nature or even a strong stand in related debates was not considered an effective strategic focus at the time. Some Indigenous organisations and leaders recognised that they had important advocacy cards to play in conservation,[1220] but only a few *used* such cards. On their part, with the fresh and abundant financial resources available after the Rio Summit, national and international organisations dedicated to conservation were expanding fast in both size and number. Some would say that they over-expanded, becoming highly dependent on fresh financial income.[1221] Pressed by their internal 'needs', soon their inhibitions started falling away about accepting **financial support from the very industries and businesses at the root cause of environmental problems**.[1222] In turn, major financial support favoured large-scale conservation initiatives,[1223] such as establishing new protected areas,[1224] while industries and businesses gained a say in conservation programmes.[1225]

1217   "Elephants as the Bambi of Africa" in the words of Fortmann, 2005.

1218   'Success' requires time to emerge, but it has been clear that community conservancies based on sustainable use initiatives maintain habitats and increasing wildlife population numbers, including in the case of endangered species. At the 2014 IUCN World Parks Congress in Sydney, a presentation illustrated the "greatest wildlife recovery story ever told" whereby sustainable use of wildlife directly governed by, and benefitting, local communities in Namibia impressively enhanced its populations of endangered wildlife: from 20 lions in 1995 to 130 in 2014, from black rhino nearly extinct in 1982 to the largest free-roaming population of black rhino in the world (outside of protected areas) in 2014 (Sikopo *et al.*, 2014). A major IPBES assessment of the sustainable use of wild species has been released in 2022, dealing with, among others, the consumptive use of wildlife for seafood, timber, energy, protein, fibre and medicines (IPBES, 2022).

1219   See Dahl (2009).

1220   E.g. IWGIA recognised that environmental issues were a less controversial road into Indigenous rights than the human rights approach (see Dahl, 2009, p. 72) but could not afford to focus on that. Encouraged by the IUCN Social Policy Programme, in the mid-1990s IWGIA became a member of IUCN. After a few years, however, it withdrew from IUCN membership.

1221   See Chapters 9–11 in Holdgate (1999).

1222   If anything, this has expanded since then. For the situation in the 1990s, see Holdgate, 1999, pp. 222–241. Some organisations moved straight from supporting primary environmental care to taking consultancies for industry (e.g. the paper and pulp industry). It was a time when, as recounted by Holdgate (ibid, p. 239), some would openly advocate for "capitalism for conservation".

1223   The major conservation initiatives of the second millennium included dozens of Integrated Conservation and Development Projects (ICDPs) that were certainly large-scale but often all but integrated, coherent or participatory. ICDPs typically juxtaposed a major conservation endeavour, such as the establishment of a protected area, with a major development initiative, such as an alternative livelihoods infrastructure. They were operated by governments, major conservation and development NGOs and the private sector (see Hughes & Flintan, 2001; IUCN CEESP, 2003; Brechin *et al.*, 2003b). ICDPs often 'stole the language' of community conservation but did not offer local coherence and succeeded in confusing people and strategic approaches alike.

1224   Just like 'planting trees', 'establishing some new protected areas' is a most appealing intervention. Protected areas can be 'shown' on a map, counted as 'protected hectares', etc. It is hard, however, to effectively implement them in the field, where and when complex realities emerge.

1225   A telling example is the fact that, in the early 2000s, the IUCN programmatic lines of work on climate change and lines of work on energy were carefully kept separate. During the same years, a movement developed among IUCN member organisations and individual members of the IUCN Commissions against any collaboration or partnership with Shell and other corporations, such as Rio Tinto and Holcim, engaged in mining and cement production with important environmental impacts. Despite more than 70% of non-government organisations and 60% of all members voting against it, the Shell–IUCN partnership was confirmed at the 2008 World Conservation Congress (the non-governmental majority was overrun as government delegates carried a weighted vote). After that, members like Friends of the Earth resigned from IUCN. See https://www.foei.org/wp-content/uploads/2020/12/IUCN_FoEI-letter-09-jan-09.pdf accessed 2024.

The retreat from the community conservation focus, however, was not complete. At the turn of the millennium, a number of conservation advocates continued to speak in favour of the multiple cultures, epistemologies and ecological practices of local communities,[1226] while others focused on living, supporting and articulating the principles of *endogenous development*.[1227] Some 'community-based natural resource management' (CBNRM) initiatives also continued to be promoted in Southern Africa, diversely modelled on the path-breaking CAMPFIRE initiative in Zimbabwe,[1228] and others in India and other regions. For a new milestone of advocacy for community conservation, however, all had to wait until the **2003 IUCN World Parks Congress in Durban** (South Africa), the first where many representatives of Indigenous peoples and local communities participated actively and expressed their positions and views.[1229]

Taking advantage of the occasion, several delegates of mobile Indigenous peoples held a gathering just before the Congress.[1230] Recognising the commonalities of their experiences, they developed a collective strategy and decided to address the Congress, proposed a halt to usual conflicts and, instead, developed a *collaboration* among mobile pastoralists and conservationists. In the process, they asserted themselves as **"original conservationists"**,[1231] holders of unique ecological knowledge and directly and intimately dependent on the health of their natural environment. Uncle Sayyad, a leader of Indigenous transhumant pastoralists in Iran, gave his speech in the initial plenary of the largest gathering of conservationists ever organised.[1232] With great choreography, he stood against a video that showcased the wonderful mountains, pasture, domestic animals and wildlife of his Qashqai territory, a distant flute music playing in the background. On stage with him, a young Qashqai woman in traditional attire read the English translation of his speech, which remained memorable for many: "…help us maintain our lifestyles […] stand on our side in opposing the forcible settlements of our people and herds. Allow us to preserve the splendid genetic diversity of our herds, as well as the wildlife diversity that depend on it […]*We*, the mobile peoples and pastoralist communities of the world, are prepared to be your strongest allies in conservation. Are *you*?".

The 2003 IUCN World Parks Congress was also the first to offer a plethora of examples of 'community conserved areas' from all world regions. The examples were illustrated and discussed in depth.[1233] A common thread was that the **traditional knowledge** of the custodian communities was firmly **grounded in specific territories** and kept alive by the **local institutions** that were developing decisions and rules and securing their implementation. Crucially, it was argued that the "single most important missed opportunity for conservation" was the "disaffection of civil societies" and that custodians should be "empowered for conservation" with a "sharing of authority and responsibility"[1234] as their conserved territories embed biodiversity values on a par with, if not higher, than those of protected areas. It was in fact proposed that they could be protected

1226   See Stevens, 1997; Escobar, 1998; Kothari *et al.*, 1998; Hay-Edie, 2003; and the articulation of relevant concepts offered by scholars and practitioners in volume I of Borrini-Feyerabend with Buchan (1997).

1227   These principles included "building upon local felt needs, increasing local control upon development decisions, identifying niches in the local and regional economies, retaining benefits in the local area, etc." and coupled well with "territorial and food sovereignty and traditional community governance". See Haverkort *et al.* (2003) and COMPAS (2007).

1228   The Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) was a major initiative, in Zimbabwe, which engaged communities to conserve habitats and wildlife in view of their sustainable use. It combined the appeals of conserving mega-fauna and generating income for poor communities (Murphree, 1997; Roe *et al.*, 2000).

1229   Many were invited under the auspices of the IUCN Commission on Environmental, Economic and Social Policy (with the financial support of the cooperation agencies of Switzerland, Sweden and Denmark) and of new IUCN members accustomed to carrying out advocacy work for Indigenous peoples, such as the Forest Peoples Programme.

1230   At this occasion they created the World Alliance of Mobile Indigenous Peoples (WAMIP) which, since then, has faced challenges in its activities but was still in existence at the time of writing in 2023.

1231   M. Taghi Farvar, communications at the IUCN World Parks Congress in Durban, 2003. This was a novel and controversial position, as other Indigenous representatives in meetings before and after Durban WPC had positioned, and will position, themselves in opposition to conservation (a typical statement was: "we, Indigenous peoples, are not conservationists"). Arguments similar to Farvar's are provided by Martinez-Alier (2002).

1232   Obviously, this was possible because the congress organisers included some community conservation activists.

1233   Some of these are collected in IUCN CEESP (2003). Many more were later collected and published in Borrini-Feyerabend *et al.* (2010).

1234   Editorial in IUCN CEESP, 2003.

areas under a new governance type— the **collective governance by custodian Indigenous peoples and local communities**.[1235] The 'Durban Accord' produced by the Congress enshrined all this in policy language.[1236]

In hindsight, the Durban Congress was the **launching pad of an advocacy movement** that would bring to light not only governance diversity and quality for protected areas,[1237] but also the essential **role of custodian communities** in governing and managing their territories for conservation and sustainable livelihoods. Equipped with the evolving understandings and narratives of common property regimes,[1238] environmental equity issues,[1239] Indigenous rights,[1240] linkages between cultural and biological diversity[1241] and the major responsibility of affluence— rather than poverty— in damaging the environment,[1242] the movement brought many controversies to light, adding a good measure of fresh air and honest debate into the world of conservation.

Arguably, the Durban World Parks Congress marked a milestone also by broadening what was understood as 'conservation expertise'. After the Congress, several field-based experts from Indigenous peoples and custodian communities became members of the IUCN Commissions and started participating actively in IUCN Congresses and meetings of the Conferences of the Parties to CBD. With them, visible examples of community

1235   Borrini-Feyerabend, 2003.
1236   The Proceedings of the Congress are available from: https://portals.iucn.org/library/node/8662 accessed 2024.
1237   See also the section 'Governance discovered' and Part I of this work.
1238   Ostrom, 1990; Murphree, 1997; Murphree, 2004b.
1239   Harper & Rajan, 2004.
1240   United Nations, 2007.
1241   Posey, 1999; IUCN CEESP, 2004; Berkes, 2009a.
1242   See, for instance: IUCN CEESP, 2006; Martínez-Alier, 2012; Wiedmann *et al.*, 2020.

conservation[1243] and arguments linking community empowerment and sustainable use[1244] grew in number and complexity, leading to the incorporation and promotion of **governance diversity and quality** in the **CBD Programme of Work on Protected Areas**,[1245] renewed demands to *implement* the Durban Accord[1246] and ongoing efforts at promoting 'sustainable use' of wildlife.[1247]

The process was not smooth. In the early years following the Durban Congress, the advocates of 'community conservation' had uneasy relations even with some representatives of Indigenous peoples. As mentioned, the Convention on Biological Diversity had initially focused on traditional knowledge as the key contribution of custodian communities to conservation. Consequently, even the members of the International Indigenous Forum on Biodiversity (IIFB)— established in 1996 to facilitate the participation of Indigenous peoples and local communities in the CBD—[1248] had initially focused on Article 8j of the Convention and on rights related to traditional knowledge (including intellectual property). During UNPFII and CBD meetings, some Indigenous leaders were reluctant to join calls for the recognition of the governance rights of custodians for the territories they 'conserved'. It is unclear whether this was because they saw the conservation enterprise as *inevitably* coercive,[1249] because they feared that the demonstration of **conservation results** could become a form of **conditionality** for governance rights,[1250] or simply because they wanted to keep focusing their energy on UNDRIP, a fight that was crowned by major success in 2007. Only after 2010 did the IIFB position on community conservation evolve[1251] and its members started focusing more openly on appropriate recognition of sustainable, traditional uses of territories; on the rights to 'co-manage' and defend them from external threats; and on the contribution of "indigenous and local community conserved areas" in national protected area systems.[1252]

The world of academia was also cautious in embracing 'community conservation' and it openly denounced the **simplifications** that could be hidden in its folds. Environmental and social justice activists and NGOs may be motivated by emancipatory ideals but— some scholars noted— they could still "reproduce pernicious **stereotypes**".[1253] The very idea of 'community' could be misused by pretending to include stable, homogenous, conflict-free interests... when the opposite is mostly true. In this light, community initiatives may reinforce existing hierarchies and inequalities and strengthen local elites at the expense of minorities, or of those disfavoured because of gender, age, class, race, physical abilities, citizenship, values, etc.[1254] Other scholars stressed that untangling conservation from its colonial precedents is basically impossible and 'community conservation' may hide the fact of using people as cheap labour or delegating responsibilities with no authority.[1255] The heralded idea that communities view themselves as a village, or a set of households, lineages or longhouses, that exercise control over a 'territory' was also seen by some as an historical and cultural construction, **hegemonic**

1243   See, for instance: Roe *et al.*, 2000; Brown & Kothari, 2002; Borrini-Feyerabend *et al.*, 2004a and 2004b; Poffenberger *et al.*, 2006 ; Pathak, 2009; Borrini-Feyerabend *et al.*, 2010; Jana & Paudel, 2010; Kothari *et al.*, 2012.

1244   See, for instance: Oglethorpe, 1999; Won wa Musiti, 2003.

1245   CBD, 2004; SCBD, 2004b.

1246   IUCN Resolution 4.048.

1247   Cooney, 2007.

1248   The older IIFB website (https://iifb-fiib.org/ accessed 2020) included several earlier contributions and statements, while the current website (https://iifb-indigenous.org/) focuses more on video messages.

1249   Peluso (1993) had discussed this aspect.

1250   This idea remains prominent at the time of writing. For instance, some Indigenous advocates would not wish to associate the term 'rights' with the term 'responsibilities' for fear of conditionality implications (Delfin Ganapin, personal communication, 2023).

1251   For instance, Chibememe (2010) stressed the importance of article 10c of the Convention and the need for Indigenous peoples and local communities to engage in its Programme of Work on Protected Areas. Other statements by IIFB and the CBD Alliance stressed stewardship rights and the need to recognise governance diversity and conservation by Indigenous peoples and local communities.

1252   See the excellent CBD Decision IX/18 section A paragraph 6.

1253   Brosius *et al.* (2005) offer a collection of such critical analyses and perspectives on 'community conservation'.

1254   See, for instance, Li (1996), Agrawal & Gibson (1999), Leach *et al.* (1999) and Colfer (2005).

1255   See the case of The Gambia described by Schroeder in Brosius *et al.* (2005).

in its own account, as not everyone participates in, or benefits from, the existence and reproduction of any given 'community'.[1256]

The commentators who expressed doubts about the conservation vocation and capacities of Indigenous peoples and local communities used an encyclopaedia of evocative terms and expressions to brush off the views of community advocates: **rural romanticism**, naïve pastoralist ideas, ethnic bigotry, fetishised local knowledge, idyllic innocence, myth of the ecologically noble savage, utopian political imaginaries (like anarchism and socialism), **mythical primitive harmony with nature**, and so on.[1257] Others worried about the **fast pace of socio-cultural change**. Market penetration, urbanisation,[1258] new technologies and the emergence of new 'needs' and overpowering demographic change (e.g. increased or decreased total population and age distribution in particular locations)… will all these factors be powerful enough to thwart any chance of 'community conservation'?[1259] Indeed, such risks are high, and particularly so when the community institutions are unable to adapt to the new challenges, and/or external factors become too rapid or overbearing.[1260] Flora Lu Holt has used the term "catch 22" for communities forced to broaden their economic activities and technologies for survival in changing circumstances while being asked to remain in a state of primordial 'natural balance' with their environments.[1261] For her, this is an impossible and unjust dilemma, and the noble savage is best forgotten once and for all. As also expressed by W. T. Vickers: "…'conservation' is not a state of being. It is a response to people's perceptions about the state of their environment and its resources, and a willingness to modify behavior to adjust to new realities".[1262]

Other advocates and activists noted that the scholars so critical about the potential of 'community conservation' might be "too busy self-indulgently advancing their own careers to notice urgent dilemmas".[1263] Some stressed that 'struggles over resources' may be played as 'struggles over meaning' and that representing communities as having conservation capacities has provided a vocabulary, narratives, and a way of positioning themselves that helped them to achieve positive change, or to mitigate damage.[1264] As noted by Charles Hale,[1265] **even simplified community identities** have been useful to **"champion subaltern peoples"**, **"deconstruct the powerful" and reach political objectives**. In other words, "merging cultural critique and activist research" can help to achieve valuable results, like maintaining claims over a territory or supporting people's livelihoods. "Disaffected (and ultimately ineffectual) intellectuals" have little to teach those activists who deal with "locally generated meanings" that inform **"political interventions that are *good enough*"**.[1266] The "romanticism and commitment of activists on the line" possibly misses the "luxury of full analytical scrutiny of every complexity and connection" but is in solidarity with peoples' struggles. New knowledge and theoretical innovations produced without solidarity are bound to be "politically and intellectually sterile". The only knowledge that makes sense to acquire has **"transformative impact"** and is produced through "active involvement in the political problems at hand", providing some "contribution to political struggle" and possibly feeding "new forms of accountability".

1256   Lowenhaupt Tsing A., 1993. These 'constructions' can even nourish convenient mythical fantasies and self-serving ideas like possessing "tribal green wisdom", etc.

1257   Examples in Redford (1991), Terborgh (1999), Adams (2009).

1258   By 2017, over 4 billion people— i.e. well over 50% of the then world population— lived in urban areas (Ritchie & Roser, 2018). Not all urban municipalities are similar, however, and some have a rich, historical relation with their natural environment. An example is offered in Laureano (1993).

1259   See Ghimire & Pimbert, 1997; Barrow & Murphree, 2001.

1260   See the section entitled 'What keeps governance institutions 'vital'?' in Part III of this work.

1261   Lu Holt, 2005.

1262   Vickers, 1994, p. 331

1263   Brosius *et al.*, 2005.

1264   Li, 2000. This is admitted even by those— like Leach *et al.* (1999)— who are deeply critical of the simplifications inherent in discussing 'communities' at all.

1265   Hale, 2006. Cited phrases here are from this source, except when otherwise noted. See also: Li (1996) and Li (2000).

1266   Anne Lowenhaupt Tsing quoted in Hale, 2006 p. 104.

Beyond the rhetoric, accepting the value of 'community conservation' requires a profound change in the relations between organised citizens and the State, and between them both and other parties, such as donors and technical support agencies. Accepting 'community conservation' has to do with the balance of power regarding political authority, policy processes and governance decisions relevant for conservation… an interaction where both State governments and rural communities also *create themselves*.[1267] As noted by Fred Nelson,[1268] the **negotiation** between State governments and rural communities is **always in process**, never truly set, and well revealed by the power oscillations and shifts that concern territories and the gifts of nature. And the negotiation depends upon a variety of contextual factors, as revealed by African countries experiencing a recentralisation of power (e.g. consequent to market penetration and alliances between State bureaucracies and various kinds of investors) right at the time when decentralisation processes are blooming in Latin America and Asia.[1269]

In the first two decades of the new millennium, while in the international policy arena the recognition of the value of community conservation was 'getting back on track', *national* **recognition** was **advancing** much more **slowly and unevenly**.[1270] For instance in 2010, as part of their reports to CBD COP 10 in Nagoya, very few national governments were able to show *any* relevant advance towards the recognition of governance *diversity* for protected areas.[1271] In some countries, human rights violations around protected areas were continuing unabated in **eco-authoritarian initiatives** supported by international conservation organisations[1272] and **unhealthy alliances** between conservation NGOs, corporate businesses, State actors and donors.[1273] All this— interplaying with a variety of circumstances— continued to deprive communities of their land and cultural resources and push them into unsustainable practices.[1274] The lack of engagement of many countries is evident, reminding us that the view that 'community conservation' has been found wanting[1275] is incorrect and should be replaced by the apt observation by Marshall Murphree that "community conservation has not been tried and found wanting, it has been found difficult and rarely tried".[1276]

"We have always been custodians…"[1277]

As just mentioned, despite the capacities, achievements and goodwill shown during the 2003 Durban Congress, community conservation did not readily receive recognition and support in national contexts. The protected area legislation in countries of the Global North was well consolidated and, in the Global South, often stuck in colonially-inspired principles and structures, unlikely to shake off whatever was conservative and undemocratic in their nature.[1278] In a few cases, however, custodians managed to strategically **re-invent** their **relations** with State administrations and engage in innovative combinations of modern and traditional institutions and practices.[1279] Some communities started that process by establishing 'diplomatic relations' with their

1267   Li, 2005.
1268   Nelson, 2010.
1269   Ibid.
1270   IUCN stated that governance issues are "generally regarded as one of the least successful parts of the Programme of Work on Protected Areas" (IUCN WCPA, 2010b, p. 13).
1271   These advances were inscribed in the Programme of Work on Protected Areas of the CBD (SCBD, 2004b) and the progress recorded was slow.
1272   A telling example, among many possible accounts, is described in Noam (2007).
1273   Igoe, 2007.
1274   Edjeta, 2006.
1275   Redford and Adams (2009) lump community conservation with other concepts said to have offered dramatic solutions to nature problems that ultimately proved illusory.
1276   Murphree, 2000. An even better formulation would be: "…support to community conservation has not been tried and found wanting, it has been found difficult and rarely tried".
1277   Quote from Datu Vic Saway (Talaandig from Lantapan, province of Bukidnon, The Philippines), during the First National Conference in Indigenous Community Conserved Areas (ICCAs) in the Philippines, 29–30 March 2012.
1278   On this, see Lynch (2005, p. 420).
1279   Besides the Philippines, see also the case of Senegal, discussed in the text to follow.

government administrations with the help of intermediaries (NGOs, international agencies, donors…) and using strategic entry points that would soon become inescapable in community conservation initiatives. These entry points include: **participatory mapping** of community territories and natural features and values (what Nancy Peluso baptised as "countermapping"[1280]); the expression, communication and claiming of **customary rights** under any shred of nationally-available legal and policy option;[1281] and the **interpretation and articulation of international conservation policies in national and local contexts.**[1282] Crucial to all of these is the capacity of communities to translate for others— and at times re-discover for themselves— a language of history, reality and spirituality, internal and external *relations*, and local and Indigenous structures that claim 'rights' (and, in the most powerful cases, also claim 'responsibilities').

In the **Philippines,** the three mentioned entry points flourished together and bore fruits. **Legal support** and networking available towards the end of the 20th century nourished the emerging cadre of national lawyers and activists that provided momentum to the Indigenous Peoples Rights Act of 1997.[1283] A national movement in support of **mapping the Ancestral Domains** of Indigenous peoples provided a baseline of data upon which specific claims could be made, and titles could be obtained, for a significant number of territories (mostly land-based but, in at least one case, also sea-based). Taking that as invaluable ground, numerous events in-country and at international IUCN and CBD meetings, foremost the Durban World Parks Congress, allowed several Philippines' Indigenous leaders and NGOs to **articulate** their **claims in conservation discourse** (e.g. about their 'community conserved areas'). After years of patient advocacy, a National Conference on Community Conservation was thus held in 2012.[1284] The conference revealed that most Key Biodiversity Areas in the Philippines, and many of the steep valleys that ensure the integrity of its watersheds, overlap with the Ancestral Domains of traditional custodians, and they were well 'conserved' because of their cultural and

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1280   Peluso, 2003. As territories are represented on maps, cartography plays a central role in the implementation and legitimation of territorial access, attributions and rules. In many ways, maps are territorial discourse, and their properties (boundaries, zones, areas, etc.) control the territory as words control the human imagination. In this sense, the properties of a map created by Indigenous peoples— such as the fact of having loose and permeable boundaries, overlapped by non-territorial claims and by complex management practices that involve long periods of natural regrowth— need to be simplified and translated before State agents can understand them. Lynch (2005) refers to this as "political economy of ignorance" as it refers to the national maps and laws that provide obstacles to the recognition of complex community capacities and claims. The maps increase the visibility of local territories… but can also freeze processes that are essentially dynamic and transform local logic into the logic of the mappers.

1281   See Lynch (2005). A recent informative example is described in Department of Sociology (2022).

1282   This is one of the crucial entry points adopted by the ICCA Consortium (see later in this section) and its predecessors in the IUCN Commissions.

1283   Lynch, 2005.

1284   First National Conference in Indigenous Community Conserved Areas (ICCAs) in the Philippines, 29–30 March 2012. The person who knows most about the networks of national and international advocacy and support that culminated in the Conference is Dave de Vera, Executive Director of the Philippines Association for Intercultural Development (PAFID)— an NGO that helped dozens of peoples in the Philippines as they mapped and communicated their claims and collective rights to their Ancestral Domains. PAFID was one of the founding members of the ICCA Consortium, which co-sponsored the conference and participated in its preparation for nearly a decade.

spiritual values they continued to hold and respect. In the words of Datu Vic Saway at the conference: "We have always been *custodians* of our Ancestral Domains". For government authorities and international agencies alike, the conference nailed the relevance of Ancestral Domains for national conservation goals, marking a turning point in the painful, conflictual relations that, for decades, had consistently confronted environmental agencies and Indigenous peoples (see Picture 17). Through dialogue and mutual education between government officials and traditional custodians, some peaceful relations could be re-established and the Ancestral Domains acquired an informal but respected status as voluntary 'community conserved areas'.[1285] Today, several emblematic examples— such as the territories of the Batak people in Palawan, the Mamanwa-Manobo people in Mindanao or the Dumagat and Alta people in Luzon— are listed in the ICCA Registry of UNEP-WCMC[1286] and incorporated by the Philippines government in their official reports to the CBD.[1287]

There are many reasons why legitimate attempts of custodian communities to gain national recognition for conservation are rarely easy or successful, and a major one is that the controversies about specific sites tend to develop among **unequal contenders**. Decision-makers in modern State governments are closely connected with the elite that controls political parties, media conglomerates and the forces that sustain economic modernisation and development— the banking and financial sector, infrastructure, extractive industries, commercial operations, mass tourism and the military— all forces whose interests are mostly antithetical to those of Indigenous peoples and local communities. Compared to the 'moral economy' lived by the Brazilian Amazon's tribes that perceive land and life as sacred,[1288] the **'military-industrial-political-media-consumerist complex'** controls societies via various forms of realist, not to say 'amoral' or 'immoral', economy.[1289] Besides the

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1285   Estifania *et al.*, 2012.
1286   https://www.iccaregistry.org/en/explore/Philippines accessed 2024.
1287   See https://www.cbd.int/doc/world/ph/ph-nr-05-en.pdf accessed 2024.
1288   See earlier in this section.
1289   This is not the place to discuss the subject but, at the time of writing, financial speculations and tax havens cheat millions of law-abiding citizens all over the world. Connections are also evident between weapons production and spending and the keeping in power of the politicians who control the media and use propaganda to 'inform' people about the need for 'military security', preparing for war and waging 'permanent war'. As are the connections between politicians and extractive industries, resulting in massive fossil fuel consumption regardless of climate change; between those who keep certain substances illegal (e.g. drugs or alcohol) and those who benefit from their traffic; between those who infantilise citizens into short-term jobs at the end of the rope of capital, and those who scare the same citizens into hating migrants; etc.). The ultimate propaganda may well be the pervasive sense of normalcy instilled in citizens about the "situation as it is", including consumerism, injustice, wars, the illusion of democracy and the belief that any attempt at changing things is a waste of time (Johnstone, 2023a).

humongous use of fossil fuels and material resources and the inherent danger and damage of accumulating means of mass destruction (used and unused),[1290] military efforts and preparedness are considered a 'trump card' in many national budgets. Even the most courageous communities can do little to protect their territories against them. A telling example is offered by Gangjeong, a small coastal village in the biosphere reserve island of Jeju, South Korea.

Gangjeong used to pride itself on its water quality ('best in Korea'), fearless women divers (traditional seashell collectors) and unique soft coral species (many endangered and protected under national and international law). Its charming coastline dotted with *gureombi*— natural freshwater pools where people used to soak for meditation and spiritual recreation— was listed as an 'Absolute Conservation Area' in South Korea. At the dawn of the second millennium, however, Gangjeong became an **archetype of confrontation** between the local custodians and the promoters of a huge military naval base and related developments.[1291] The local community and its supporters first desperately resisted, and later relentlessly protested, the destruction of their 'territory of life'. They carried out **referendums, hunger strikes** and *daily* civil disobedience *for years* (see Picture 18). They subjected themselves to endless humiliations, arrests, imprisonments and personal sacrifices. It was all to no avail. **An ocean of cement was poured on top of their coastlines, freshwater pools, and corals.**[1292] Even the IUCN— which held its main 2012 Congress close to the Gangjeong village— turned the other way and refused to pass an Emergency Motion to call for a halt to the naval base construction and a revision of its flawed environmental impact assessment.[1293]

Another telling example of the uneasy relations between local communities and powerful national and international actors is offered by a case in Europe, still in balance at the time of writing.[1294] The Carpathian forests are widely seen as a European ecological jewel and proposals for placing the Carpathians under a 'wilderness reserve' conservation regime (a sort of 'European Yellowstone'[1295]) have been backed by philanthropists, conservationists and magnates of the outdoor industry. Romania is host to a large part of the Carpathians and, as wildlife crimes and illegal logging[1296] made headlines in the second half of the 2010s, a private conservation organisation started buying forest land. The aim was the 'rewilding' of the forests, specifically, reintroducing missing species and promoting ecotourism and the establishment of a national park. Many, throughout Europe, interpreted this as a positive environmental step. But, from which perspective? Until the socialist takeover, after the end of World War II, most mountain areas in the Carpathians had been governed as **commons**, including by traditional Romani (Rom) shepherds who took their flocks of sheep, cattle and horses to summer pasture. Most **management rules** (e.g. how much wood was to be harvested, who could graze animals on which pastures, who would collect chestnuts and mushrooms, etc.) had been **developed and enforced by the traditional institutions** of Romani communities.[1297] Much has changed since then. Today, national policy and EU policies regulate the behaviour of farmers via economic incentives, and economic considerations have become much more important…even as they rarely favour the small farmers or the local ecology.[1298] But economic considerations have *not* wiped out the capacities and collective rights of the Romani communities.

1290   Hooks & Smith, 2011.
1291   The initial decision was taken in 1996, but not much happened until about ten years later. See: Koleilat, 2019.
1292   Construction of the naval base took nearly ten years and inauguration took place in 2016. The protests did not stop (see Hong, 2021).
1293   The text of the proposed Emergency Motion can be read here: https://www.iccaconsortium.org/wp-content/uploads/2016/06/wcc-5-jeju-participants-report-sept-2012.pdf accessed 2024.
1294   This example is drawn from Iordăchescu (2018). More information on the Romanian commons in Vasile (2019) and Iordăchescu *et al.* (2021).
1295   See https://www.theguardian.com/travel/2023/oct/22/a-yellowstone-for-europe-romanias-ambition-for-a-vast-new-wilderness-reserve accessed 2024.
1296   Including by European timber mafia (see https://www.europeandatajournalism.eu/eng/News/Data-news/Timber-mafia-and-deforestation-in-Romania accessed 2024: see also https://brunomanser.ch/waldkarpaten/upload/docs/bmf_report_the_svydovets_case.pdf accessed 2024).
1297   An ethnic minority of Romania, also referred to as Rom, Tzigane or Gypsy, supposed to be descendants of a Dalit Indian caste of travelling musicians that reached the Balkans in the 14th century. Identified also as a religious minority, Romani people have endured centuries of slavery, serfdom, deportation, pogrom and hardships. They should be supported in sustainable livelihoods also in view of this history of long and severe discrimination.
1298   Molnár & Berkes, 2016, and Emma Courtine, personal communication, 2022.

As described by George Iordăchescu (2018), Romanian Law does not allow buying land traditionally held as commons, but the promoters of rewilding have been clever, buying whatever they could and creating untenable conditions of restricted access for the rest, confiscating horses and carts from resource users, restricting mushroom and berry picking, preventing grazing, etc. With that, several resident communities— around **6,000** people already among the poorest of the poor in Europe— are losing crucial sources of income and are frustrated by not being allowed to continue their traditional land-use practices. They believe their custodianship has maintained and enriched the local natural heritage (e.g. the grazing areas serve both domestic and wild animals, the timber resources were always managed carefully and never exhausted) and they could continue to do so in the future. But their long experience in custodianship is unrecognised by modern conservationists, and they feel that some **'utopian wilderness'** is being **imposed upon them**. **Instead** of that, they ask the government to do much more to **prevent wildlife crimes and illegal logging**, and to back them up in continuing their traditional practices. As their governance institutions are under attack by 'green grabbing'[1299] and powerful economic and political forces, including those benefitting from the war economy in Ukraine,[1300] will they manage to remain vital and sustain their livelihoods in the Carpathians? And, will they ever find allies among the conservationists? Will the latter learn not to "take things into their own hands" but to pay attention to the social history of the habitats they wish to conserve?

The Ancestral Domains of Indigenous tribes in the Philippines, the coastline and coral reef of Gangjeong and the mountain forests and pastures of the Romani communities in the Carpathians offer a glimpse of 'territories of life', a phenomenon that, despite its evidence in many contexts, has remained invisible and unarticulated for a long time, in particular by conservationists. In 2008, the 'collective discovery' of community conserved areas in all continents and cultures and the growing need to make them visible, recognised and

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1299   There is more to this than throwing insults at well-meaning conservationists, as this case offers a dilemma between kinds of livelihoods and relations with nature. Rich urbanites can leave nature intact for their holiday's hiking and not be aware where the wood of their apartment's floor and furniture comes from. But poor people whose survival depends on mushroom and berry picking, or taking their animals to grazing, cannot.

1300   See Bruno Manser Fonds, 2024.

supported coalesced as prime motivations to establish the **ICCA Consortium**.[1301] The initial members comprised trustees of custodian Indigenous peoples and communities and supporting NGOs, allies and advisors who had matured strong mutual confidence through years of collaboration in the field and/or within the working groups of the IUCN Commissions. Together, they had advocated the value of 'community conservation' before, during and after the Durban Congress,[1302] and in 2008 joined as volunteers, setting themselves the task of **moving forward the concerns of custodians of conserved territories**.[1303] Two years later, in 2010, they decided to acquire a formal status under Swiss Law as an international 'movement organisation' to promote the *appropriate* recognition and support of such territories.[1304]

The term **'CCAs'** and **'ICCAs'** were abbreviations the Consortium initially used to describe territorial sites governed, managed and conserved by custodian communities as commons. Such sites were characterised as exhibiting three properties: 1. strong bonds between the territories and their custodians; 2. well-functioning governance institutions able to decide rules and get them implemented and respected; 3. decisions and rules producing positive results for both environmental integrity and community livelihoods. In the years that followed, ICCAs were identified in a variety of cultural and ecological environments and mapping initiatives highlighted overlaps between biodiversity richness and areas under collective governance by Indigenous peoples and communities.[1305] Practices of sustainable use of wildlife were strongly argued for (and remain controversial).[1306] The new concept of **'conserved areas'** would be articulated as conservation *de facto*, on a par with protected areas at the Sydney IUCN World Parks Congress of 2014.[1307] And, also as a consequence of all these developments, the ICCA concept made substantial inroads in conservation policies,[1308] being ultimately re-baptised **'territory of life'**.[1309]

From the beginning, the strategic approach of the Consortium combined an **international policy focus** with support to the **self-determination of custodians**— from site-based processes to sub-regional and national networks that would ultimately tackle (as in the case of the Philippines described earlier in this section) policy changes at national level.[1310] The rooting of work in both local 'territories of life' and international networks

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1301   The Consortium was established on the occasion of the IUCN World Conservation Congress of 2008, focusing on 'community conserved areas' or CCAs. The term later evolved into 'ICCAs' standing for "areas and territories governed, managed and conserved by custodian Indigenous peoples and local communities" and, later still, into "territories of life" (Sajeva *et al.*, 2019). See also: https://youtu.be/70mt7bozJb8?list=PLuBpRnNXhKyQciWz4bRRdPqtLBaT5tdts accessed 2024. Here we also refer to the ICCA Consortium as 'Consortium' tout court.

1302   The first organised initiatives emerged in the months of preparation towards the first World Conservation Congress of Montreal (Canada) in 1996. A Panel on Collaborative Management of Protected Areas was then created with Fikret Berkes and Yves Renard as co-chairs.

1303   The movement was staffed by volunteers, who worked for years without a budget and by taking advantage of the office premises and activities of members and affiliates.

1304   The Consortium is an association whose members are organisations that represent Indigenous and community custodians and their allies. The honorary members are individuals engaged as activists and experts. The mission reads: "The Association ICCA Consortium is established to promote the appropriate recognition of, and support to, Indigenous peoples' and community conserved areas and territories (ICCAs) at local, national, and international levels. This purpose is set in the context of the broader vision of conserving biodiversity and ecological functions, nurturing the sustainable livelihoods of Indigenous peoples and local communities, and implementing the UN Declaration on the Rights of Indigenous Peoples— including self-determination and the full respect of their cultural diversity and collective and individual rights and responsibilities. See: www.iccaconsortium.org; Farvar *et al.*, 2018; Sajeva *et al.*, 2019; and the short movie: https://youtu.be/70mt7bozJb8?list=PLuBpRnNXhKyQciWz4bRRdPqtLBaT5tdts accessed 2024.

1305   See https://www.landmarkmap.org/ accessed 2024. See also pages 84–90 of Borrini-Feyerabend *et al.*, 2013 and Elias *et al.*, 2016. In specific countries, mapping had managed to bring visibility to community territories even earlier in the new millennium— e.g. in the Philippines, where participatory mapping and delineation have supported the legal recognition of ancestral domains (see: http://pafidph.org/ accessed 2020) or in Iran, where the transhumance territories have been mapped by many tribes in efforts to secure their livelihoods (see: https://www.cenesta.org/en/ accessed 2024). One of the countries where the mapping and demarcation of Indigenous and Quilombola lands have taken place early and involved truly immense territorial extensions is Brazil (see: https://pib.socioambiental.org/en/Demarcation accessed 2024). It is now demonstrated that this work has led to much lower rates of deforestation and higher regrowth even when compared with governmental protected areas (Alves-Pinto *et al.*, 2022).

1306   Cooney *et al.*, 2018; Child & Cooney, 2019; Child, 2019.

1307   A definition of 'conserved areas' was first offered by Borrini-Feyerabend and Hill (2015). See also Andersen and Enkerlin Hoeflich (2015) where the term is used without offering a definition. Some may equate 'conserved areas' with OECMs, an idea we do not espouse here and we discuss in Part VI.

1308   E.g. as often identified with one of the four main governance types for protected areas (Borrini-Feyerabend *et al.*, 2013); as describing essential contributions to the Aichi Biodiversity Targets of CBD COP 10 (Kothari, 2014); as a potential major component of OECMs in many countries (Jonas *et al.*, 2017); etc. See definitions in Part VI of this work.

1309   See Farvar *et al.*, 2018; Sajeva *et al.*, 2019 and ICCA Consortium, 2021. See also the short movie: https://youtu.be/70mt7bozJb8?list=PLuBpRnNXhKyQciWz4bRRdPqtLBaT5tdts accessed 2024.

1310   Process guidance is available here: https://ssprocess.iccaconsortium.org/ accessed 2024.

was considered essential.[1311] But all this could only be promoted opportunistically, as it depended on a fortunate combination of capable people, resources and other suitable circumstances.

Like in the Philippines, such a fortunate combination was identified in 2008 in Casamance, a region of Senegal where eight fishing communities were ready and willing to **re-create and re-assert their traditional governance institution** for their estuarine environment— for years violated and depleted by non-local fishers using destructive (and legally forbidden) fishing gear. The Consortium supported the communities in organising and facilitating some large gatherings where collective awareness moved from problems to solutions, devising a local governance structure, some key management rules and a volunteer surveillance operation for their estuarine territory. The communities drew on their traditional knowledge and institutions, their culture of solidarity, their closely knit society, and Senegal's Decentralisation Law. The Consortium offered support to interpret CBD Decisions in favour of community conservation and to carry out a participatory situation analysis and planning.[1312] It also facilitated some small financial support to acquire a surveillance boat for the new 'community conserved area'. Crucially, the eight fishing communities demonstrated uncommon voluntary engagement, ingenuity, diplomatic ability and solidarity in organising themselves and convincing the local government that they could *apply* the existing legislation and enhance both the local biodiversity and their own livelihoods.

Kawawana— the 'community conserved area' of the eight fishing communities in Casamance—[1313] was formally recognised by municipal and regional government authorities in 2010. The regular surveillance and new fishing practices that followed such recognition have generated impressive ecological and social results, offering an example for coastal conservation throughout West Africa. After just a few years of surveying and enforcing sensible fishing rules, local biodiversity was impressively restored, fish catch significantly enhanced, local families were eating good fish again and some of the youth who had migrated to urban areas were returning to their villages.[1314] Two main achievements can be highlighted here. The first is that community governance could be fostered and 'restored' by limited, appropriate support provided under favourable circumstances. And the second is that restored community governance was able to restore a damaged ecosystem and maintain ecological and socio-economic benefits. This indeed confirmed the foundational work by Marshall Murphree on **sustainable use of wildlife**, which could be summarised as follows: "sustainable use depends on **a governance institution endowed with suitable knowledge, mētis, authority and means to intelligently adjust use practices to changing social-ecological and economic circumstances**".[1315]Despite its proven success, at the time of writing this, the recognition of Kawawana is formally secured at the municipal and regional level *only*. The communities still cover all costs of their conservation activities[1316] and the appreciation of their work at the national level remains unclear. Following the steps of the Consortium's self-strengthening process,[1317] however, a national network of similar organised communities has emerged throughout Senegal. The network is committed to policy improvements for the entire country.

1311   Agrawal and Gibson (1999) consider such collectives/federations as essential to "span the gap" between the local and the national.
1312   Borrini-Feyerabend *et al.*, 2009.
1313   In Djola language the abbreviation Kawawana stands for "our collective patrimony for us all to conserve".
1314   Grace Thomas & Touré, 2013.
1315   Not a direct quotation of Marshall Murphree but a synthesis from his writings and personal discussions with him.
1316   See the relevant account in ICCA Consortium, 2021. In 2021, the community enlarged its conserved area to cover the community forest and, basically, the entire territory of the municipality (Chatelain & Trecourt, 2021). A community savings and loans association has also been strengthened to provide financial support for the administration and surveillance of the governing institutions. Punctual backing for this as well as for the means of surveillance (e.g. boats, gasoline, binoculars) and the technical advice that has accompanied some key moments of the overall process was provided by small grants from donors solicited by the Consortium.
1317   https://ssprocess.iccaconsortium.org/ . The 'process' is a synthesis of successful experience by communities.

If the recognition of 'community conservation' in Senegal remains localised and still *in process*,[1318] Canada's recently renewed policies and practices for community conservation are consolidating at the time of writing. As a belated response to the Durban Accord and various CBD Decisions, Canada's national conservation goals came fully to the fore after 2015. The country was then also striving to put into practice the recommendations of its Truth and Reconciliation Commission, and discussions were ongoing about UNDRIP, sovereignty and specific treaties with its First Nations.[1319] With the encouragement of both IUCN and the ICCA Consortium, the Parks Canada Agency and several Canadian Indigenous organisations agreed to jointly develop an approach towards '**Indigenous-led conservation**'. In 2018, the report *We Rise Together*[1320] called for a healing process to restore relationships with the land and among peoples, in a renewed "ethical space" of dialogue. From this positive start, it became possible to envisage the concept of Indigenous Protected and Conserved Areas (IPCAs), rooted in "self-determination", but open to "develop partnerships with governmental and non-governmental entities, research institutions, and others." [1321]

The historical, legal, socio-cultural and ecological complexities of implementing IPCAs in the Canadian environment are daunting, but the case of Edéhezíe Protected Area— the first recognised by both the Indigenous government of the Dehcho Region of the Northwest Territories and a Federal Agency (Environment and Climate Change Canada)—[1322] has opened the way.[1323] Its establishment was Indigenous-led, with management assured by local Dene guardians. The initial years of funding are being provided by the Federal Government of Canada, and the governing body includes representatives of both the Dehcho Dene First Nations and the Federal Government. Decisions are only to be made by consensus.

Since its establishment, the ICCA Consortium had focused its advocacy on recognising the conservation value of territories of life. It had done so not only to promote the integrity of nature and sustainable livelihoods but also— and openly— to strengthen their custodians' request for **self-determination**.[1324] Self-determination is the **foundation of the UN Charter**[1325] and is recognised in international law as a right *of process*[1326] that is proper to peoples (not to States or governments). It is explicitly at the core of the UN Declaration of the Rights of Indigenous Peoples[1327] and implicit in the demands of many non-Indigenous custodian communities.[1328] The concept is complex and often focuses on **cultural aspects**— the manifestations of collective humanity and shared meaning centred upon language, livelihoods, values, institutions, traditions, ceremonies, ways of living, common historical experiences as distinct 'peoples' and 'communities'. It may also concern the desire for collective **territorial rights and responsibilities** as a way to secure the material basis for livelihoods. And it may concern the desire for an appropriate level of **political autonomy**, including via an independent **deliberative body**.

1318   See, however, Dieng & Ndiaye (2012).
1319   *Zurba et al.*, 2019.
1320   Indigenous Circle of Experts, 2018.
1321   Stephen Nitah, quoted in Zurba *et al.*, 2019.
1322   See: https://www.canada.ca/en/environment-climate-change/news/2018/10/first-new-indigenous-protected-area-in-canada-edehzhie-protected-area.html accessed 2024.
1323   Ibid.
1324   The ICCA Consortium's mission includes seeking "...self-determination and the full respect of cultural diversity and collective and individual rights and responsibilities....". As of 2023, the Consortium has adopted a Manifesto for territories of life where self-determination is crucial (see https://www.iccaconsortium.org/2023/08/22/territories-of-life-manifesto/ accessed 2024).
1325   Article 1 of the UN Charter of 1945 calls for "respect for the principle of equal rights and self-determination of people...". Later, Article 1 of the UN International Covenant on Economic, Social and Cultural Rights of 1966 states that "All peoples have the right to self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development."
1326   It is a 'hard right', but a right to process with a wide range of possible outcomes dependent on the situations, needs, interests and conditions of concerned parties... not a right to outcome (see https://unpo.org accessed 2024).
1327   United Nations, 2007.
1328   United Nations, 2018.

For many Indigenous peoples and communities, self-determination includes diverse and specific combinations of the three aspects just described, as they seek to **secure** their natural and cultural, material and immaterial **heritage**. In fact, self-determination also means *maintaining the capacity to define* 'self-determination' in any changing context.[1329] Respecting self-determination implies diverse things in diverse circumstances, from ensuring the will of people to remain in 'voluntary' isolation from the rest of society[1330] to recognising a desired level of internal regulatory jurisdiction and economic independence (e.g. language rights, autonomous food security, autonomous regional government) that **impedes assimilation** *de facto*. Only for a small minority who explicitly say so, self-determination implies full political independence from the State.

Self-determination acquires full meaning only in light of the unique historical contexts of each people and territory, and especially so when those include short and long waves of colonisation, neo-colonisation, wars and conflicts. At its root is the experience of human groups that **self-identify** as distinct 'peoples' or 'communities' and express a **desire for a level of autonomy**. This has too often been met by resistance and repression from power, motivating innumerable struggles and conflicts. At times those resulted in failure and even tragedies but, at other times, they were successful in producing agreements that secured a desired level of autonomy. Despite the richness and diversity of its possible political interpretations and despite the fact that self-determination of peoples and communities can coexist well with State governments, the concept of self-determination is usually controversial. As mentioned, some peoples and communities have focused their demands on a recognition of their **cultural and political rights** and given lesser consideration to the specific territory where they wish to enjoy those rights. Others, however, have concentrated on **territorial rights**, as they saw the transmission of cultural practices to future generations possible only as part of the territories where autonomy and sustainability could be sought.[1331]

Some peoples currently engaged in struggles for self-determination are represented in the international arena by the Unrepresented Nations and Peoples Organization (UNPO).[1332] In the past, some UNPO members achieved the status of State governments on their own account.[1333] Others have negotiated satisfactory agreements with their State governments and today are no longer members of UNPO.[1334] Still others possess a high level of self-determination but are yet to be recognised as independent States by all or some members of the international community.[1335] All members of UNPO, like all non-members, need to be aware of the possible instrumental use of their struggles by geopolitical powers— enemies and allies alike, as recognising or not recognising a call for autonomy has strong geopolitical implications.

1329   The concept of 'self-determination' and the extent to which it is recognised by different governments regarding their Indigenous peoples is described in United Nations Human Rights Council (2021a) and in footnote 1332.

1330   According to the Inter-American Commission on Human Rights (CIDH, 2013), approximately 200 tribes (about 10,000 individuals) are estimated to live in total or relative isolation ('initial contact'), principally in areas of the Amazon region of South America. The term 'voluntary' is qualified in the mentioned text (in Spanish).

1331   Corntassel, 2008.

1332   A standing point of UNPO is that, in view of the world's vast ethnic diversity, self-determination does not mean seeking mono-ethnic States (the very idea triggered some of the bloodiest chapters in human history, including ethnic cleansing, forced assimilation, massive movements of refugees and genocidal crimes). As agreed by the UN, the right to self-determination also does not create a right of peoples to unilaterally declare secession or to dismember the territorial integrity or political unity of independent States when those conduct themselves in compliance with the principle of equal rights and self-determination of peoples and possess a government that represents the whole people belonging to the territory, without distinction as to race, creed or colour. Interestingly, in 2019 the UNPO Secretariat launched a campaign titled Reimagining Self-determination with the aim to inspire a renewed global debate to modernise the current definition of that right as an instrument of long-term global peace, democratic reform and sustainable development. In 2021, UNPO stressed that the right to self-determination and the right to land and FPIC are closely connected. The website of UNPO (https://unpo.org/ accessed 2024) offers more information. Given the increasing entanglement of legitimate struggle for self-determination and geopolitical interests of State powers, UNPO's independence should be continuously tested and challenged.

1333   E.g. Latvia and Estonia (both recognised in 1991), East Timor (recognised in 2002), Bougainville (recognised in 2008) and Kosovo (recognised in 2018). The international community rarely has a homogenous opinion regarding matters of self-determination, so recognition is always to be specified 'by whom', 'by what means' and ''in whose geopolitical interest'. All sorts of combined answers are possible. After a long history of conflicts, Bougainville recognised its own self-determination from New Guinea by a peaceful referendum, but New Guinea has still to recognise its independence. Kosovo became independent from Serbia after a NATO military intervention.

1334   E.g. the Moro people of the Philippines

1335   E.g. Taiwan and Somaliland.

Is there any meaningful distinction between the self-determination sought by the members of UNPO and by the members of the ICCA Consortium? This question can only be answered by the member organisations of the associations themselves. Usually, but not necessarily, the scale of autonomy desired by members of UNPO is greater than that sought by the members of the Consortium. Moreover, several members of the Consortium focus on territories where a relatively well-defined people or community aims at maintaining or achieving a meaningful **level of autonomy in governance and management**. And their self-determination claims are typically *also* **based on a demonstrated capacity to conserve** the territories at stake and, with that, to secure livelihoods, food sovereignty and wellbeing as distinct peoples or communities. For instance, the Manobo people of Soté in the Philippines (case example 9) has clarified the Ancestral Domain it has strenuously defended and now wishes to govern. The Aysén coastal communities of Chile demand to consolidate their governance to protect their *Espacios Costeros Marinos de Pueblos Originarios* (ECMPO, Coastal and Marine Area of Indigenous Peoples).[1336] Massaha and other communities in Gabon strenuously resist logging in their customary forests that include sacred natural sites and livelihood resources.[1337]

Demonstrating and claiming one own's capacity to conserve may be a case of "using the masters' tools to dismantle the master's house".[1338] As recommended by Indigenous activist M. Taghi Farvar "disempowered peoples who wish to liberate themselves need to be proficient in the language of the groups that dominate them".[1339] In this sense, **it *is* possible to understand a hegemonic discourse deeply enough to imbue it with more substantial, and alternative, meaning**.[1340] And it *is* possible to engage in processes of political imagination that have concrete results and "**generate meaning in contexts of unequal power**".[1341] In this sense, processes of seeking environmental justice offer room to articulate local values, custodianship and self-determination.[1342] Case example 30 offers an **emblematic** account of an Indigenous people, member of the ICCA Consortium, that has recently taken strong **action for self-determination in its territory of life**, conceiving this as a status that confers both collective rights and collective responsibilities.

No simple way out exists from the many dilemmas that face humanity at this moment in history. But the multiple values of territories of life and the traditional governance institutions of custodian communities have gained attention in international conservation circles.[1343] On the one hand, it is now clear that, for at least 12,000 years, humans have used and shaped most terrestrial environments on our planet, including those that some describe as 'pristine', 'intact' and 'wild'.[1344] On the other, traditional governance institutions are today better valued as repositories of **biocultural knowledge and capacities to conserve nature**.[1345] Much of that knowledge and capacities has been lost, but what remains, and what is being rebuilt and recreated, may be put to excellent use to rein in deforestation and biodiversity damage.[1346]

1336   https://www.iccaconsortium.org/2022/10/11/chile-indigenous-mapuche-williche-artisanal-fishing-communities-govern-coastal-marine/ accessed 2024.
1337   https://www.iccaconsortium.org/2022/01/11/alert-massaha-gabon-call-protection-sacred-forest-threat-logging/ accessed 2024.
1338   An often-quoted 1984 paper by the Black, lesbian, feminist author Audre Lorde is "The Master's Tools will never dismantle the Master's house". In this she warned poor, lesbians, Black, older women not to wait for liberation from their academic, straight, white, younger 'sisters'... but she did not mean that as a refusal of learning the skills of the enemy. In that very paper, in fact, she quotes Aimé Cesaire about the need to break from the prison of the colonisers' language, by mastering that language and converting it to the needs of self-expression.
1339   This recommendation is the opposite of Lorde's.
1340   Examples may be the concepts of 'inclusive conservation' and 'Indigenous conservation' (Farvar *et al.*, 2018), 'convivial conservation' (Büscher & Fletcher, 2020), as well as the very term 'territory of life'.
1341   Li, 2005.
1342   See Coolsaet, 2020.
1343   See, among many others, IUCN Resolutions 3.012; 3.055; 4.048; 5.094; 6.030; 7.118 (all available on a searchable repository hosted by the IUCN portal https://portals.iucn.org/library/resrec/search); IPBES, 2019; UNEP WCMC *et al.*, 2020.
1344   Ellis *et al.* (2021) report that, already by 10,000 BCE, wildlands covered 27.5% of Earth's surface only. While Fletcher *et al.* (2021) discuss in detail how the wilderness concept may have damaged traditional knowledge and biodiversity conservation, others use it just to distinguish those places on Earth that have been spared the heavy human footprint suffered by others. In this sense, the concept still has value... but it should be qualified.
1345   Stevens, 1997; Posey, 1999; Brechin *et al.*, 2002; Borrini-Feyerabend *et al.*, 2010; Kothari *et al.*, 2012; Forest Peoples' Programme, 2020.
1346   See, for instance, Nepstad *et al.*, 2006; Porter-Bolland *et al.*, 2012; Alves-Pinto *et al.*, 2022.

Case example 30.

The Wampís Nation finds self-determination by defending the 'ecological autonomy' of its integral territory of life in the Peruvian Amazon[1347]

The Wampís nation lives in the watersheds of the Morona and Santiago Rivers between the Cordillera del Cóndor range and the Marañón River, in the Peruvian Amazon at the border with Ecuador. Covered by rainforest and relatively isolated (more than 1,500 km from Peru's capital, Lima), the Wampís territory is one of the few remaining regions that retains full and undisturbed connectivity in the Eastern Slope of the Tropical Andes— the place of highest biodiversity richness anywhere on land. Within it, the Kampankis mountain range is a safe haven for viable populations of endemic and threatened species of mammals, amphibians, reptiles and birds (the most emblematic include the jaguar, boa and tapir).[1348] It is also a reliable source of clean water, an important carbon stock (above and below ground) and a reservoir of seeds of trees highly valued as timber and many other useful plants.[1349] As the Wampís never adopted cattle farming (unlike some of their Shuar neighbours), nor did they rent out land for agroindustry (as in certain Awajún areas), their **forest is largely intact— one of the best conserved along the Andean foothills**.

The Peruvian government has created a few protected areas in the Wampís territory, which overlap in part or fully with titled communities and sacred areas. But this did not spare the territory from exploration and exploitation by mining, oil and gas industries, which have taken advantage of government legislation and policies providing incentives for those activities. Areas of land, forests and watercourses were, and still are, contaminated by mercury from illegal gold mining and oil leakages from the 45-year-old North Peruvian Pipeline. Naturally, such impacts nourished local resentments, which escalated in 2009, when the Wampís and their Awajún neighbours organised a mass protest that blocked pumping stations, pipelines, and river and road transportation for several months. The protesters demanded the **reversal of the government decrees that had opened the territory to further mining, oil, gas and agro-industrial concessions**. The government responded by sending in police forces and **a violent confrontation between them and Indigenous 'warriors'** (numbering about 4,800) left 34 people dead among both soldiers and Indigenous protesters. Many Wampís and Awajún were detained. This Indigenous uprising, known as the 'Baguazo', is the most severe that has taken place from the beginning of the new millennium in Peru, and some say also worldwide.[1350] Although the immediate result was tragic, the **Baguazo uprising** was **ultimately successful,** as the decrees that opened the territory to new concessions were derogated and, in August 2018, the Supreme Court of Peru set a historical precedent by cancelling a concession that had not received proper prior consultation.

The Baguazo was clearly a factor in the **revival of the Wampís' proud warrior ethics**, but also contributed to the **re-awakening of** its **cultural identity**. In the years prior to the uprising, the Wampís had participated in a 'rapid biological and social inventory' led by the Chicago Field Museum. This was a positive experience, which they used to re-evaluate their Indigenous ecological

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1347   Case example compiled by Grazia Borrini-Feyerabend based, at times verbatim, on Niederberger (2020) and on: Autonomous Territorial Government of the Wampís Nation, 2015; IWGIA, 2018; Wrays Perez Ramirez, personal communication, 2019; unpublished report prepared for the ICCA Consortium by Thomas Moore, 2019; and the very informative section on Iña Wampisti Nunke of ICCA Consortium, 2021. See also https://nacionwampis.com/ accessed 2024 and https://www.youtube.com/watch?v=Rqm6XSiNvdg accessed 2024. The picture of abundant water in the Wampís territory is courtesy of the Autonomous Territorial Government of the Wampís Nation.

1348   The Chicago Field Museum carried out a rapid biological inventory and found more than 20 species of plants, fish, amphibians and reptiles described for the first time by Western scientists, as well as a unique floristic composition (Chicago Field Museum, 2012).

1349   Ibid, p. 270.

1350   An instructive short film (in Spanish) is available here: https://www.youtube.com/watch?v=ERUeH9mmvGM accessed 2024.

knowledge. Several negative experiences with conservation NGOs, however, also accumulated in the early 2000s, when an 'avalanche' of projects raised positive expectations but also tensions and suspicions of possible personal interests of leaders. Many of the projects actually weakened the Indigenous organisations as the external resources were channelled through governmental agencies.

At around the time of the Baguazo, another positive input was provided by a Peruvian non-profit NGO called *Instituto del Bien Comun*. With UNICEF funds, the *Instituto del Bien Comun* carried out a cultural-historic mapping project employing a team of local Indigenous experts. They covered Awajún and Wampís communities and **mapped almost 4,500 references to culturally and historically relevant sites, place names, and the gifts of nature they have ancestrally used**. *When the worst of the Baguazo aftermath was over, the* Wampís *were ready to re-organise, and they naturally did so around the rejection of extractivism and an affirmation of what could be termed* **'ecological autonomy'**— *the autonomous governance over their 'integral territory'*. For that, their newly produced map proved a powerful tool. Printed on plastic canvas, the depiction of ancestral land as an 'island' with fixed border lines reinforced a strong vision of territoriality. While the map was not appropriate to represent the

fluid ethnic identifications that exist locally, it could serve well as a tool to engage with State representatives in discussion.

On 28 November 2015, the Wampís Nation **self-proclaimed governance rights to its customary territory**— comprising 1,327,760 ha— and **took on the corresponding responsibility** to govern it for the public good and to maintain a healthy environment and culture for the present and future generations.[1351] The territory they declared (*Iña Wampisti Nunke*) includes titled and untitled lands, a couple of protected areas and a portion of a national park,[1352] lands occupied by colonists, mining concessions, an army base, two municipalities, etc. The Wampís describe it as **'integral territory', unbroken from the top of the sky to the centre of the Earth** and occupying an **entire landscape**. This is adamantly different from the leopard spots of fragmented land that the Peruvian government was (and is) only willing to recognise as belonging to Indigenous communities.

From its creation, the self-proclaimed **Gobierno Territorial Autónomo de la Nación Wampís** (GTANW, Autonomous Territorial Government of the Wampís Nation) rooted its authority in **Indigenous self-determination** *and* **Indigenous conservation values**, *both imbued with the invocation of* Wampís *cosmology and*

1351   Gobierno Territorial Autónomo de la Nación Wampís, 2015.
1352   The National Park in question is Ichigkat Muja–Cordillera del Cóndor and the other protected areas include the Tuntanain Communal Reserve and the Zona Reservada Santiago-Comaina.

non-human actors. This well corresponds to an extension of their territorial claims from the horizontal dimension (titling of land) to the **vertical dimension**— *the realisation that the* **'integral' territory** *must include the underground and the space above ground, but also implies* **respect and care for the sacred 'beings'** *(nunkui, tsunki and others)* **associated with the earth**, with **bodies of water** and with **the sky**. In this way, the organisation of the Wampís acquired a much larger dimension than a reaction to external threats, offering a **collective vision of expanding autonomy** and bringing into the political realm the *arutam* ancestor spirits, multiple sacred beings, and elements of the spiritual traditions of the Wampís like vision seeking and visits to the sacred waterfalls. The connection with the conservation of biodiversity is immediately clear. The 'message to the world' sent from the founding assembly of the GTANW clearly notes that Wampís' self-determination should be supported by the rest of the world so that they may protect 1.3 million hectares of forest with all the carbon stock and biodiversity richness contained therein. In other words, the **protection of the environment** (forest, biodiversity, climate) is stated as being **intrinsically linked to both Wampís ethnicity and self-determination**.

The Wampís Statutes include protocols of relationship with non-Wampís individuals, enterprises and organisations within the territory. The Statutes also lay out a vision for the future, stipulate rules regarding the health and duties of the Wampís people, and procedures for their physical and spiritual wellbeing, education, language and recovery of ancestral place names. The Statutes do not allow the Peruvian government or anyone else to impose activities without the free, prior and informed consent of the Wampís Nation and its Autonomous Territorial Government. In particular, the Wampís Nation affirms that the **Government of Peru** is **not allowed to grant any further concessions** for oil, timber or mining in their territory— a milestone in Indigenous sovereignty.

At the time of writing, the Government of Peru has not officially recognised the Wampís Nation and its Autonomous Territorial Government, but the need for consent has been legally confirmed by the Fourth Constitutional Court of Lima in a judgement issued in August 2018, in application of the ILO Convention 169, ratified by Peru in 1994. Moreover, the oil company Geopark has withdrawn from the unexploited oil concession Lot 64 in Wampís and Achuar territories. The announcement came after the GTANW and some of its allies filed a criminal complaint to prevent Geopark from putting the Wampís communities of the Morona River at risk from contagion during the COVID-19 pandemic. The governmental company Petroperu[1353] has decided to accept the transfer of the 75% share of the project owned by Geopark and become the sole operator of the concession, pending the approval by a Supreme Decree of the Peruvian government. The Wampís consider Geopark's withdrawal from the area as an important step forward in the defence of their ancestral territories. They are resolved to continue the fight until the very end of the concession.

Some of the contemporary challenges facing the GTANW may be more internal than external. Many regulations having to do with land allocation or hunting and fishing are traditionally handled by customary institutions at the kinship level and fall under the responsibility of communal authorities, with their specific by-laws.[1354] The GTANW does not interfere with these decisions but has recently started to elaborate some **general guidelines,** which should ensure that sustainable economic activities are given priority over destructive ones, fostering a consensus against commercial logging, gold mining, oil exploitation or large-scale cattle ranching. This will inevitably require exercises in persuasion and the construction of consensus, as some individuals and groups currently depend on commercial hunting and logging, or even engage with illegal gold mining and oil companies. There will also need to be tools and resources to enforce implementation. All Wampís are concerned about the diminishing abundance of fish, game and valuable timber species. They know that some rules must be developed and respected. Hopefully, the **inspiring collective value of self-determination**, and the memory of centuries of struggles it carries, **will instil vitality** into the young Wampís governance institution.

1353   See https://gestion.pe/economia/empresas/petroperu-acepta-salida-de-geopark-peru-del-lote-64-nndc-noticia/?ref=gesr accessed 2024.
1354   Niederberger, 2020.

For some, this shift of perspective is a reaction to some of the excesses of modernity and reveals a renewed appreciation of the qualities that made it possible for humans to survive in the daunting conditions of our past. Hopefully, it is also a recognition of the immense potential of communities and territories of life in terms of **diversity**, **vitality** and even **humane relations** with nature and other people— as custodians may still be able to maintain some bonds of *care* with their environments and among themselves. At least part of the planet's much-needed mitigation and adaptation to climate change and restoration of habitats and biodiversity needs to come from **decentralised communities living** in close relation with their territories. Much else is also needed, including ways to deflate the greed, aggressiveness, insane consumption and impunity that are responsible for much of climate change and habitat damage. It is becoming clearer, however, that custodian communities have the essential task of contributing **local, self-determined solutions** to the current environmental crises and climate change prospects— be it by choice or compelled by events.[1355]

1355   Gowdy, 2020.

*The most important thing to know about our society is that all
our means of understanding our world are being aggressively
and continuously interfered with by powerful people who benefit
from the status quo. They're actively meddling in our perception of
reality.*

Caitlin Johnstone, 2023b

*We refuse to be
What you wanted us to be
We are what we are
That's the way it's going to be.*

Bob Marley, quoted by Arturo Escobar, 2020

A recognition crescendo, with uncertain outcomes

There is **a paradox in many struggles for self-determination**. On the one hand, it seems evident that such struggles must be rooted in enhanced awareness and inner strength, a spiritual reawakening of the very Indigenous peoples and local communities that have suffered oppression and colonisation. This should bring them to recognise their genuine roles and renounce foreign ways and values. Yet, 'foreign values' may include appealing concepts and practices, such as recognition of **rights**, offers of **reconciliation** and promises of **economic benefits**. How far should those be accepted and followed? Jeff Corntassel is clear that many of these are appealing elements of a **politics of distraction**.[1356] It is true that those who seek self-determination have often in mind the political and economic recognition of their autonomy (i.e. some recognised 'rights'), but, Corntassel asks, are not those rights and the related politics of reconciliation and economic models, State-centric, steeped in colonialism, adherent to oppressive patterns of individual land ownership and consumerism? Are those not **incompatible with the moral economy** of those who wish to live close to the land and be responsible for what happens to it and to one another?[1357]

Glen Coulthard asks similar questions as he offers a scathing analysis of the struggle of the Dene and Kluane First Nations against a pipeline project. For him, it was via **participatory processes of 'domestication'** that the Canadian government managed to change "…how Indigenous peoples think and act in relation to the land…",[1358] rendering acceptable the concepts and practice of land property and monetisation that are inherent to capitalism and foreign to First Nations. Coulthard does not propose that First Nations disengage from State-based legal and political systems, but calls for **critical self-reflection, scepticism and caution about the rights-based, recognition politics** developed and controlled by such systems.[1359] In the same vein, Chris Hedges (2023) stresses that "militarists, corporatists, oligarchs, politicians, academic and media conglomerates champion identity politics" as such championing "does nothing to address the systemic injustices or the scourge of permanent war" and it simply makes it "more palatable" by "castigating those who do not linguistically conform to politically correct speech" and "incorporating a tiny segment

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1356   Corntassel, 2012. Jeff Corntassel is a member of the Tsalagi Cherokee Nation.
1357   Corntassel, 2012. See also Niederberger, 2020.
1358   Coulthard, 2014, p. 78, quoted by Coolsaet & Néron (2020, p. 58 in Coolsaet, 2020). Glen Coulthard is a member of the Dene First Nation.
1359   Coulthard, 2014. Other Indigenous scholars who have stressed similar powerful points and contributed to the 'resurgence' movement in Canada include Alfred Taiaiake and Lianne Betasamosake Simpson (Stan Stevens, personal communication, 2022).

of those marginalized by society into unjust structures to perpetuate them". True political impact requires much more substantial and uncomfortable change.

Questions and issues such as those just mentioned, and the dilemmas of being *described by others*, and having to relate to others in the language and forms of *their* power, are part of the thicket that self-determination processes need to untangle. As we will see in this section, the dilemmas involve unprecedented opportunities and risks. Corntassel (**2008**) believes that colonisation can be countered only by **genuine Indigenous approaches**— centred upon what is truly part of Indigenous cultures, namely, a clear focus on **relationships and responsibilities**. In his view, decolonisation and **resurgence** may be nourished by traditional ceremonies, reverence to nature and sacred sites, bonds of kin and camaraderie... in other words, self-determination is more about autonomously assuming responsibilities and coherent lifestyles than asking State governments and others to grant 'rights' in processes of 'reconciliation'. This perspective provides a helpful background for the events we are about to recall, while keeping in mind that, too often, 'taking responsibility for the land' is not an option readily available for custodians. For instance, when State governments deliver concessions for the exploitation of minerals, timber or water or demand that impacting infrastructure are hosted in the very land cherished by custodians... the only option is fierce resistance. And even this is rarely successful.

Reflecting upon the struggles of custodians like the residents of Gangjeong, the Romani communities or the 'Baguazo' uprising of the Wampís and Awajún Nations described in preceding sections gives no indication that the value of community conservation was about to experience, **after 2015,** a **rapid and sustained 'recognition crescendo'**. True, this was to take place mostly in the international policy arena and in academia, but it would have been unimaginable even just a few years before. Beyond the impressive examples of custodianship highlighted in national and international gatherings, a decisive impetus emerged when researchers started making a **quantitative case for the land conserved by Indigenous peoples and local communities**. The land rights specialist Liz Alden Wily was a pioneer, persuasively arguing that customary collective tenure could rightfully apply to *more than half of the world terrestrial environment*.[1360] This had been off radar for most development and conservation advocates, including those who had powerfully highlighted the role of the commons for sustainable use of wildlife.[1361] Alden Wily also stressed that, with respect to other forms of tenure, customary collective tenure applies to much higher proportions of forests, rangelands and wetlands— the habitats critical to both livelihoods and biodiversity.[1362] The World Resources Institute (WRI) was inspired by these results and built upon them to create LandMark—a global online platform that gathers information about Indigenous and community lands.[1363]

As Alden Wily's revelations about customary land rights were sinking in, the next step was demonstrating that Indigenous peoples and local communities were also good 'custodians', often better than other governance actors at conserving biodiversity. Some research had earlier **quantified** that result for forest environments in the Amazon region[1364] and further studies were to consolidate that[1365] and extend the value of community governance to other regions and ecosystems on the planet.[1366] Very soon, the role of custodians and their **contribution to conserving biodiversity** were described as **crucial**[1367] and broadly **recognised** by the international conservation community.[1368] Meanwhile, the ICCA Consortium's membership was reaching well above 200 organisations and 400 individuals, while

1360 Alden Wily, 2011.
1361 Oglethorpe, 1999.
1362 Ibid.
1363 See https://www.wri.org/initiatives/landmark accessed 2024 and https://www.landmarkmap.org/
1364 Examples are Nepstad *et al.* (2006) and Porter-Bolland *et al.* (2012).
1365 Alves-Pinto *et al.*, 2022.
1366 Corrigan *et al.*, 2018; Garnett *et al.*, 2018; Kyle *et al.*, 2019; Baragwanath & Bayi, 2020; Fa *et al.*, 2020; Sze *et al.* 2021; Kruid *et al.*, 2021.
1367 ICCA Consortium, 2021; WWF International *et al.*, 2021; Asia Indigenous Peoples Pact *et al.*, 2022.
1368 In 2022, CBD acknowledged "the important roles and contributions of Indigenous peoples and local communities as custodians of biodiversity and partners in the conservation, restoration and sustainable use." (CBD, 2022, Section C.8).

the official registry of ICCAs/territories of life (ICCA Registry) at UNEP-WCMC[1369] was slowly but steadily being filled with examples. Some custodians started receiving small grants via UN Agencies[1370] and their 'conserved territories' were offered 'official standing' by IUCN and others.[1371] It was increasingly clear, moreover, that custodians possess legal rights only to a *minor* percentage of the land they occupy, manage and protect,[1372] and are thus vulnerable to outside commercial interests, which can acquire land in quick and easy ways.[1373] It was also surprisingly revealed that new constitutional and land law provisions were *increasingly* able to recognise customary collective regimes (this was particularly true in Africa).[1374]

The Convention on Biological Diversity had introduced in 2010 the concept of "other effective area-based conservation measures" outside protected areas (abbreviated as OECMs).[1375] Many soon realised that OECMS mostly encompass the traditional territories of Indigenous peoples and local communities.[1376] In 2016, IUCN introduced a **new IUCN membership category** composed of organisations of **Indigenous peoples**[1377] and the new Indigenous members did not wait long to develop a call for the recognition of their rights to govern "lands, territories, waters, coastal seas, and natural resources", asking for protection from damaging encroachment and direct access to public and private funding.[1378] As consciousness of **climate change** was mounting, the **mitigation role** of custodians (e.g. as they prevent deforestation more than other governance actors)[1379] entered the spotlight. Further, the positive results of **governance by traditional custodians** stood confirmed also for **livelihoods benefits**, not only conservation results.[1380]

In 2017, the Global Alliance of Territorial Communities (GATC),[1381] comprising four umbrella organisations of Indigenous peoples with claims to hundreds of millions of hectares of forests, articulated a statement asking for a stop to ecocide and violence against Indigenous and community defenders and the inclusion of cultural, social and environmental safeguards in all dealings with them. They asked for legal rights to land, mechanisms for conflict resolution and redress, and the protection of heritage and intellectual property rights. A relatively new focus was then added: "a greater percentage of *international finance* for climate and development to reach the local level, with more direct access by Indigenous peoples and local communities".[1382] Later, it was specified that this would imply a dedicated funding facility for 'Indigenous guardians of the forest'. In 2021, the IUCN General Assembly adopted some inspiring resolutions promoting the governance role of custodians in "existing and new conserved and protected areas" and pledged to protect 80% of the Amazon region by the year 2025,[1383] including by recognising all ancestral territories of

1369   https://www.iccaregistry.org/
1370   The GEF Small Grants Programme administered by UNDP became an important supporter of community conservation initiatives and ally of the ICCA Consortium in the 2010s. Many other organisations continued or started focusing on territorial management and care, including Land is Life (https://www.landislife.org/pagina-maqueteado1/ accessed 2024), Survival International (https://www.survivalinternational.org/ accessed 2024) and the Equator Initiative (https://www.equatorinitiative.org/ accessed 2024).
1371   After its Durban World Parks Congress of 2003, IUCN formally recognised the value of governance diversity and quality, and community conservation in 2008 (Dudley, 2008). After its Sydney World Parks Congress of 2014, IUCN moved to regularly work on 'protected and conserved areas' (see: https://www.iucn.org/our-work/region/asia/our-work/protected-and-conserved-areas accessed 2024 and so did WWF https://forestsolutions.panda.org/approach/protected-and-conserved-areas accessed 2024).
1372   RRI, 2015; Notess *et al.*, 2018.
1373   Notess *et al.*, 2021.
1374   Alden Wily, 2018.
1375   See the definition and discussion of OECMs in Part VI.
1376   Jonas *et al.*, 2017; see also: Borrini-Feyerabend *et al.*, 2014; Kothari, 2014. Importantly, and thanks to the advocacy of custodians, CBD COP 15 recognises the integrity and distinct nature of the territories of Indigenous peoples and local communities beyond protected areas and OECMs (CBD, 2022).
1377   IUCN Resolution 6.004 of 2016. This was the first time that IUCN had reformed its membership structure in its 70-year history and the idea was to be able to play a convening role for Indigenous organisations and a facilitating role to develop a specific conservation strategy for them, in alignment with existing international policy processes.
1378   These demands were enshrined in 2021 in the Global Indigenous Agenda for the Governance of Indigenous Lands, Territories, Waters, Coastal Seas and Natural Resources https://portals.iucn.org/union/sites/union/files/doc/global_indigenous_agenda_english.pdf accessed 2024.
1379   Ding *et al.*, 2016; Etchart, 2017; RRI, 2020; FAO & FILAC, 2021.
1380   Dawson *et al.*, 2021.
1381   https://globalalliance.me/ accessed 2024. The alliance today includes five umbrella organisations of Indigenous peoples from Latin America, Central Africa and Indonesia.
1382   GATC Press release of 2017, accessed March 2022. On the website accessed December 2023, the requests are summarised as: 1) An end to the violence, criminalisation and murder of our peoples; 2) Recognition and enforcement of legitimate territorial rights; 3) Direct access to climate finance; 4) Full respect of the right to free, prior and informed consent 5) Incorporation of traditional knowledge in climate change strategies.
1383   Resolution 7.129 makes a significant reference to the Durban Accord of 2003 and the Promise of Sydney of 2014 with regard to promoting quality and diversity of governance of conserved and protected areas.

Indigenous peoples and local communities, and their governance authorities. Finally, in November 2021, a landmark announcement was made during the United Nations Framework Convention on Climate Change (UNFCCC): a coalition of governments and private donors **pledged 1.7 billion US$ over four years** towards **climate solutions led by Indigenous peoples and local communities**.[1384] This was an unprecedented commitment in terms of *total funding* and implicit recognition of *tenure rights.[1385]*

The ambition of the requests and the support that has been pledged fit the magnitude of the current environmental crises and climate change prospects,[1386] and the briefly described '**recognition crescendo**' of the value of community conservation is nothing short of exciting. For those who have supported the recognition of community conservation for decades, the excitement is natural… no matter that the acceptance is late and faintly reminiscent of the rush to lifeboats on the Titanic. There is still much hope in engaging Indigenous peoples and local communities as environmental stewards in the many diverse biomes in which they have demonstrated their sustainable livelihoods— some would even say that this is the only hope left. Exactly because of the enormous issues at stake, however, the 'recognition crescendo' also introduces some preoccupations. For instance, the main positive requests currently being discussed are not for self-determination, which may mean diverse paths, determined and chosen by diverse custodians in diverse social-ecological environments. They are for outright **legal land rights** and **financial support**. A few **questions** spontaneously come to mind, starting from the most basic: can 'community conservation' help to stem environmental crises and climate change? If so, are legal land rights and financial support the *most important needs* that custodians should try to meet? Will meeting such needs be *sufficient* to secure their territories of life? *What else* may custodians need? And, could legal land rights and financial support also bring about *new conflicts and problems*? If so, could those be prevented?

Can 'community conservation' help to stem environmental crises and climate change?

Figure 6, reproduced below from a report launched in 2021, makes explicit the quantitative case for conservation in territories of life (ICCAs), estimated as potentially more important than the contribution of all protected areas on the planet. The report argues that "…securing collective lands and territories and self-determined governance systems and cultural practices is the biggest opportunity in the Post-2020 Biodiversity Framework and fundamental to the diversity and wellbeing of all life on Earth".[1387] The report does not enter the debate about whether grassroots communities can or cannot be trusted as 'conservationists'. But it implicitly recommends that all who care about nature promote community-based processes to secure the conditions for community conservation to be possible and desirable. Rather than blanketing half of the planet as a protected area as some recommend doing,[1388] it seems more effective to explore the *how*— the processes and conditions that inspire and support local governance institutions and resource use regimes towards conservation and caring, *wherever they may apply*.[1389] This is the answer we also embrace, as the conservation opportunities offered by territories of life[1390] reflect the many facets and characteristics of the governance vitality exhibited by institutions as they keep bonding communities to their natural environments.

1384   https://www.fordfoundation.org/the-latest/news/governments-and-private-funders-announce-historic-us-17-billion-pledge-at-cop26-in-support-of-indigenous-peoples-and-local-communities/ accessed 2024.

1385   The pledge should be seen in the context of similar pledges made in the past, which remain unfulfilled.

1386   Rights and Resources Initiative (RRI) also coordinates an initiative that asks for a pledge ten times larger (see: https://www.pathtoscale.org/ accessed 2024).

1387   UNEP-WCMC & ICCA Consortium, 2021, p. 36.

1388   See: https://natureneedshalf.org/ accessed 2024.

1389   See, among others, Berkes *et al.*, 1989; Brechin *et al.*, 2003b; Kok *et al.*, 2018.

1390   A recent attempt to review the case for such conservation opportunities is offered by Zanjani *et al.*, 2023.

14% of the world's land is currently covered by State and privately governed protected and conserved areas.

26% of the world's State and privately governed protected and conserved area on land overlaps with potential ICCAs

14% of the global land area

Potential ICCAs cover an area greater than the terrestrial State and privately governed protected and conserved area network. Outside of this network (which currently covers 14% of land), potential ICCAs cover 17% of land.

17% of the global land area

31%

If potential ICCAs were appropriately recognised for their contributions to conservation alongside the existing terrestrial network of State and privately governed protected and conserved areas, the total coverage would increase to 31% of the world's land.

This finding underscores how essential it is to appropriately recognise and support indigenous peoples' and local communities' rights and existing conservation efforts in achieving any area-based target in the post-2020 Global Biodiversity Framework, whether it is 30% or otherwise.

MILLIONS KM²

State and privately governed protected and conserved areas only

Potential ICCAs only

Overlap

Figure 6. Comparative quantitative estimate of the contribution of territories of life to the planetary conservation of biodiversity (from UNEP-WCMC and ICCA Consortium, 2021)

In fact, community conservation is not always equally feasible and successful, but it seems to be effective where **supportive processes and conditions** are provided. The scholars who have studied such conditions have provided diverse recommendations— from favouring 'territoriality' to enhancing awareness of the scarcity of the gifts of nature and the capacity to prevent conflicts.[1391] Some stressed that community conservation works only when accompanied by **social justice**.[1392] Later in this section we will mention that some associate it with the **scale of the governance system** and the **measure of autonomy and control** that the local governing institution is able to exercise. In a preliminary synthesis of regional studies of community conserved areas, variety was highlighted and combinations of factors were found important, such as "remote areas in which traditional institutions are 'left alone' by State governments", or institutions adapted to new socio-political conditions are "met by enlightened government policies willing and able of formally recognizing them".[1393] In fact, all the characteristics and factors that support governance vitality discussed in Part II of this work are likely to play a role, adding meaning and weight to the advice we will offer in Part V. Our answer to the first question is thus:

1391   McCay & Acheson, 1987; Ostrom, 1990; Bromley & Cernea, 1989.

1392   Alcorn (1993) states: "In the real world, conservation of forests and justice for biodiversity cannot be achieved until conservationists incorporate other peoples into their own moral universe and share Indigenous peoples' goals of justice and recognition of human rights". Wilhusen *et al.* (2002) stress that conservation solutions involve the careful negotiation of "ecologically sound, politically feasible, and socially just programs that can be legitimately enforced in specific contexts". Büscher *et al.* (2017) recommend "shifting from economic growth while redressing inequality".

1393   Borrini-Feyerabend & Lassen, 2008.

yes, community conservation can truly help to stem environmental crises and the associated climate change prospects… provided that supportive processes and conditions are also made available.

Are legal land rights and financial support the most important needs that custodians should meet?

The sure answer to this question is: it depends on context. Indeed, what territories of life often need are collective land rights vested in the custodians. For instance, the case of the *Maha Gram Sabha* of India (case example 15) shows how the recognition of collective land rights generated a crucial and fruitful (re)empowerment process. Many other examples in this document— in Italy as in Mexico, Guatemala or Greece— illustrate how collective land rights are fundamental to develop local experience, knowledge and mētis in governing and managing a territory. It is also true that custodians need financial resources for basic functioning— from holding governance meetings to enabling communication, territorial surveillance, biodiversity monitoring and management activities. Thus, often, both the recognition of collective land rights and financial support are strongly desired. And custodians usually also wish for the full recognition and respect of a variety of rights, including cultural and intellectual property. Yet, the 'most urgent need' may be something else. Many communities, their territories and their governance institutions are under attack by a variety of external and internal forces that need to be assessed locally, allowing targeted strategic initiatives to develop. Should not **environmental defenders** be effectively protected, first and foremost?[1394] Should not **perverse incentives** at national level be stopped as a matter of priority, so that destructive production and consumption cease fuelling local environmental damage? And should not **community governance** itself be revitalised, promoting self-awareness, engagement, transparency, integrity and equity?

Complexities abound. For instance, even the custodians who strongly desire a legal title for their territories of life may have diverse views about the **desired level of attribution of such title**. Should land ownership be formally recognised at *individual or family level*, as for the Étivaz pasture owners of Switzerland (case example 8); at *tribal level*, as for the Abolhassani Tribal Confederacy of Iran (case example 18); at the level of a *self-defined community*, as for the *mariscadoras* of Galicia (Spain), the monastic community of Mount Athos in Greece or the *Regole* of Italy (case examples 1, 5 and 7); or at the broad *territorial level* identified by an Indigenous people, as for the Karen of Burma/Myanmar, who declared their entire territory as a peace park (case example 3), or as the Wampís Nation of Peru, who declared their entire territory as integral, autonomous and self-governed (case example 30)? These levels of claim and attribution are profoundly diverse in terms of resulting self-determination, livelihoods and conservation outcomes. Even more complex than land tenure are the interpretations and options surrounding cultural and intellectual property rights,[1395] which invest heritage and knowledge (e.g. arts, literature, sciences, medicine, seeds, breeds, historical sites, artefacts, designs, ceremonies, technologies) as well as uses, performances and innovations championed through time by communities, but also by specific individuals. Possibly most 'risky' for communities, is the possibility of a sudden injection of major financial resources, which requires appropriate, efficient and transparent management if it is not to introduce new problems. Understanding and deciding fairly about all these issues need time. Should there not be— **first and foremost**— processes of **well-informed discussion**, **self-identification as custodians, self-strengthening and internal agreement** to ensure the appropriate level of attribution of legal land rights, the appropriate meaning and recognition of cultural and intellectual property rights, and the appropriate targeting and handling of financial resources?

1394   The mentioned 2017 press release of GATC had this at the forefront of requests. See footnote 1382.

1395   The idea of intellectual property is controversial and some advanced the suggestion that any benefit related to Indigenous intellectual property might be used to secure the very territories where the biocultural diversity originated (Oli *et al.*, 2010).

The few participatory analyses that have engaged custodians in research about "what they need and want" to secure the thriving of their territories of life revealed that the **inner strength and integrity of the concerned communities** were perceived as essential.[1396] Many of the engaged custodians explicitly said that the more united and 'together' *they* are, the better their territories will be governed, managed and defended. In the absence of immediate threats from outside, their essential felt need was about the community's own attitudes and capacities, it was a need from within rather than from outside. The same studies found that the communities do appreciate various forms of legal and socio-economic recognition (i.e. land rights and beyond) and that they see technical and financial support as most helpful when it enables them to carry out **surveillance and enforcement of their own rules**, to **respond to threats** and to take advantage of **joint learning and networking** with other communities.

A recent study[1397] offers a good example of the need to maintain, first and foremost, the community's inner strength and integrity. India has one of the few legislations designed to secure land rights to customary owners— the Forest Land Rights Act of 2006. The Act is applied when a community makes a compelling and sustained case for it, and a community that managed to do this and secure its collective forest in 2012 is Lavari, in the Indian state of Maharashtra. Being legally recognised as possessing some collective rights, however, is still far from being allowed to exercise them. When many trees in the Lavari forest were destined to be felled for the construction of power transmission lines, the community claimed its rights to proper information, consent and compensation. What it got in return was an opposition barrage from both governmental agencies and the company that was constructing the power lines. Besides the usual bureaucratic delays and rigidity, the opposition included attempts at bribing individuals, creating divisions, and scaring and coercing the community to renounce all its legitimate requests. Lavari, however, managed to remain well-organised and united. After many delays and even last-minute attempts to refuse their dues, they finally obtained their compensation. Importantly, how to use that compensation was discussed in-depth during several meetings of their *Gram Sabha*. The decision was that part would be distributed to households— "not too much, not too little"— and part would be used collectively for "health, education, emergency facilities and community welfare". The *Gram Sabha* also expressed the desire that their struggle serve as a model for other communities. In all, Lavari demonstrates that **land rights 'work' when the community is united and shows integrity**... while they might be **of little use otherwise**.

Further in-depth studies of the conditions that favour custodianship and the support desired by custodian communities are more than desirable, but it is clear that the **'community logic'** is invariably **richer and more complex than economics alone**. The governance institutions of territories of life are under attack from political and cultural interests and face evolving environmental crises and climate change phenomena. If anyone is keen to support them, it would seem appropriate to place *such institutions* at the centre of decisions, and to assist them to empower themselves in ways tailored to the context and aiming at all dimensions of environmental justice. These empowerment processes should **nourish the integrity and vitality of the institutions**, the community **cohesiveness**, and the **collective understanding** of the implications of assuming both rights and responsibilities regarding land and cultural and intellectual property as well as the prerequisites and consequences of receiving any financial support. In line with this understanding, a recent analysis highlights the need to recognise the variety of values that encompass the richness of people's relationships with nature.[1398]

1396   About twenty original participatory studies of individual custodian communities and many more regional analyses are available from www.iccaconsortium.org. An overall summary of their results is available in Borrini-Feyerabend *et al.* (2010) and an enriched, summarised version of that work is available in Farvar *et al.* (2018).
1397   Gupta *et al.*, 2022.
1398   Pascual *et al.*, 2022. This study is remarkable if daunting in its complexity. One wonders whether multi-value studies are not simply 'embedded' in local governance institutions that fairly represent the relevant communities.

Are land rights and financial support sufficient to secure territories of life?

Some of the problems that territories of life face are hardly touched by legal land rights, such as those that originate in violent forces from outside or when fast cultural change affects governance institutions from within. The overwhelming power of violent invaders is evident at the development frontiers of countries as different as Brazil, the Democratic Republic of Congo, Burma/Myanmar or Nicaragua. For instance, on the Caribbean Coast of Nicaragua, Indigenous Miskito and Mayangna communities face criminal gangs of '*colonos*' who kill, maim and rape with impunity to chase rightsholders from their land, occupy it, extract timber and raise cattle (see Picture 20).[1399] The communities possess collective titles to their land, which have been agreed nationally and reconfirmed by the Inter-American Court of Human Rights.[1400] But the legal rights are not enforced and defended by the Nicaraguan government, on the contrary, local authorities are reported to back the *colonos* and refuse to investigate them even when they behave criminally.[1401] This will not improve and may even deteriorate as the Green Climate Fund assigned over US$64 million to support the government of Nicaragua in its 'fight against deforestation' in the very areas where the Miskito and Mayangna face brutal violence and murder. It is known, in fact, that large-scale reforestation projects greatly stimulate interests in the concerned land. In the political climate of violence and impunity that predominates along the Caribbean coast, such interests are *doomed* to enhance injustice and dispossession.[1402]

Similarly, the Karen people of Burma/Myanmar have received attention and appreciation for their conservation and sustainable livelihoods results (see case example 3). Following the military coup d'état of February

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1399   Oakland Institute, 2020.
1400   Inter-American Court of Human Rights, 2001.
1401   Oakland Institute, 2020.
1402   On this see: https://www.oaklandinstitute.org/one-degree-removed accessed 2024; this undated preprint is also very valuable: http://www.iapad.org/wp-content/uploads/2015/07/beyond_the_map_sv.pdf accessed 2022.

2021 and the repression that has engulfed the country ever since, at the time of writing the Karen remain under assault by their own government— villages are being bombed and people are forced to find shelter in the woods or escape as refugees across the border.[1403] Problems such as those of the Miskito and the Karen are clearly more political than legal. Even major funding would not make much of a difference…unless extremely well targeted.

In a similar vein, legislation in support of rights may be there, but a political regime may neglect its enforcement. For instance, the Bolsonaro administration that held power in Brazil from 2019 to 2022 defunded law enforcement, got rid of employees who were crucial for it, and made it openly clear that certain illegal activities would *not* be prosecuted. This resulted in high rates of environmental and social crimes.[1404] What seems needed in all these cases is **personal and collective security**, the **cessation of violence** and the **guarantee of justice**. Elsewhere, the problems may originate from misplaced hopes, as some community members see in environmentally and socially destructive activities, like dangerous and polluting artisanal mining, or coca cultivation and drug trafficking, the only path towards a prosperous life.[1405] Decent **livelihood alternatives, stability, and positive paths to personal 'meaning' and 'success'** may be *what people need the most* to engage in sustainable and fulfilling livelihoods, where it makes sense for them to care for the future of their territories of life.

Could legal land rights and financial support bring new conflicts and problems to custodians?

Security of tenure to territory and financial support to develop infrastructures and means of sustainable livelihoods are essential inputs for a sustainable future. But only careful processes and conditions can prevent problems between communities and/or internally, among the newly recognised collective landowners. For instance, custodians are aware that they will always need to relate with neighbouring communities, and that this is not best done via inflexible legal rules, but via **flexible vernacular practices**, which help to **prevent or manage conflicts**. Experienced land right supporters warn that flexible and approximate delineation of land rights is better appreciated by communities than the tight and precise delineation demanded by State cadastral systems.[1406] Moreover, conflicts *internal* to communities often emerge when important change takes place rapidly and the occasions for undue benefits and corruptions multiply. Cases are not rare of initiatives where sudden recognition of land rights or influxes of financial resources brought internal conflicts and havoc to communities rather than livelihoods improvements and enhanced conservation.[1407] Careful and **transparent processes** are the demanding alternative.

For instance, what **prerequisites** are involved for the recognition of land rights? What consequences? At least two kinds of issues may surface. The first is the conflation of the rights that may accrue to communities for their conservation capacities with other rights. For instance, Indigenous peoples' rights, as recognised by UNDRIP, need no conditionality related to conservation. In this sense, advocacy for conservation should be kept separate from

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1403   See https://www.facebook.com/karenwomenorganization/ accessed 2024.
1404   See Brown (2023) and Menezes & Barbosa, 2021.
1405   Some peasants are forced to cultivate illicit drugs by mafia cartels and are afterwards kept in slavery-like situations. No cruelty is spared to force them to obey. Others are lured into jobs that are dangerous, painful and unfulfilling.
1406   Dave de Vera, webinar communication, 2021.
1407   This was clearly observed during the implementation of the GELOSE Law as part of a major environmental programme supported by World Bank loans in Madagascar around the turn of the millennium. Community management rights and financial resources were made contingent on establishing 'formal village organisations' according to the specifications handed down by government officials. Predictably, the financial resources at play did not attract the most trustworthy local fellows and the hastily established new organisations soon developed conflicts with the pre-existing traditional authorities. Often, the end effect was the disruption of any form of local environmental governance (details and references in Borrini-Feyerabend & Farvar, 2011).

advocacy for collective rights. Yet, it may be expedient to claim collective rights to a territory *also* because such territory is best conserved by custodians. One may wonder, however, whether anyone will monitor the status of the territory and evaluate the environmental and livelihoods results of the Indigenous managers once the land rights are achieved?[1408] Ideally, the entire community that holds legitimate claims and rights should exercise monitoring… but how will the managers be accountable to it? And, if the State or donors wish to monitor the 'community conservation' results, might that interfere with Indigenous rights? The second kind of issues regards institutional representation. Are traditional community institutions allowed to engage as *sui generis*, or are they to 'transform' into modern organisations to be legally recognised by State governments? Who will formally hold the collective rights to territory and to cultural and intellectual property? Who will be able to receive and engage financial resources? Questions such as these are not anodyne. The answers should be developed by the communities themselves, carefully tailored to the historical and legal context and the social-ecological and cultural circumstances. But these answers require **time** to be fairly discussed and resolved and, as discussed by Coulthard (2014): **for effective decolonisation** it is the entire framework of 'recognition' that needs to be community-controlled.

Problems may also arise in discussing whether **any general distinction** should be made **between 'Indigenous peoples' and 'local communities'** in all their variety— from Adivasis to Yoruba, from Afro-Colombian to Zulu, from Quilombolas to Uighur, from Tuareg to mountain communities in Europe. Who could make that distinction and how? Diverse definitions of such collective entities are in use and a number of international agreements and bodies (e.g. UNDRIP, ILO, UNPFII) have relied on self-definition and mutual recognition. Will that be sufficient if substantial financial resources are at stake? Currently, there is a separation even between the advocacy group of Indigenous peoples[1409] and the advocacy group of local communities and NGOs[1410] in the context of the Convention on Biological Diversity. Similarly, IUCN has accepted Indigenous organisations as part of its member constituency, but not yet organised local communities. UNPFII, in its session of April 2023, even accepted a motion— presented by the NGO Cultural Survival— against associating Indigenous peoples and local communities in the expression 'IPLCs' as often used in the context of the Convention on Biological Diversity. The justification was that this "weakens recognition of Indigenous peoples' affirmed rights and identities". The motion requested "…States, UN bodies, and all institutions to retire the term 'IPLC' in favour of recognising both Indigenous peoples and local communities as two different populations with distinct interests and rights".[1411] Yet, the financial pledge made in November 2021 at UNFCCC speaks about both and, in most real-life situations all over the world, communities include people who identify themselves as Indigenous and others who do not. Also, peoples such as the *caboclos* or *ribereños* in the Amazon region are not formally recognised as Indigenous in the countries where they reside, but their production practices and livelihoods are **indistinguishable** from those of others formally recognised as Indigenous.[1412] How should their cases be treated?[1413]

The **risks of commodification and financialisation of nature** are also significant. Both the territories of life and their custodians will be impoverished if the relations between the two are dominated by financial

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1408   In the late 1910s, the ICCA Consortium engaged in dialogues with UNEP-WCMC arguing that environmental and social results of community conservation initiatives should be 'peer reviewed' rather than reviewed by national authorities or experts, and that national networks of custodians should be the best possible 'peers'. The Consortium did also support the development of national networks for 'peer support and review' in many countries (a non-updated list is available here https://www.iccaconsortium.org/creating-a-critical-mass-of-support/ accessed 2024).

1409   International Indigenous Forum on Biodiversity (IIFB): https://iifb-indigenous.org/

1410   CBD Alliance: https://cbd-alliance.org/en

1411   Statement available at https://www.culturalsurvival.org/news/statement-towards-discontinuing-use-collective-term-indigenous-peoples-and-local-communities accessed 2024.

1412   Brechin *et al.*, 2003b, p. 268. For the case of the Pantanal, in Brazil, see also Chiaravalloti (2019). Some voices question whether, today, the concept of 'Indigenous' is still useful at all (Davis, 2023; Singh, 2023).

1413   In the words of Janis Alcorn: "put crabs in a bucket and watch them fight with each other". The opponents of community as agents of conservation may well use this "old strategy axiom"…

considerations.[1414] There could be a risk, for instance, of shifting governance decisions towards maximal financial income rather than sustainability and enhanced local livelihoods and wellbeing. Also, the more numerous the levels of delegation and handling between the custodian communities and the international representatives who negotiate and manage the financial flows... the higher the risk for **mishandling** and corruption. Further, financial support is likely to come with **strings attached** and to attract powerful actors, capable of **undermining** community **autonomy and self-determination**. But not everyone agrees that financial flows of resources to communities can be dangerous. After all, various forms of economic valuation and commercial utilisation of nature— both in consumptive and non-consumptive practices— are quite germane to 'sustainable use of wildlife'— an approach that has been cherished by both custodian communities and conservation advocates. Is there not a strong similarity between a fair exchange for potatoes in the Andes, a sport-hunting operation in Namibia (or other financing initiative for community conservancies there) and some 'natural assets' for sale on the **New York Stock Exchange**? If we accept and welcome the first and conditionally agree with the second… what is the problem with the third?

While, as earlier mentioned, **'sustainable use'** is a prime strategic approach for community conservation of the commons,[1415] it is known that some conditions facilitate the performance of the relevant governance institutions.[1416] Among those, two seem of notable interest here. The first is that the communities that fare better seem to be those small enough to be able to **develop and adjust their own institutions** (i.e. organisations, processes, decisions and rules for the governance and management of their territories).[1417] This is confirmed by research on patterns of **constitutionality**.[1418] The second is that the sudden emergence of technological innovations and integration with non-local markets appear to have an adverse impact on the commons.[1419] Together, these research results provide a clear indication that the **scale of the system** and the **measure of autonomy and control** that the local institutions manage to exercise **are important** for good functioning and sustainable results. Thus in this sense,, there are similarities but also notable differences between a fair exchange for local varieties of potatoes in the Andes, a trophy hunting operation in a community conservancy in Namibia and the financialisation of **'natural assets'** in Wall Street, New York. We assume that the first operates at the local scale and is largely self-ruled and self-assessed in an ongoing way, while the second has both local and international dimensions and its lasting achievements depend on its governance being effectively shared. The third, however, is fully out of the local sphere and invariably controlled by international financial capital.

Further insights may be drawn if we also explore the 'middle-ground' case of **sport hunting of wildlife**, which possesses a measure of local grounding but is also connected to international interests and flows of financial resources. Sport hunting can provide benefits for communities and wildlife conservation, and even boast impressive restoration results, as in Namibia.[1420] The conditions for this to happen, however, require careful **tailoring to the context** and **adaptive learning**. For instance, best practice studies and local monitoring data should be available to set quotas for the hunted species and there should also be, besides the essential security of tenure,[1421] equity and transparency in dealing with funding flows, community benefits and allocation of

1414   On this, see again Sullivan (2009).
1415   Cooney et al., 2017. Webb, 2002; Child, 2013. See also the early global analysis offered by Oglethorpe (1999).
1416   Agrawal, 2001. Agrawal notes that these conditions are of such various natures that they discourage even seeking any broad 'recipe for sustainability'. This is supportive of the approach we are taking in this work, as we have chosen to consider local governance institutions as 'systems' rather than investigating the characteristics of their component parts (e.g. 'organisations', 'rules'). An earlier multi-country review of 'community-based natural resource management' (Roe et al., 2000) had identified a number of factors fostering community management capacities, which include secure tenure; size, cultural cohesiveness, motivation and sense of legitimacy of the community; equity in the distribution of management benefits; flexibility and capacity to relate with neighbours, government officials and others. These factors relate very well with the characteristics of governance institutions we found associated with vitality.
1417   Ibid, and references therein.
1418   Haller et al., 2016; Haller et al., 2018.
1419   Agrawal, 2001, and references therein.
1420   Cooney et al., 2017. See also footnote 1218.
1421   Jenkins, 1999.

concessions.[1422] Moreover, all concerned actors should have fair and satisfactory roles— specifically, the communities that bear the opportunity costs of maintaining wildlife habitats should receive economic benefits, but also have a **meaningful involvement in decision-making** regarding the sport-hunting operations.[1423] In other words, the governance involvement should be much more than a token afterthought as financial benefits are disbursed. In fact, many of the initiatives found to be successful are those where the **culture** of the concerned communities is **respected**.[1424] As Marcel Mauss aptly said: ". . .we possess more than a tradesman morality"[1425] and: "human beings would prove critically impoverished if the best we could come up with is *money* as mediator of our relationships with the non-human world".[1426]

Could new conflicts and problems be prevented?

The conditions that allow meaningful and effective long-term relations between humans and nature— what some refer to as 'sustainability'—[1427] are **not the product of improvisation**. As discussed earlier, centuries of experience are distilled in local knowledge, mētis and institutions. Recent opportunities, such as sport hunting of wildlife, may require years of local practice and policy experience at national and international level before becoming well oiled, productive and sustainable. For instance, there is a notable embedded experience with some trials and errors in the functioning of the mentioned Community Conservancies in Namibia, which have gone through decades of adjustments selling sport-hunting quotas and managing territories. If the same communities were to place their territories as an asset for distant investors and receive income in a detached and aseptic way, the system would likely become rigid and less resilient. In fact, one of the current weaknesses of sport hunting of wildlife is its dependence upon the vagaries of international policies (e.g. CITES) and distant markets (e.g. tourism in an age of economic uncertainties and epidemics). In other words, communities may be effective in biodiversity conservation and mitigation of climate change but some **processes and conditions to ensure the sustainability** of the governance and management of their territories **must also be in place**.

Despite the risks intrinsic in the commodification of nature, many believe that some **compensation for the custodians of the environment** is due, and the idea of a dedicated funding facility for 'Indigenous guardians' clearly made inroads among the Indigenous peoples' representatives who participated in the 26th UNFCCC Conference of 2021.[1428] To be sure, between the announcement and the actual disbursement of financial support there is a need to devise effective and equitable mechanisms for running a funding facility— something that will hopefully involve thorough and transparent discussions. For the moment, nothing seems to announce major novelties, which makes it probable that 'experienced' mechanisms and individuals are likely to remain in charge. It is also not yet clear whether a connection is expected between such facility and the 'new asset class' promoted by IEG— an issue that is bound to generate controversies. Noticeably, there is even a chance that, in a repeat of the situation of the late 1990s, community conservation may be highlighted in a **bright straw fire** but **soon forgotten**, as financial resources are absorbed by a variety of intermediary organisations. The ICCA Consortium and its members and many others have long been cautious about interventions that risk the

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1422   Ibid.
1423   Cooney *et al.*, 2018.
1424   Ibid.
1425   Mauss, 1950 (p. 83 of English translation).
1426   Sullivan, 2009.
1427   Adams, 2009.
1428   Helena Paul, personal communication, 2021.

commodification of nature, including schemes such as REDD+[1429] and PES.[1430] The rapid influx of tourist resources into Van Long Natural Reserve in Viet Nam or even much more modest PES resources into the *ejido* of Xcalot Akal in Mexico (case examples 12 and 29, respectively) and others described elsewhere[1431] offer insights.

In summary, the call for legal tenure and financial support for the local custodians of biodiversity is appropriate and welcome. But recognition of community conservation needs to be respectful and 'vernacular enough' to fit the context, and any support provided should be transparent and carefully targeted. Recognition and support should also combine with interventions at non-local level, such as putting a stop to perverse incentives, preventing the pernicious effects of sudden market penetration and safeguarding the defenders of nature.[1432] Crucially, the custodians must be aware of a range of relevant information and well-organised to withstand the inevitable challenges in their path. In fact, that **awareness and organisation should come first**— before major change arrives and takes its toll.

As well said by the Indigenous Kichwa of Sarayaku (case example 23, part a): "**Our people must maintain a sense of what is fundamental**". This, in essence, is the core result of a process of self- strengthening, a process that may take centuries or juwst a few months. Without a shared sense of what is fundamental for the community and its territory— which in Part II we have condensed as 'possessing inspiring collective values'— the risk of being overpowered by change coming from outside is very real. Even the provision of legal land rights and financial support to a weak and disorganised community may generate problems, sometimes comparable to the benefits to be also expected. But a community that is strong and united in upholding its core values, is usually able to defend itself. Excellent examples are provided by the Regole of Cortina d'Ampezzo in Italy (case example 7), the Manobo of Soté in the Philippines (case example 9) or the Cherán community of Mexico (case example 10). **Had the UN and State governments more seriously engaged with grassroots community organisations**, as agreed as part of the Earth Summit's Agenda 21[1433] and advocated by *Caring for the Earth* (the 'updated' World Conservation Strategy of 1991),[1434] **many communities might be better informed** and **stronger**, today, and ready to ask for the specific level and type of recognition and support they need. They might also be **better organised to fend off risks**— from the commercialisation of nature to climate emergencies.[1435] GATC surely has an awareness of the complexities involved and is considering a variety of mechanisms and safeguards. But it is important that the risks of 'recognition',[1436] and not only the benefits, are highlighted.

Is self-strengthening utopian?

Exploring case examples and reflecting upon governance vitality and community conservation revealed that many governance institutions possess a strong and *affective* relation with their territories of life— a relation that is valued beyond legal recognition by State governments and beyond the economic values they may

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1429   In 2008, many Indigenous peoples expressed a refusal of REDD schemes. The so-called "2 May Revolt" at the UN Permanent Forum on Indigenous Peoples is illustrated in this telling video: https://www.youtube.com/watch?v=UtORVi7GybY accessed 2024 and article: http://www.carbontradewatch.org/video/protest-indigenous-peoples-2nd-may-revolt-at-the-unpfii-4.html accessed 2024. Since then, protests have largely receded and Indigenous peoples sit on multinational and national REDD+ bodies (information from https://www.un-redd.org/governance?f%5B0%5D=year_of_publication%3A2022 accessed 2024). See also Dahl, 2009 and the REDD Monitor website by Chris Lang (https://redd-monitor.org/about/ accessed 2024).

1430   A discussion of various PES schemes is available in Kill (2014).

1431   E.g. Wilkes & Shicai, 2007; Lovera, 2008; Borrini-Feyerabend *et al.*, 2010 (pp. 42 and 60).

1432   See ICCA Consortium, 2018.

1433   United Nations, 1992. Agenda 21 was briefly discussed earlier in the work.

1434   IUCN, UNEP and WWF, 1991.

1435   Some already had a clear view of this at the beginning of the Third Millennium. Bawa *et al.* (2004) stressed the need to pay much better attention to the how of conservation than to the what needs to be conserved. They pointed to a multiplicity of locally adaptive Indigenous approaches that combine local practices and institutions, both formal and informal, as well as modern science.

1436   Again, see Coulthard (2014). In fact, all dimensions of environmental justice should be pursued together, as weak and incomplete forms of justice are not likely to provide effective support to territories of life (Neil Dawson, personal communication, 2022).

offer.[1437] These relations are constitutive of the heritage and collective identity of the Indigenous and community custodians of the territories, as made evident by the astonishing sacrifices they are able to bear as 'defenders'. Before and beyond the billions of US$ floated in the international policy arenas, what may make a difference is the collective voices of **self-identified custodians**, those who engage together in processes of **self-strengthening** and end up **recognising, and being recognised by, their peers**. Along with that, often goes the understanding that a territory of life is crucial as conserved area, but also as a bond with the past and the future of the community, a ground for inspiring collective values related to **collective identity, autonomy and social morality**.

The ICCA Consortium has been recommending that any technical or financial support to territories of life is combined with support to **self-strengthening processes** of, and by, their custodians. These processes are to be based on extensive and transparent internal exchanges (see Picture 21).[1438] The main suggested method is **grassroots discussions focusing on the territories of life**, starting from an analysis of their situation and of the community willingness to self-recognise as custodian. Such initial moments of collective self-awareness are to be followed by diverse steps, according to the needs and desired future in each context, unique for each custodian community and territory of life.[1439] Examples of 'steps' taken by diverse communities include: mapping, demarcation, documentation and research on the territory, its values and problems; situation analysis, visioning and planning for community activities; setting up radio programmes to communicate with other communities in the region; organising local events and celebrations; confirming, modifying or developing rules for harvesting, hunting and fishing; revaluing sacred sites and related traditional objects and practices; setting up or enhancing the regular surveillance of the territory; gathering financial resources for intra-community loans; setting up collective gardens and seed exchanges; repairing irrigation infrastructures; identifying other custodian communities and mutually recognising as 'peers'; developing alliances with other custodian communities for policy advocacy; etc. The self-strengthening processes may be initially facilitated by external supporters, but as soon as possible they should take off **as autonomous paths to self-determination**.

As part of self-strengthening processes, it is most useful when partners or community members carry out **research** and convey information about relevant issues of land tenure, cultural and intellectual property rights, and any other elements of legislation and policy that affect the territories of life. It is also useful to gather information about technical and financial support available for biodiversity monitoring and conservation, climate change mitigation and other applicable forms of community-based work. The information should be broadly shared in the community (e.g. at village assembly level), involving all age groups of men and women[1440] and **encouraging the discussion** of past experiences, expected consequences and perceived implications.

Broadly respected community members[1441] should be engaged in identifying the most appropriate type and level of organisation where legal land tenure for the territories of life could eventually be vested. They could be encouraged to take a role in identifying the benefits and risks of new initiatives, mediate conflicts, ensure transparency in the use of funds and accountability in the delivery of results, etc. During self-strengthening processes, custodian communities should never be asked to reach fast conclusions, jump into projects or be 'beneficiaries' of initiatives conceived elsewhere and recipients of a 'one size fits all' solutions. They should rather have a chance to be

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1437   On the multiple values assigned to nature by Indigenous peoples and local communities see also Pascual *et al.* (2022).
1438   Guidance distilled from the experience of the members of the ICCA Consortium is available in several languages from: https://ssprocess.iccaconsortium.org/ The need for this guidance was recognised soon after the Consortium's establishment, see: Borrini-Feyerabend *et al.* (2010, p. 40).
1439   Examples of self-strengthening processes in the Amazon region can be found at: https://cemi.org.co/territorios accessed 2024.
1440   This process was pioneered by the CAMPFIRE initiative in Zimbabwe (see also footnote 1228). Trophy fees brought to villages were shared among the families. As appropriate, part of what had been distributed could be voluntarily, and very visibly, returned to the collective coffer to be invested in communal initiatives (Marshall Murphree, personal communication, 1996).
1441   Some projects promote the establishment of ad-hoc institutions when new funds are expected to be received and disbursed locally. This frequently unleashes community conflicts.

Picture 21. Moments in the self-strengthening process of the Kawawana community (Casamance, Senegal) captured in 2009 and 2010. The process has achieved many positive results and, at the time of writing, the community remains actively engaged. (Courtesy Grazia Borrini-Feyerabend)

protagonists of conservation and sustainable livelihoods,[1442] choosers and developers of their **unique paths to self-determination**.[1443] If successful, they would enhance the security of their territories and livelihoods but likely also achieve the renewal of those **relationships** and freely assumed **responsibilities** that Corntassel situates as fundamental in **spaces of resurgence and solidarity**.[1444]

Self-strengthening processes offer no guarantee but may hopefully inspire communities towards **decolonisation**— becoming aware of, and resisting, the forces that negatively affect their lives; towards more **sustainable lifestyles**— taking from nature in moderation and making sure there is enough left for the future;[1445] and towards **pluralism**— appreciating the variety of worldviews, languages, cultural expressions, livelihoods, and legal and knowledge frameworks[1446] that nourish biocultural diversity. In this sense, community self-strengthening processes for conservation and sustainable livelihoods are necessary all over the world, in the North as in the South, in the East as in the West. But diverse communities face enormously diverse challenges. For some, the key territorial decisions concern investments to attract more birds or ease up motorised traffic, while for others they have to do with producing enough food, preventing dispossession and disasters, and protecting lives. In this sense, the only and ultimate way to strengthen all territories of life is via seeking and achieving the conditions that allow **sustainable livelihoods** and foster **social and environmental justice** *everywhere*.[1447]

So, answering the last question we may say, yes, self-strengthened territories of life, local sustainable livelihoods and social and environmental justice everywhere are *utopian* goals—particularly so if imagined alongside the dystopian futures that seem to be preparing for a large part of humanity. These goals are far from centre stage in national policy frameworks, the predominant worldviews of politicians, and the approaches of many conservation and development professionals. Collective territorial governance is rarely conceived even by the communities themselves, with the exception of a few— mostly but not only[1448] Indigenous peoples — who maintain a strong sense of distinct identity and actively seek independent livelihoods. Much more often the relations with nature are appreciated in the short-term only, in economic terms only, for individuals and enterprises only… and only as part of formal settings, such as private property or State-run protected areas. Many are pacified by the amazing but unwise and unsustainable achievements of the carbon burning age and see no alternative to politicians and policies at the service of economic profits, barely hiding their accompanying injustices and permanent war. Yet, as we reflect upon the sources of vitality of our long history as humans on Earth, the relational values[1449] of custodianship of territories of life do emerge.

Custodianship is possibly most apparent in today's ***defenders* of territories of life**, in the line of fire to resist destructive and illegal activities.[1450] Courageous women and men go out every day as 'Indigenous guardians' in

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1442   Jorge Nahuel, quote from https://youtu.be/70mt7bozJb8?list=PLuBpRnNXhKyOciWz4bRRdPqtLBaT5tdts accessed 2024.

1443   See https://ssprocess.iccaconsortium.org/ Emblematic examples in this work include case examples 3, 7, 9, 10, 23 (part a. and part b.), 26 and 30.

1444   See Corntassel (2008) and Corntassel (2012).

1445   Holmberg, 2021.

1446   Sutej Hugu, 2021.

1447   Hopefully, as in the words of Martin Luther King: "the arc of the moral universe is long, but it bends toward justice" (speech given at the National Cathedral, Washington DC., 31 March 1968).

1448   Communities that chose and demonstrate post-capitalist, relational values, like collective care for nature and sustained internal reciprocity, are described in case example 15 and further discussed by James and Pathak Broome (2023). The village of Mendha Lekha is particularly inspiring as its residents succeeded in donating all individually owned lands to their gram sabha (general assembly) to be held in collective custody. In line with the Gramdaan Act of India, this greatly empowers the gram sabha as legal institution of direct democracy, liable to receive financial benefits directly from the state and address issues of local justice. These functions are otherwise performed by the Panchayat, an executive body gathering a few elected representatives from multiple villages (Neema Pathak Broome, personal communication, 2023).

1449   Pascual *et al.* (2018) discuss much of what we describe here as 'custodianship'— i.e. relations of kinship, stewardship, responsibility for nature, responsibility for people affected by environmental change (including in the future)— as relational values, arguing their central role to much religious thought and to eudaimonia, the highest human good that combines wellness in body and spirit. On this see also Foggin *et al.* (2021).

1450   See, for instance: https://www.globalwitness.org/en/campaigns/environmental-activists/ accessed 2024.

the Amazon region[1451] and as resisters against destructive and unjust political decisions and actions in all world regions. The Mexican community of Cherán (case example 10) is emblematic in its courage, unity and capacity to maintain its commitment in a violent and unforgiving environment… but many others among the peoples and communities we described, from the Penan of Malaysia (case example 19) to the Borana of Ethiopia (case example 6) are bravely facing daily struggles. In less immediately dangerous contexts, many other peoples and communities daily employ their researchers, journalists, teachers, students, leaders, organisers, activists, managers, surveillance agents and caretakers of territories.[1452] All such custodians are living indicators of the integrity and strength of their communities and of the vitality of their territorial governance institutions. May their peaceful but unfailing resolve for **self-determination** and **justice** be an inspiration for all.

1451   Indigenous guardians patrol their community territories to prevent the entrance and depredation by miners and drug traffickers. For a rich recent account of the complexities surrounding such work in the Peruvian Amazon see Farman (2021). See also this simple and powerful video: https://www.youtube.com/watch?v=uAeAgYQfuvo, accessed 2024. In Ecuador, a community of A'iCofán people formed its own 'guardians' dedicated to monitoring the 50,000 ha of their ancestral territory, including via drone (United Nations Human Rights Council, 2021a). Other solid experiences of Indigenous guardians include the Consejo Regional Indígena del Cauca in Colombia, and the Guardia Kichwa of Loreto (Romo, 2019) and the Guardia Indigena of Ucayali (https://news.mongabay.com/2023/05/shipibo-communities-create-indigenous-guard-to-protect-peruvian-amazon-from-deforestation/ accessed 2024) in Peru. See also: Sein Twa, 2021.

1452   Inspiring examples are collected in https://vikalpsangam.org/ accessed 2024.; https://cemi.org.co/territorios; Conlu *et al.*, 2022; Samakov & Foggin, 2022.

Vitality interlude

"When the Spanish invaders came, they destroyed all our sacred buildings, they killed many of our wise elders. But a fire remained within us. When we come here and make ceremonial offerings, we free ourselves. The faith of our Maya ancestors is freeing us. […]

This sacred fire is alive. It keeps being alive. This is why we keep coming back here. We will not abandon it. […]

This sacred site is a living space, a place where we link with divinity, with our ancestors, with our own selves… a place where we understand what is happening around us. Those among us who believe in spiritual life… we will defend life, wherever and with whoever, it is our duty.

The first mission that we have as humans is to defend life. The life of plants. The life of animals. The life of nature. The life of elders. The life of children. The life of women. The life of all human beings." [1453]

1453   Words and image courtesy of Felipe Gomez, Maya spiritual leader of Guatemala, from an interview by Pakesso Mutash in Episode 9 of Pakesso Mukash/ Konnected.tv/ https://www.aptntv.ca/konnectedtv/video/ accessed 2023.

Part V: Assessing and promoting vitality

*...for readers eager to enhance the vitality of a specific governance institution,
or to engage communities at large as custodians of conserved or protected areas...*

"…the stress on the biology of the Earth may reach a breaking point. We are still in a period of grace."

Barry Commoner, 1972a

Vitality of a governance system

"A governance institution possesses vitality when it maintains its **capacity to function through time, fully and in *inspiring ways*—** including by *evolving* under inevitably changing, and possibly challenging, circumstances." This is the working definition of **governance vitality** we adopted in Part I and later explored through examples, stories, questions and considerations.[1454] As this work focuses on institutions for governing conserved and protected areas, we further understood the 'capacity to function *well*' as the capacity to keep achieving the objectives of *conserving nature* and *contributing to the lives of people.* As indicator of the first we take the integrity of the relevant ecosystems and of the second the wellbeing of the relevant communities.[1455]

Focusing on 'the capacity to *function*', rather than on any specific organisation, plan or set of rules, compels us to understand governance institutions in a systemic sense (see Figure 7). We, therefore, depart from the often-adopted definition by Douglass North that describes institutions as "sets of informal and formal rules".[1456] We instead understand institutions as comprising not only formal and informal ***decisions and norms***, but also the social ***organisation(s) that*** established them (e.g. the structures and persons in charge and the knowledge, mētis,[1457] technology and means necessary for them to act), the ***processes*** by which such decisions and norms were decided and implemented and the mainstream ***worldview***[1458] within which they operate, including **language**,[1459] history,[1460] and main cultural and spiritual beliefs, besides overarching policies and relations with other institutions. In this broader definition, it makes complete sense to ask whether an institution is 'functioning' well, and which element in the system might be adapted or modified to make it function as well as possible.

In our systemic definition, the 'institution' for the governance of a specific conserved or protected area comprises the *ongoing interactions* and *processes* by which the *organisation* that possesses legal and/or customary authority informs itself, conceives *decisions, customs and rules* for the area, and ensures their communication, implementation and respect in the relevant social context (including by providing resources and inspiration for that).[1461] Contributing to that are physical and material elements (for instance: capacity of the governing body to meet and invest in managing the territory; secured means for surveillance of the concerned

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1454   See Part VI for a lexicon of basic concepts, including 'governance'. As 'capacity to function through time', vitality is compatible with fluctuations in functionality and results, provided irreplaceable damages are not caused to the relevant ecosystems and/or societies.

1455   The most fundamental of questions may be "governance for what?" (Oakeshott, 1996, quoted in Dror, 2001).

1456   Some often-quoted literature defines 'institutions' as distinct from organisations: "…institutions are [a] set of informal and formal rules administered by organisations [i.e.] groups of individuals bound by some common purpose to achieve objectives" (North, 1990), italics added. Young (2008) also makes the same distinction, for instance by separating the US Constitution (institution) and the US Congress (organisation). As noted, we use a different definition here, as institutions are implemented by organisations and acquire full meaning only 'in operation', situated in history and as part of a specific society. Moreover, it is not the specific rules that are important but the way the rules are agreed upon (Berlain, 2021).

1457   Following Scott (1996), we use the word to describe a living body of vernacular knowledge developed through local experience, usually poorly codified but eminently practical, fluid and adapted to local skills, needs, motivations, specific locations (even microenvironments) and communities.

1458   In fact, a full 'Weltanschauung', or cosmovision.

1459   "Language is so important as it is the heart of any 'culture': it embeds meaning" (see Geertz, 1973, p. 5). Remarkably, Geertz also said: "Societies, like lives, contain their own interpretations. One has only to learn how to gain access to them" (ibid, p. 453).

1460   We follow here the analysis of Berger and Luckmann (1966) who stress that "Institutions always have a history, of which they are the products. It is impossible to understand an institution adequately without an understanding of the historical process in which it was produced." (quote from ibid, p. 72).

1461   For an example of a local governance system recently examined in some depth, paying particular attention to factors related to local history, culture and worldview, see Murali *et al.* (2022).

area; presence of infrastructure that allows sustainable livelihoods options…) but also cultural elements and qualities (for instance: history of relations with the territory; rightsholders well represented in the governing body; presence of leaders with the capacity to inspire others and manage conflicts; rules that can be easily understood and followed; social propensity to appreciate and respect nature; sense of solidarity among those who need to respect the rules…).

VITALITY OF GOVERNANCE

motivation & energy… purpose, meaning & emotions motivated by collective 'values' …adaptability, creativity, empowerment, connectivity, collaboration, wisdom…

governance **functions**

maintained through time, fully, and in inspiring ways…

GOVERNANCE INSTITUTION

organisation

structure(s) and individual actors, knowledge, mētis, technology, means…

process and rules

taking decisions, ensuring implementation, eliciting respect of decisions, customs & rules…

governance **outcome**

decisions, customs and rules *applied* to regulate access to, and use of, the gifts of nature…

mainstream worldview… language, history, culture… laws & policies…

diversity of governance

quality of governance

equity and **effectiveness**

of decisions and implementation…

Figure 7. A sketch of the systemic interplay among diversity, quality and vitality as properties of a governance institution (see definitions in Part VI)

The capacity to function is clearly related to *who* is in charge (e.g. the *type* of governance institution) and *how* the governing functions are exercised (e.g. the *quality* of governance). In this sense, an *appropriate type* of institution and a *good quality* of governance do ground and promote vitality… although some vitality may remain even when type and quality could be improved. In fact, **while type and quality may be in great part codified and prescribed**,[1462] **much of what constitutes vitality cannot**, and is unique to the context. As 'functioning' happens through time and in specific contexts, the structure and rules adopted at any given time may be less decisive than ongoing reflection and action, capacity to deal with complexity,[1463] and— as appropriate— meaningful evolution and change[1464] to respond to the needs of the conserved or protected area. As illustrated by examples throughout this work, some vital governance institutions maintain their functioning through time by changing structure or type.[1465] Others are aware of some limitations and actively seek to improve the quality of their governance. Still others go through periods of diminished effectiveness, turmoil or dormancy to re-emerge evolved… having regained a capacity to function well by losing part of their

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1462   I.e. it is hard to describe these capacities in a normative sense, they cannot be included in a job description as 'activities to be performed'…
1463   …as recommended by **Van Laerhoven** and **Ostrom** (2007).
1464   As stressed by Dror (2001), the history of governance shows that innovations in governance— even radical ones— are needed to fend off institutional obsolescence.
1465   For the definitions of governance and related concepts, such as type, diversity and quality, see Part VI of this work.

resemblance to their earlier selves. This **capacity to change and evolve demonstrates** the **vitality** of an institution possibly better than any other indicator.

Inner motivation and the capacity to change while carrying out its role are needed to sustain the functioning of a governance institution *fully*, so that it achieves distinction of performance and obtains outcomes that meet or surpass expectations. This may explain why governance vitality cannot be prescribed or included as specific activities in a job description. The vitality of a governance institution pertains to a functioning whole and can hardly be broken down into specific activities. As for living organisms, its features and characteristics are best observed and discussed by exploring the **behaviour** (**functioning**) **of the system**. But it is still valid to ask whether the governance of precious ecological units— the conserved and protected areas crucial for the future of nature and societies— *do function well* and whether and how they could possibly *improve*. In fact, all institutions may benefit from examining themselves, understanding their own functioning and striving to improve.

In Parts I to III, as we explored processes of governing a territory as systemic phenomena, we have drawn from a variety of disciplines— from human ecology[1466] to political economy,[1467] from evolutionary biology[1468] to ecological anthropology.[1469] Our aim was not to illustrate old or new theoretical ideas but to find possible commonalities and insights for positive action. For that, we have focused on the characteristics of *local* **institutions**, that is, the organisations, processes, and rules relevant **at the *direct interface* with the environment**, pausing for a while on the fact that they are inevitably part of larger contexts. Like all living systems,[1470] governance institutions are open, dynamic and embedded in multiple contexts— most importantly the society in which they operate and the diverse levels where other institutions relate with them. In other words, as stressed in Part III, all institutions are always in interplay with other institutions, as well as with diverse social-ecological phenomena that may enable and support them but also diminish or even impede their work. As they exist in **dynamic interaction with diverse contexts and levels of decisions**, it is only in first approximation that we can examine any 'single' institution at the direct interface with its local environment.

In recent years, scholars have focused on the need for institutions to be aware of uncertainties, tolerant of ambiguity, and open-minded about 'policy gambling' nourished by learning.[1471] Some have highlighted the complexity of social-ecological fit,[1472] which can be examined via hybrid analyses of institutions[1473] at multiple levels.[1474] Others have stressed the 'fuzziness' of institutions— the multiple purposes, meanings, identities, rationalities and arrangements that allow them to function,[1475] the presence of individuals capable of making

1466   E.g. we recalled Johnson and Earle (2000), who have investigated social evolution and described social scale and organisation as diverse ways of interacting with the environment to obtain food, security and the possibility of reproduction. In their perspective, the environment is a human artefact binding people to the land.

1467   E.g. we recalled Polanyi (1944) arguing that people are socially motivated (e.g. via patterns of reciprocity, redistribution and exchanges) more than they are motivated by mere material gain ("economic self-interest").

1468   E.g. we mentioned Ridley (1997) in the section on 'Connectivity and collaboration' in Part II of this work.

1469   Ecological anthropologists study the adaptive functions of cultures with respect to ecosystems. Some (see Bateson, 1972) have tried to build models of adaptive living systems (e.g. via self-regulation, adaptation, homeostasis, etc.).

1470   Miller, 1978.

1471   Dror (2001) notes that historical processes are dynamic compounds of necessity and contingency, choice and chance. In such processes, uncertainty cannot be eliminated, and inconceivable mutations are bound to happen. Governance institutions ought to be transparent, as their decisions inevitably involve a measure of 'fuzzy gambling'. They should prepare themselves, and the public at large, for unforeseen consequences, for instance by adopting decision protocols to follow in times of crisis, setting up staff units in charge of strategic intelligence and foresight, exploring alternative-future scenarios, etc.

1472   Folke *et al.*, 2007.

1473   Armitage, 2008.

1474   Allen & Hoekstra, 2015.

1475   Cleaver & de Koning, 2015.

a difference, and the capacity to change by 'bricolage'.[1476] While governance vitality has been mentioned[1477] but not discussed at length in specialised literature, other concepts that apply to socio-cultural and ecological systems and relate in many ways to vitality have been explored extensively. Emerging from the history of institutions and human development in general, the learnings matured by the practitioners and scholars who have been investigating these concepts have provided indispensable insights for the systemic understanding of governance vitality adopted in this work.

Is vitality related to other concepts?

We list and describe in this section a few concepts, germane to governance vitality, that provide insights in themselves as well as in comparison with vitality.

Resilience

The resilience of a social-ecological system is its capacity to absorb disturbances and reorganise, and even change itself while retaining its function, structure, identity and feedbacks.[1478] This means that a resilient system hit by any disturbance— including significant ones, such as a flood or a financial crisis— is capable of remaining within, or bouncing back to, a 'stability landscape basin'[1479] determined by a few variables. Resilience so understood includes the idea that there exists such a 'stability landscape basin' where the social-ecological system functions well, and that the system has inherent capacities to return to, or maintain, that functioning.[1480] But resilience can imply even more. The capacity for adaptability and transformability of the social component of the system (adaptive governance) may influence and even improve the 'stability landscape basin' or even respond to disturbances in the innovative ways that create *new* stability landscapes.[1481] This is what, earlier in this work, we referred to as *strategic adaptability*.

While vital institutions need to be able to react positively to shocks, vitality of governance embodies more than resilience and strategic adaptability: it implies **being pro-active and assertive**, not just capable of reacting well, but capable of *acting* well, looking into the future. It is about positive agency, not solely 'bouncing back' or passive ('brainless') sustainability. In this sense, vitality introduces into a social-ecological system some explicit elements of reflection, consciousness, choice about appropriate response. Also, vitality encompasses the idea of *evolving* **through time**, and possibly becoming stronger, more responsive, more productive, more equitable and more meaningful. This may be in response to a changing context, but it is also about expressing the **endogenous will and capacities** of the institution at stake to determine the future course. In the words of Carl Folke and co-authors (2007): "It is not clear that resilience in institutions is always a good thing. Maladaptive but resilient institutions can allow poor environmental management to persist for very long periods of time, particularly if such institutions are subsidized by other social or economic sectors, or if they are operating

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This may refer to institutions that are altered, adapted, re-invented, tweaked or pieced together, such as "a community forest management association that functions as a social security mechanism in case of illness" (Cleaver & de Koning, op.cit.). See also Vorbach and Ensor (2022) for a discussion of bricolage as hybridisation of practices of different origins.

1477 Borrini-Feyerabend *et al.*, 2014; Andersen & Enkerlin Hoeflich, 2015; Borrini-Feyerabend & Hill, 2015; Hockings *et al.*, 2019.

1478 Walker *et al.*, 2004.

1479 Noticeably, a 'stability landscape basin' includes more than just one 'equilibrium status'.

1480 Folke *et al.*, 2005.

1481 Ibid.

at the wrong scale". Vitality attempts to remedy this by introducing the idea of 'functioning through time *in inspiring ways*'.[1482] The concepts of vitality and resilience are thus closely intertwined, but clearly distinct.

Social-ecological fit

This term was discussed by Carl Folke *et al.* in 1998 and later further analysed by the same and other authors.[1483] It describes the *suitability* of the temporal, spatial and functional dimensions of institutions with respect to the characteristics and dimensions of the ecological context where they operate. To match the scale and scope of the relevant ecological processes, institutions should develop in co-evolving relationships with their ecological domains. Many Indigenous and traditional institutions did and do so, making it possible for them to "filter out and discard practices that are clearly unsustainable". Systems that demonstrate social-ecological fit are said to be "robust and effective". In the absence of that, they become "brittle", "vulnerable", "rigid" and "unresponsive" (notice how these terms perfectly describe a *lack of vitality*). A misfit institution may keep disturbances at bay and appear successful, but lead towards long-term backlashes, such as a fishery collapse or a devastating megafire in a national park. According to Folke and his 1998 co-authors, lack of social-ecological fit is driven by economic and social factors, from tenure regimes to technological change, or, even more broadly, by mis-fitting power relations, worldviews, lifestyles and values. The nodal problems may be spatial (e.g. governance institution not matching ecological units), temporal (e.g. short time horizons of planners and politicians versus long horizon of needed interventions) or functional (e.g. interventions that ignore side effects like threshold behaviour and cascading, or end up micromanaging). Overall, "the problem of fit is a matter of the match, or congruence, between biophysical systems and governance systems"— an issue that also has much to do with the interplay among institutions and their scale of functioning.[1484]

Institutions that demonstrate social-ecological fit are clearly also likely to exhibit governance vitality. **Vitality**, however, **adds** the dimension of governing '**in inspiring ways**', which translates the meaning of 'being fit' *for the culture and aims of the concerned society*. As highlighted by Harries-Jones (2010), social-ecological fit requires that **culture and environment respond and adapt to each other in complex multiple feedbacks**. Vitality may be part of a new social-ecological lexicon that describes exactly that.

Adaptive social learning

For Fikret Berkes (2010), our best chance to positively respond to social-ecological change rests in "dynamic governance, shaped by interactions, feedback learning and adaptation over time". The phrase summarises three essential understandings from years of academic inquiry.[1485] The first of these is the crucial value of *learning*— a process by which institutions develop the capacity to understand social-ecological issues and possibly solve related problems. The methods of choice noted by Berkes are experiential and experimental, enriched by a commitment to permanent institution-building. Learning is related to institutional memory and to the use of the acquired knowledge mediated by institutional power (e.g. the power to take decisions but also to define questions, choose indicators and targets, measure outcomes, etc.). And learning is active and dynamic, never a fixed property or static condition.

1482   Davenport (2020) uses the term 'emotional resilience' in a similar way, to describe imaginative and creative frames of mind capable of 'buoyancy' under crisis, i.e. responding beyond the normal into new systems of thinking.
1483   Folke *et al.*, 2007; Galaz *et al.*, 2008. The descriptions and quotes are from Folke *et al.*, 2007.
1484   Young, 2008. Marshall Murphree (2004a) also stressed this among factors supporting the 'sustainable use' of nature.
1485   See, for instance Armitage *et al.*, 2009 and Berkes, 2009b.

The second understanding we find in the phrase is that learning happens by *interaction* and *feedback*, thus through *joint* problem solving and reflection within learning *networks*— all of which justifies calling it "*social* learning", a concept that Berkes has developed at length.[1486] Social learning is a plea for both pluralism of ideas and solutions and participatory decision-making— the opposite of command-and-control operations but also of adversarial actors competing for influence on decision-making. Berkes calls instead for *collaborative* partnerships among actors with diverse comparative advantages, capable of **building trust** among themselves, **resolving conflicts** and **learning-by-doing** *together*. He stresses, for instance, that social-ecological systems are best managed by wisely merging the knowledge and capacities held by diverse actors at diverse governance levels (e.g. community members know well the conditions of their forest, but only agencies at national level may possess the remote sensing data for the larger ecosystem and much other information of a socio-economic and political nature).

The third understanding we find in the same phrase is a call for *adaptive* solutions— the opposite of blueprint— matured in response to varying conditions and challenges. Adaptation builds upon constructive interactions, possibly slow to develop, requiring early investments of resources (high transaction costs) and demanding a willingness to share risks… but possibly also aiming high, at nothing less than building an autonomous capacity to act. The capacity for adaptive social learning is thus thoroughly germane to much that characterises governance vitality that we have discussed in Part II and described as **'strategic adaptability'**, **'creativity and empowerment'** and **'connectivity and collaboration'**. The fact that these very similar understandings developed without an explicit interaction between the extensive scholarly work elegantly summarised by Berkes and the work on vitality of governance for conserved and protected areas offers encouraging support to both.

Constitutionality

Another concept explored in the literature and most relevant for vitality is 'constitutionality'. In the context of developing a new institution, or renewing and improving one that already existed, constitutionality is conveyed by the **sense of *ownership*** felt by a group of people that engage together, building upon local knowledge and resources.[1487] This sense of ownership may benefit from external catalysing agents (e.g. a platform where interaction is perceived to be fair) but can also do without it. Promoting constitutionality requires a much deeper appreciation and effort than the participatory processes often superficially organised by conservation and development agencies to implement *their* projects. It requires genuine engagement by communities able to give voice and action to all their members— including those in weaker and marginalised positions, usually less able to participate.

Empirical analyses show that constitutionality in institution building is strongly related to conditions such as: community emic perception of the need for a new institution; linkages to pre-existing institutions; fair negotiation processes; catalysing role of outside agents; recognition and use of local knowledge; and government recognition at the onset.[1488] Concretely, we may find constitutionality in **groups that craft their own rules** (e.g. about a local fishery or community conserved area) in order to respond to specific problems or opportunities. With time, they may own such rules as crucially important for the territory and their own relation with it, demonstrating **motivation and work energy** in preserving, enforcing and respecting them.

1486   Berkes, 2009b.
1487   Haller *et al.*, 2016; Haller & Merten, 2018.
1488   Haller *et al.*, 2018.

In this sense, constitutionality and vitality are revealed in similar ways. And we may say that constitutionality offers a proper ground for the vitality of an institution to develop and prosper.

Subsidiarity

The principle of subsidiarity calls for tasks being decided and undertaken— among all able to perform them— by those at the **level closest to where the tasks will have effects**.[1489] Some add that higher levels of authority have a duty to enable and support lower levels to undertake their functions, even when they maintain ultimate responsibility for inappropriate decisions.[1490] Subsidiarity has been adopted as a guiding principle by the European Union, and it is interpreted to mean that governance shall be exercised at the lowest possible institutional level that is compatible with the required capacities for effective results.[1491] Applied to the governance of territories, this means that— wherever such capacities exist— decisions should be taken and implemented at national rather than at EU level, at district rather than national level, or at community rather than at district level. A plausible rationale for this is that decisions taken closer to the phenomena and people to be impacted are likely to promote easier learning, caring and enhanced effectiveness and efficiency. Wherever people share knowledge and experience about the local environment, subsidiarity thrives on proximate and immediate feedback loops— positive and negative, because of action or inaction. Because of this, it is likely to strengthen the citizens' sense of ownership of an institution (constitutionality)[1492] and its resilience.

While it may be easier to describe the concept in theory than to realise it in practice,[1493] real-life subsidiarity is often connected with practices of decentralisation (deconcentration, delegation or devolution) of decision-making power and responsibility/accountability. When fairly and well-organised in a nested system, subsidiarity is expected to promote **autonomy, initiative, strong motivation, and sense of responsibility**—[1494] all properties connected with the vitality of a governance institution.

High-quality interaction among actors

Vitality is mentioned in the literature as related to 'high-quality interaction among actors', as observed, for instance, among actors engaged in governing and managing water systems.[1495] In that sense, vital relations among actors are described as being *energising* (positive collaboration process), *productive* (positive results of the collaboration) and capable of exploring, developing and consolidating some '*common ground*' in dealing with complex governance issues. Finding common ground may mean moving from fragmented action to **collective problem-solving**. It may mean finding together a better coherence among policy formulation, implementation and long-term expectations and perspectives. Or it may mean benefitting from a shared sense of urgency and a combination of informal and formal face-to-face relationships.[1496] Vital coalitions of actors are described in the literature as including the presence of leaders of change and benefitting from deliberative processes as well as from supportive government authorities.[1497]

1489   Adapted from Jordan, 2000.
1490   This responsibility should be subject to appeal and quasi-judicial review. These issues are discussed by Dror (2001), who notes how the principle of subsidiarity goes back to the Society of Jesuits and Catholic Canon Law.
1491   Marshall, 2008.
1492   Thomas Niederberger, personal communication, 2019.
1493   Marshall, 2008. See, however, the case examples provided in this work, in particular 7, 10, 14, 15, 16, 18, 29 and 30.
1494   Mele, 2006.
1495   Edelenbos *et al.*, 2015. Much valuable literature is cited in this article.
1496   Edelenbos *et al.*, 2015.
1497   Horlings, 2010.

Understanding 'high-quality interaction among actors' as an internal property of a governance institution allows a direct link with constitutionality and subsidiarity. The connection seems also clear with **positive connectivity** with actors outside the governance institution and, again following Edelenbos and co-authors, with **energy, productivity** and **wisdom**, also naturally associated with vitality. Also remarkably, 'high-quality interactions' is said to be associated with **motivation** and **inspiration**.

Self-organising capacity

The cooperative governance and management that characterise the commons are said to have *vitality* when compared to conventional economic relations dominated by the imperatives of growth, profit and consumerism.[1498] Elinor Ostrom studied the institutions governing the commons and the combinations of variables that enhance their capacity for self-organisation, maintenance and autonomous problem-solving.[1499] From a variety of field examples, she identified eight institutional *design principles* (described not as necessary but as supportive) that foster such capacities. Among others, these principles include: clear boundaries (of territories);[1500] graduated sanctions; ensuring that those affected by the rules can participate in modifying them; internal capacity for monitoring and conflict management; and nested layers of governance. The principles are applicable in different historical, cultural and technological conditions but polycentric governance and subsidiarity are considered as generally desirable, as are the accumulation of practical knowledge and the willingness to experiment.[1501] Institutional arrangements for the commons may be quasi-autonomous but should be organised at multiple scales and effectively linked or nested together.[1502]

Besides Ostrom, other scholars have studied enabling conditions for sustainability of governing the commons specific to diverse types of natural 'resources', embedding policies, etc.[1503] The governance institutions *per se* are said to be favoured by a variety of factors, including small size, interdependence of members, shared norms, successful prior experiences, and fairness in allocation of benefits, among others.[1504] As **self-organisation and autonomous problem-solving** are key properties of vitality, all characteristics that are positive for self-organising capacity and demonstrate effectiveness and sustainability of decisions offer insights about vitality as well.

Ethnogenesis

This concept is best described by an example. In the last fifty years, several Indigenous peoples in the Madre de Dios region of the Peruvian Amazon "united among otherwise rival groups or factions to confront and resist external, ethnocidal forces and demand respect for their ways of life".[1505] The Indigenous federation they created, called— Federación Nativa del Río Madre de Dios y Afluentes (FENAMAD)— has little in common with their traditional forms of organisation and its structure and alliances were designed by necessity, in order to face legal requirements and gain, little by little, political recognition by successive Peruvian governments as

1498   Weston & Bollier, 2013b. Recently, the dynamic character of the commons ('commonisation' and 'de-commonisation') has also been stressed (Nayak, 2021).
1499   Ostrom, 1990.
1500   Clear boundary should not mean rigidly defined boundaries. Indigenous peoples in the Amazon Basin have historically shared their territories of life with others, allowing for useful reciprocal exchanges. Their territories remain today interlaced life spaces, which can well be shared (Thomas Moore, personal communication, 2020).
1501   Weston & Bollier, 2013b.
1502   Ostrom, 1995.
1503   The Digital Library of the Commons (https://dlc.dlib.indiana.edu/dlc/ accessed 2024), established by Elinor Ostrom and co-workers, offers free access to thousands such documents.
1504   Agrawal, 2001.
1505   Moore, 2021.

well as by private companies, missionaries, civil society, anthropologists and others. The federation represents diverse Indigenous nations and isolated Indigenous peoples, and it advocates on their behalf for recognition of their collective rights to territories, to receive basic social services, resist undesired 'development' initiatives and mining or logging concessions, govern specific 'conserved areas', etc. It is active regionally and nationally, but also in international UN and other international fora. The federation facilitates the organisation of Indigenous nations based on ethnicity (e.g. common language, history, cultural traditions), fosters solidarity among nations, and focuses on securing and defending territories. Through its relatively brief (40 years) but intense formal existence, the federation has met and resisted internal crises and external aggressions of diverse origin, demonstrating the capacity to adapt to varying circumstances. Ethnogenesis is defined as the sum of "adaptive processes in a people's forms of life and relationships that allow them to survive in a colonial intercultural context".[1506] In this light, the Madre de Dios federation appears to "constitute a legitimate indigenous response of ethnogenesis", with "**adaptations** to the increasing global economic, social, and political pressures that threaten the survival of Indigenous peoples and cultures".[1507]

Despite the novelty of the use of the concept, we recognise in ethnogenesis, as just described, much of what the vitality of governance institutions is about... The post-colonial historical conditions that prompted the definition and description of the ethnogenesis process are clearly narrower than 'vitality' *per se* and specific to peoples and communities that define themselves based on ethnicity. But the capacity of an organisation to operate important **change up to a metamorphosis** of what existed, or even to **create something entirely new** to **strategically adapt and survive** appears at the heart of vitality.

Sustainability

Sustainability is a broad and not always clearly defined concept, despite being routinely used and considered familiar by virtually all government agencies, academics, corporations, governance actors in general and even the financial sector. The often-quoted definition of 'sustainable development' offered by the Brundtland Report ("meeting the needs of the present without compromising the ability of future generations to meet their own needs")[1508] is memorable but rather unspecific. More recently, sustainability has been linked to the *viability* of the socio-cultural, economic and environmental 'pillars' in society,[1509] with specific meaning and application provided by the Sustainable Development Goals (SDGs).[1510] Most such goals describe desired outcomes, namely, what sustainability should look like in practice. The SDGs, however, *do not* explicitly recognise the forces of political economy that influence the goals themselves and the way the related interventions are conceived and implemented.[1511] In this sense they generally do not call into play issues of constitutionality, subsidiarity, and high-quality interaction among actors— all of which relate directly to vitality.

The scope and focus of sustainability, sustainable development and governance vitality may largely interplay/overlap, but the concepts are clearly not synonymous. Stretching the definition, vitality could be a property of governance institutions that **favours progress towards achieving the SDGs**, thus contributing to deliver sustainability in general. This may be particularly true for SDG 12: Sustainable production and consumption;

1506   Whitten, 1976.
1507   Moore, 2021.
1508   World Commission on Environment and Development, 1987.
1509   Purvis *et al.*, 2019.
1510   See https://sustainabledevelopment.un.org/?menu=1300 accessed 2024.
1511   Some stress that SDGs are questionable for various reasons, one being that they hardly discuss, recognise or highlight communal tenure and rights.

SDG 13: Climate action; SDGs 14 and 15: Sustaining life below water, and life on land; and SDG 16: Peace, justice and strong institutions.

Diversity and quality of governance

Diversity and quality of governance are defined in Part VI of this work. Here it may suffice to say that diversity refers to the existence of diverse *types* of governing institutions, which may be differently 'appropriate' to their context. In turn, quality regards diverse *ways* of conceiving, implementing and ensuring the respect of decisions and rules, and we can set it in a spectrum between 'good' and 'bad' governance according to given criteria. A governance institution can thus be of 'appropriate type' and 'good quality' as it matches the social-ecological history of the relevant territory and the governance criteria of the relevant society. Indeed, vitality is substantially related to diversity and quality of governance, as described in conservation literature[1512] and visualised in Figure 7. It would be truly hard to imagine vitality as dissociated from 'appropriate'[1513] and 'good'[1514] governance, which relate to: emerging from and being responsive to the context, rather than imposed upon it; engaging society by active communication, dialogue and transparency; seeking consensus on decisions; maintaining integrity, coherence and respect in implementing decisions and rules; etc. All these properties nourish vitality with purpose and meaning.

What, then, does vitality *add* to diversity and quality that justifies its treatment as a separate property of governance? As briefly mentioned in our introductory description, vitality appears to encompass that ***vim and capacity*** that cannot be prescribed or demanded in a normative sense. Policies and legislation can deal with diversity by prescribing a certain *type* of governance for conserved or protected areas. They can deal with quality by prescribing certain *criteria* to follow in taking and implementing decisions about them. They cannot codify vitality, however, as part of the terms of reference of any governing institution. Vitality can only be expressed autonomously and voluntarily, like the sap that nourishes a plant from within. It emerges in unique ways related to specific contexts and it reveals a governance institution's **character, strength, distinction and care**. It adds effectiveness, but also flavour and beauty to performance. And it often leads to **excellence** in what we have described as **custodianship**. But it does not come easily, especially when an institution needs to emerge without local historical rooting, as in the case of the Galápagos Marine Reserve (case example 25).

<div align="center">* * *</div>

The concepts briefly described in this section enrich our understanding of vitality. They also remind us again of the very characteristics we explored in Part II as being both likely to contribute to its governance vitality and mostly 'intrinsic' to a governance institution. We earlier schematically placed such characteristics in Figure 2. We now add, in Figure 8, the concepts just described that appear to fit, 'confirm' and add to it. The figure is not meant to imply any type of causation or necessary connection, which would hardly be meaningful for broadly defined concepts. It rather describes the 'social humus' where relationships and phenomena can and do emerge.

1512   Borrini-Feyerabend & Hill, 2015; see also pages 59–60 in Borrini-Feyerabend *et al.*, 2013; Franks *et al.*, 2018; Booker & Franks, 2019.

1513   Annex II of CBD Decision 14/8, 2018. The document uses the term 'appropriateness' but does not discuss it in depth. In fact, 'appropriateness' relates to the governance type 'fitting' the social-ecological context. For instance, if for centuries two different ethnic groups have been drawing their livelihoods from overlapping territories, possibly with different modalities of use, it would be 'appropriate' to include both in a shared governance institution, and 'inappropriate' to include only one, or neither of the two.

1514   We understand 'good governance' as governance exercised by respecting the criteria agreed by a given society (e.g. participation, transparency, accountability, respect of human rights...). See also Borrini-Feyerabend *et al.*, 2013.
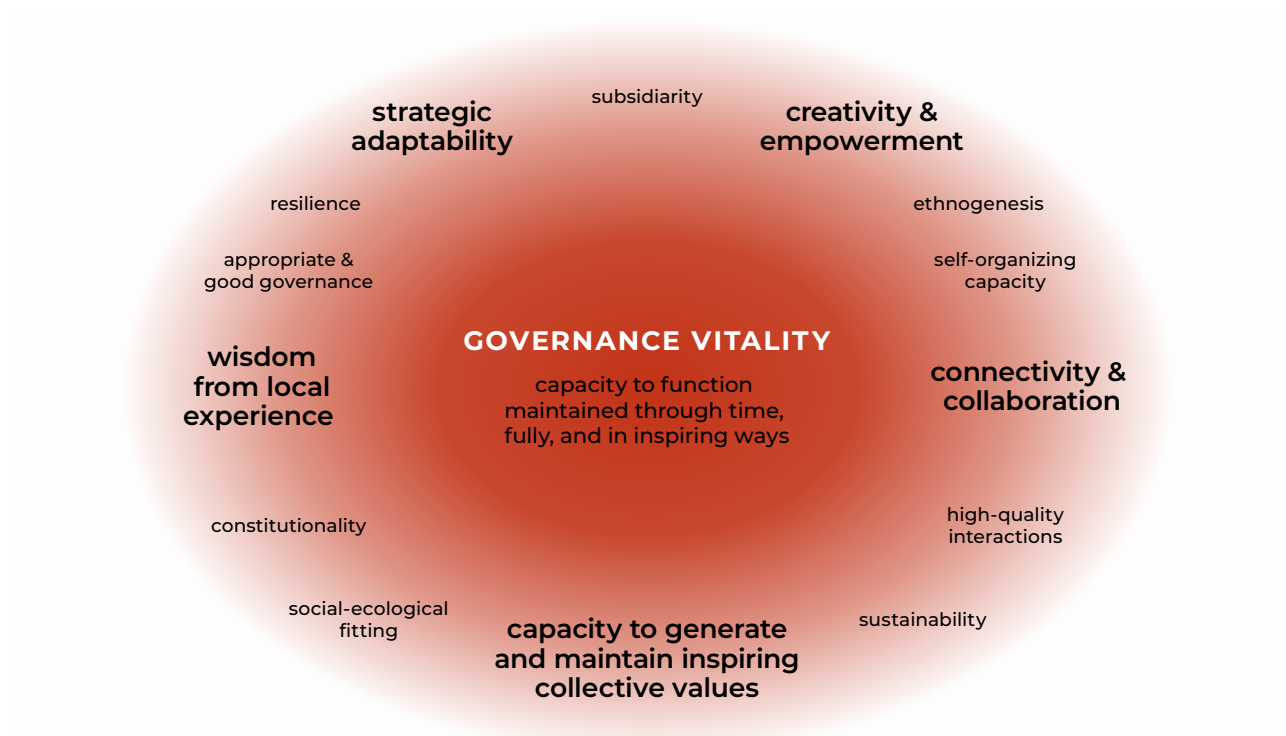
Figure 8. The 'social humus' where governance vitality can emerge (the 'characteristics likely to contribute to governance vitality' presented in Figure 2 are enriched here by other fitting concepts and phenomena, as detailed in the text).

Vitality as a 'conservation standard'

As just mentioned, the last two decades have seen interest emerging about governing conserved and protected areas and ways to describe and evaluate such governance. Processes, criteria and indicators aimed at assessing governance quality (e.g. adherence to the *criteria*) and diversity (i.e. appropriateness of *type*) have been developed and tested in a few cases.[1515] While presenting challenges of their own, these initiatives have generated some useful information and advice.[1516] But governance insights can go further. By **understanding** the characteristics of **governance vitality**, practitioners and societies may monitor the functioning of their institutions and find ways to **ensure that** their **performance remains** *excellent* **and** *inspiring through time*, including by devising and enacting needed change. Is this meaningful and desirable? If so, is 'assessing' vitality at all feasible, giving vitality's more elusive character compared with diversity and quality?

The Promise of Sydney,[1517] a commitment reached at the close of the IUCN World Parks Congress of 2014, embraced the inclusive concept of "protected and conserved areas" and called for the "scaling up of conservation to represent all sites essential for the conservation of nature" and to "enhance diversity, quality and *vitality* in governance and management, including the appropriate recognition and support of areas conserved by

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1515   See the Annexes to Borrini-Feyerabend *et al.*, 2013 https://www.iucn.org/sites/default/files/import/downloads/annexes_to_governance_of_pa.pdf accessed 2024.
1516   See, for example, Franks & Booker, 2018.
1517   See Andersen & Enkerlin Hoeflich, 2015.

Indigenous peoples, local communities, and private entities". It promised to "engender a life-long association [of people with nature] for physical, psychological, ecological, and spiritual wellbeing". Implicit in this commitment is the need for protected and conserved areas, and their systems, to remain or become as effective as possible.

During the same influential congress, further preliminary steps were also taken to recognise protected and conserved areas that meet some globally applicable **standards** as noted in the IUCN Green List of Protected and Conserved Areas.[1518] Such standards are conceived to encourage governance institutions to measure, maintain and improve their performance through consistent criteria.[1519] The standards are also intended to allow institutions to identify where they may fall short, and where investment and effort in knowledge, capacity, management or governance may be recommended, and why. As part of such standards, **governance** *vitality*, even as then preliminarily defined,[1520] was explicitly recognised as **deserving attention**.

Meeting even minimum standards is challenging for most conserved and protected areas across the world, and seeking an additional label is often motivated by political and financial considerations. These limitations notwithstanding, it seems logical that *only* areas with a sustained capacity to function fully, well and through time— namely, exhibiting vitality of governance— deserve inclusion as part of the IUCN Green Listing process.[1521] In fact, one of the seventeen criteria to be met by an area for IUCN Green Listing is "Enabling governance vitality and capacity to respond adaptively".[1522] In this sense, **governance vitality is an aspiration at the core of IUCN Green Listing**.[1523] With or without the aim of assessing the IUCN Green Listing standards, however, custodian communities, government agencies, conservationists and landowners would all benefit from better understanding the phenomena that build upon, or undermine, the vitality of governing their conserved or protected areas.

Recalling Figure 2 and integrating in it the concepts and considerations further discussed, we reach the more complete sketch depicted in Figure 8. Is there a hope to assess a phenomenon as rich as the one described there? We believe there is, but only through an **honest self-assessment process** and with a '**meaningful intention**'. A vitality assessment requires a comprehension of how an institution has been functioning through time, what strengths and weaknesses it possesses, how it has been dealing with evolving political, socio-cultural and ecological situations, and how it has been relating with a variety of relevant actors and institutions. All this needs a qualitative in-depth exploration and analysis of phenomena *in context*, using indicators that are meaningful in the specific circumstances.

Only the key governance actors and the representatives of the society directly concerned with the territory possess the knowledge and (possibly) the motivation to analyse the relevant phenomena in the required depth. External 'evaluators' with minor inputs from the mentioned actors and representatives would produce

1518   See: https://www.iucn.org/theme/protected-areas/our-work/iucn-green-list-protected-and-conserved-areas accessed 2024. The four main components of the Green List standards are 'good governance', 'sound design and planning' and 'effective management', which all contribute to 'successful conservation outcomes'. Embedded in these components is a suite of 17 criteria, accompanied by 50 indicators and associated means of verification. Any conserved or protected area, wherever situated and however governed, can commit voluntarily to being assessed and benchmark its progress against the global standard, adapted to the country of jurisdictional context. To ensure that the process is robust and verifiable, an initial self-assessment later proceeds through expert independent review. The sites and countries that agree to participate in the assessment process benefit from the international visibility and technical support that the IUCN Green Listing can provide.

1519   Hockings *et al.*, 2019.

1520   See Borrini-Feyerabend *et al.*, 2014.

1521   Noticeably, while there may be political momentum in 'getting a label', the capacity to keep that label by maintaining a level of performance is harder to find. Any 'label monitoring body' trying to maintain quality faces political and financial difficulties.

1522   Criterion 1.3 in IUCN & WCPA (2017).

1523   This work was initially in part conceived to support candidate areas and territories for IUCN Green Listing, but quickly moved beyond that. Conserved and protected areas that seek to meet the IUCN Green List Standards may still find it relevant and useful to explore the dimensions of governance vitality highlighted here.

results of much lesser value... although external *facilitators* of self-assessment processes are highly desirable. Further, while there is limited meaning in evaluating vitality to develop a 'judgement' or a score, there is plenty of meaning in self-assessing vitality to **promote one's own functioning to the fullest**, and to identify and tackle any limiting factors. That is why we believe that a self-assessment process should aim at **developing the full potential of governance vitality** for lasting conservation and livelihoods results. This would justify the efforts and provide meaning to the assessment process itself.

If there are indeed unifying and general principles of conservation that apply globally, we should expect them to emerge from accumulated experience in locally based initiatives, rather than from previously articulated theory or concept.[…] . We need to pay more attention to the practice of conservation than to what needs to be conserved.

Kamaljit S. Bawa et al., 2004

Self-assessing vitality

At the present historical cusp of unprecedented powerful technologies, demographic size, and unrelenting, widespread use of fossil fuels, social-ecological change has become so rapid and pervasive that all institutions appear fragile. When the governance vitality of an institution manifests itself, it seems a remarkable phenomenon, it commands attention and generates hope. When such vitality is flickering, however, it may be time— for those who care— to act. But who should assess vitality? In the preceding section we argued that governance vitality is best evaluated and enhanced based on an honest **self-assessment process**, involving the key actors in the institution and in the community and society the institution is expected to serve.[1524]

An occasion for a self-assessment process may be offered by a self-strengthening initiative[1525] undertaken by the governance organisation, by a broader governance assessment of conserved and protected areas,[1526] by a major problem or opportunity that calls for restructuring the institution, or even by a group of concerned actors determined to awaken energy and action for a specific area or territory. What should the self-assessment examine? Are there specific **questions** to explore vitality and ways and methods to understand the phenomenon? Are there **indicators** to support the analysis? Some examples of questions and indicators to approach governance vitality are listed in Tables 2 and 3 below. Any group of concerned actors can organise a process by which questions are discussed and indicators are reviewed, adapted and assessed for a specific conserved or protected area or territory. For instance, starting from an understanding of the context, organisations, processes and rules that describe the concerned 'governance institution' (see below), the questions listed in Table 2 may be used as starting points for reflection and the indicators listed in Table 3— which refer to the five characteristics associated with vitality– may provide further inspiration.

Remarkably, the full meaning of governance **vitality** in a given setting may be **best understood while trying to assess it**. For that, Tables 2 and 3 offer useful guiding posts… but not all questions and indicators are always appropriate and surely not equally important in diverse situations. In addition, they are not exhaustive. For instance, in line with Figure 8, any additional assessment of phenomena such as resilience, social-ecological fit, ethnogenesis or constitutionality would provide further useful insights.

1524 This is corroborated by the evidence of a recent major review of literature aimed at understanding whether protected areas are better managed by the State or by resident Indigenous peoples and local communities. As reported by Dasgupta (2024) one of the authors of the review states that "… assessment should be bottom-up, and […] about what matters to the people that are living with those ecological systems".

1525 A methodology for this has been recently released by the ICCA Consortium https://ssprocess.iccaconsortium.org/ It is available in English, French, Spanish, Chinese, Persian, etc.

1526 This may include a variety of parameters, sites and institutions. See Part II of Borrini-Feyerabend *et al.*, 2013; Booker & Franks, 2019.

Table 2.

Some basic questions to approach vitality for an institution governing a conserved or protected area or territory

- For *how long* has the institution been 'functioning'?
- Is it functioning with *excellence*?
- Has it been *evolving*, responding to change in its context?
- Does it show *motivation and energy* (is it 'inspiring itself')?
- Is it *inspiring* for the concerned community or society?
- For *how long* is it likely to function, evolve and inspire itself and others?

Table 3.

Governance vitality and its characteristics: examples of indicators for conserved and protected areas or territories

Element/ characteristics	Possible indicators
Governance vitality *per se*	- Having **sustained through time the capacity** of the governance institution **to function** (i.e. **achieve the objectives** of the conserved or protected area) **fully and in an inspiring way.** A *timeline* noting a constellation of *events*, a *story* connecting them, or other qualitative indicators may be appropriate here. - Demonstrated **excellence** of performance (e.g. the institution has solved problems in complex and trying circumstances). - Demonstrated capacity to respond to and **evolve** under changing circumstances. - Demonstrated **motivation** and **energy** of the governance institution to keep playing its role through time, even under challenging circumstances. **Clarity** of role, purpose and reason to exist of the institution; **awareness** and understanding of the **meaning** and possible multiple **values** it safeguards for the community or society at large (*self-inspiration*). - Measure of **social respect** acquired in the community or society, including a sense of the social **ownership** and **legitimacy** of the institution, and of the adherence to the decisions, customs and enforced rules[1527] (*inspiration for concerned others in society*). - Sense of **confidence and security** of the community or society about the future of both the institution and the conserved or protected area.

1527   For instance, people respect the rules agreed for the conserved or protected area; they speak about their park or their territory; they participate in relevant gatherings and celebrations; they provide volunteer help for surveillance or restoration work.

Strategic adaptability	• Demonstrated **alertness**— promptly recognising emerging conditions, problems and opportunities. • Demonstrated **responsiveness** and **timeliness**— providing timely and agile responses to emerging conditions, problems and opportunities; implementing decisions without delay. • Demonstrated **learning**— actively seeking and integrating information and knowledge from local history, experience and any other sources, and using those to improve the desired results and impact. • Demonstrated **strategic thinking**— deciding and acting after weighing options (e.g. through dialogue, exchanges, experiment and debate) and with a view to the long term. • Demonstrated **adaptation and flexibility**— providing appropriate and diverse responses to diverse circumstances, problems and opportunities; being capable of changing a course of action, as necessary. • Demonstrated **resilience**— having recovered and rebounded from major adversities, stresses and shocks.
Creativity and empowerment	• Demonstrated **motivation, energy, autonomous agency and leadership** in caring for the conserved or protected area *beyond what is normally required/ expected* by governance institutions (e.g. engaging new actors, seeking an understanding of new phenomena important for the future of environment and people). • Demonstrated **capacity to take self-determined decisions and act upon those** (e.g. changing rules no longer useful; resisting imposed inappropriate rules and destructive forces and threats; promoting own vision of wellbeing and development; choosing autonomy and frugality versus dependency and domination by the mass market). • Demonstrated **interest in becoming aware** of problems, threats and opportunities and feeling **empowered to take responsibility** to respond *beyond the call of duty*. • Instances of **embracing new ideas** and **people**— including by engaging in the co-production of **new knowledge** and regularly reviewing and **renewing leadership positions.** • Instances of having conceived and implemented **innovative and effective responses** to challenges, problems and opportunities. • Demonstrated capacity to be **self-disciplined** and **self-critical;** allowing the institution to **grow, develop and change.** • Instances of justified **transformative change** in governance structures and roles (**adaptive governance**) while respecting suitable **criteria** (e.g. legitimacy, transparency).

Connectivity and collaboration	- Instances of **abundant, sustained and inspiring exchanges** with diverse concerned actors, institutions and sectors of society at multiple levels, to: - Develop **alliances and ongoing collaborations** to realise, or effectively advocate for, initiatives and change in policy and practice (e.g. collaboration with external legal and economic advisors); - Promote dialogue, mutual understanding and **collective development of knowledge**, including across sectors of interventions and cultures (e.g. collaboration among outside ecologists and local managers); - Promote **nested and integrated systems of planning, decision-making and action** that seek inclusivity and synergy (e.g. having secured financial support for local activities as part of broader interventions); - Create **spaces** at multiple scales **to reflect and deliberate** about issues affecting nature and society (e.g. inviting politicians to regularly respond to residents regarding the conserved or protected area); - Facilitate the transmission of experience and learning **across generations, genders and social groups** (e.g. facilitating youth-specific visits and events with the accompaniment of wise elders and storytellers). - Demonstrated concern and capacity to **generate, acquire and use the needed material resources through time** (e.g. via productive investments to sustain the ongoing costs of governing and managing the conserved or protected area; via secured political support for governance meetings, learning exchanges, surveillance, etc.). - Demonstrated concern and capacity to **absorb, generate, circulate and value** relevant flows of **information and knowledge** (e.g. gathering the views of practitioners, local knowledge holders, scientists and researchers to inform decisions; maintaining information databases and ensuring their accessibility and transparency).
Wisdom from local experience	- Repeated instances of having taken and implemented **considered decisions leading to positive and meaningful action** (e.g. awareness of the health consequences of a mining operation used to inform the concerned society and prevent a local concession). - Demonstrated **thoughtfulness** about the decisions at stake (e.g. by openly recognising **diverse perspectives, complexity and uncertainties**). - Properly valuing both **local experience** (mētis) and **new knowledge** (e.g. by seeking both traditional and 'scientific' views and compiling, reflecting upon, sharing and transmitting what has been learned, including across generations). - As far as possible seeking decision-making by **consensus** (e.g. by paying attention to diverse concerns, highlighting the **common good**, **relational values, reciprocity**, and **solidarity with future generations** versus selfishness and material goods of immediate use). - Instances of having prevented or mitigated problems and conflicts or mitigated damages via **diplomatic skills** (e.g. having facilitated and negotiated agreements, safeguards, precautionary measures and compensations).

	- Demonstrated **respect** for other legitimate institutions (e.g. about the separation of powers among them, while seeking mutual comprehension and synergy). - Demonstrated **respect** for people and places (e.g. by appreciating social-ecological **history** and diverse worldviews, the biocultural heritage, knowledge and values of **diverse communities**, and diverse **gender** and **age** groups within them). - Evident **social-ecological fit** with respect to the conserved or protected area (e.g. the institution includes representatives from *all* rightsholders concerned with the ecosystem; is well aware of spill-over effects; the time horizon of its decisions fits the needs of the ecosystem; etc.). - Demonstrated capacity to secure an **effective** and **efficient**, but also **measured** and **respectful** use of resources (e.g. by keeping in mind the needs of future generations, consciously **avoiding waste,** avoiding the **unnecessary accumulation** of wealth and material goods, **respecting** nature and **non-human beings** in nature).
Inspiring collective values	- Instances of having taken responsibility for, and implemented, **ethically sound and future-oriented decisions**, including by being determined or even tough, when resistance is due, and regardless of going against the short-term selfish interests of a few. - Demonstrated capacity to **maintain commitment** and **integrity** in governing, managing and caring for the relevant conserved or protected area even in the face of substantial obstacles and opposition. - Demonstrated capacity to **inspire society** to perceive and uphold some shared **cultural and spiritual values** related to the conserved or protected area (e.g. stressing that it provides a link between people and their common past and desired shared future, that it nourishes a sense of identity, social morality, pride, diversity, piety, beauty and self-reliance… while making sure that such **values remain *life-supporting* for nature and *all* people**). - Instances of direct engagement of the institution in defence of the conserved or protected area, **inspiring** others to join in and **give the best they can give** (e.g. refraining from leveraging negative feelings like selfishness, fear, blame and greed; actively preventing the degeneration of shared identity and pride into nativism and intolerance). - Decisions and action that demonstrate a **sense of community** and **appreciation, attachment, care** and **empathy** for nature and people. - Regular occurrence of lively, joyous and socially appreciated moments of common **engagement** and **celebration** for the relevant conserved or protected area.

All governance institutions are inherently dynamic and bound to change. Thus, their vitality does not refer to the permanence of any specific manifestation— name, specific organisation, rules or even 'work principles'— but to the permanence of the capacity to function through time, specifically, the process of governing that delivers results in terms of well-conserved nature and well-supported human wellbeing. This may apply to conserved areas, protected areas, territories of life or any other area or territory that is socially valued *per se* or for the benefits it provides. In this light, what seems always desirable is the dynamic maintenance of **effective and inspiring relations between communities and their natural environments**— relations that seek and nurture the thriving of both nature and people.

The conditions for thriving nature and people are often not thwarted 'from within' but by phenomena that are not under the control of the concerned governance institution. In this sense, **governance vitality is determined by the balance of power** in a particular context and time— it is the **result of political struggles.** We introduced this idea in Part III and offered several examples of some such struggles in Part I and Part IV. Political struggles may reveal and enhance vitality… but may also affect it negatively, and even kill it. Yet, the *intrinsic* institutional characteristics that contribute to vitality, including the five main characteristics described in Part II, provide the sap—the vim and capacity— to respond to outside forces, including those that are oppressive and damaging. Such intrinsic characteristics are thus desirable for a variety of reasons.

Are there ways to fully realise, maintain or even enhance such intrinsic characteristics? More specifically, **is it possible to foster and nurture the vitality of an institution** in charge of governing a specific conserved or protected area or territory? We propose answering the question in the generic affirmative… although only specific institutions could say that about themselves. Below we suggest a **simple methodology** to explore this— a two/three-day workshop involving individuals in key governance roles and representatives of other relevant actors (20 to 40 participants is a good size). The workshop may be called by a community according to its own customary practice, possibly as an offspring of a general assembly. Or may be agreed during one of the meetings of the governing board of a protected area. A strong and confident community or governing board will want to involve many others, including trusted advisors, staff and those not usually involved in governance but concerned about it, such as organised users of the conserved or protected area, neighbouring communities, conservation advocates, national government officials, donors, etc. It is instructive to involve, after an honest review of local social-ecological history, concerned people of diverse gender and age, representing diverse worldviews and concerned sectors.

The workshop should be held within or next to the conserved or protected area or territory. The presence of an experienced **facilitator** is recommended to structure the occasion and provide added clarity and focus. A facilitator not from the relevant locality would be ideal but is not indispensable. The workshop could include several steps— to be considered, carried out, rearranged, extended or disregarded as the situation calls for. Table 4 outlines a possible programme for a workshop lasting two days and including four main steps/sessions. If feasible, we recommend extending the workshop to three days, with the second day fully occupied by the field visit and the third day fully occupied by the exploration and discussion of options for action and the consolidation of a plan. We recommend linking self-assessment and action, as taking stock of a situation *per se* is much less meaningful than doing it to improve and enhance vitality. It may also be possible to distribute the four sessions of the programme through several weeks, although the immersive nature of a full-time workshop is more conducive to learning and planning results.

Table 4.

Possible programme for a two-day vitality self-assessment workshop

Time	First day	Second day
Morning (3–4 hours)	Know thyself	Check with the territory and people (field visit)
(1–2 hours)	Lunch	Lunch
Afternoon (3–4 hours)	Take the pulse of governance vitality	Explore options and plan to enhance governance vitality

The topics and methods proposed for the four sessions of the self-assessment workshop are illustrated below as a fictional example. Naturally, any approach adopted in real life will need to be adjusted to the specifics of the context.

Know thyself

In a friendly and informal setting, such as participants facing one another sitting in a circle, the workshop begins with a welcome from the facilitator, possibly followed by a short opening statement from a spiritual authority, someone who can bring everyone to understand the value of the work ahead for both nature and people.[1528] This is followed by rapid self-introductions by all participants. The facilitator then outlines the agenda and recalls the aim of the meeting. As part of this, the facilitator offers a simple definition of 'governance' and explains what is meant by governance diversity, quality and vitality (see Part VI of this work). Besides definitions, what does it mean, in practice, governing a conserved or protected area that is important for a community and/or a broader society? The facilitator explains that the first session of the workshop will review the governance institution for the conserved or protected area or territory that closely concerns all participants in the workshop. Everyone will contribute to a common understanding about the historical evolution of the area or territory, what are the strengths and weaknesses of its governing institution, what meanings does it embody, what emotions does it engender, etc.

The facilitator explains that governance institutions are generally complex, embrace **explicit and implicit roles and meanings**, respond to diverse interests and concerns and elicit emotions, which provide sources of energy for support but also possible troubles. A first step for any governance institution to strengthen its own vitality is thus to be fully aware of itself and its 'sources of energy'. The facilitator emphasises that the open discussion of the history of the institution allows participants to discover elements of motivation and

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1528   In Guatemala, for instance, the lighting of a candle among flowers and a few words by a Maya elder can bring everyone to a common awareness of the preciousness of togetherness and peace.

strength that might be better acknowledged and nurtured, and blockages that could be solved. The institution governing the concerned area or territory: why was it developed? What meanings, interest and concerns does it represent for different groups in society? How does it function *de facto?* What facilitates or impedes its effective functioning? Governance institutions operate based on a variety of assumptions, aims and relations, some of which may be poorly known by some concerned groups. Spelling out what everyone believes is known and shared by all others is healthy for the institution overall, and likely to reveal new opportunities.[1529]

After this brief introduction, the facilitator invites all participants to gather into small groups sharing similar features, concerns and interests (e.g. economic actors, scientists and researchers, administrators, elders, young members of the community…). Three to seven persons is a good size for these groups. With the help of *a list of questions* offered by the facilitator, all groups recall—from their knowledge and perspective— the history of the concerned conserved or protected area or territory and of the origins and stated purpose(s) of its governing institution(s) through time. They discuss when and how the relevant area or territory was 'defined' within its current borders and limits, when diverse governing institutions were established (or one institution significantly evolved), and who was involved in that. What roles and 'meanings' were at stake? What services were offered to local communities and the larger society? Have all those evolved with time? If there are doubts or unanswered questions, those are noted. The elements of shared awareness of the history of the place ground the following discussion, which covers the *current* governing institution. The groups explore questions such as: who is supposed to take decisions for the conserved or protected area? Who takes decisions *de facto?* Is there any formal structure and/or specific organisation in charge? If so, what is its stated purpose? What rightsholders, stakeholders and key interests and concerns can or cannot have a voice in decisions? The groups capture all their answers on a large sheet of paper or on a computer file. If some issues cannot be clarified, they are noted as open/unanswered questions. This initial part of the group exercise takes a minimum of 45 minutes.

After each small group has collected and discussed answers, it pulls them together into a **graphic rendition**. This includes a **timeline** of the conserved or protected area or territory, with **milestones** for main changes in governance and key roles, meaning(s) and services provided by diverse or evolving institutions. Coming to the present, each group also draws a sketch of the **current governance organisation** and of the **process**(**es**) by which it takes and implements the decisions and rules relevant for the conserved or protected area. The sketch is prepared with cut-outs of coloured paper pasted onto a sheet of paper on a board (see some such sketches in Picture 22), noting *who* (i.e. which rightsholders and stakeholders, representing which interests and concerns) appear to be taking the key decisions, and *how*. Each group also notes which actors make sure that such decisions are implemented and respected, and how. While some groups like the idea of preparing a graphic image with the help of a computer, the facilitator should insist that the groups work with paper and cut out symbols pasted with scotch or masking tape or pinned. This avoids the monopolisation of the work by any one expert computer user. In fact, the desired result is not a slick presentation but a description to which everyone in the group has actively contributed.

1529   For instance, in what is today Pollino National Park, in the south of Italy, several villages were founded between 1470 and 1540 by people fleeing a Turkish invasion in their original territory, which is today part of Albania. Five hundred years later, the villages still maintain a strong attachment to their Arbëreshë traditions, language, specific agro-pastoral characteristics, Greek-Byzantine rites, handicrafts, costumes and dances. The establishment of the national park, in the late 1980s, did not pay any attention to them and focused on ecological values only. A more inclusive governance system that actively engages Arbëreshë representatives would strengthen the cultural significance and attractiveness of the protected area, and the vitality of its governance.

Picture 22. Diverse actors draw diverse pictures of the governance structure and mechanisms influencing decisions for the Galápagos Marine Reserve in August 2001 (from Borrini-Feyerabend & Farvar, 2001)

The graphic rendition is helpful as it allows participants to visualise governance as a process that requires action by diverse subjects and involves various pathways of influence. Noticeably, there is no one *right* rendition and the description of the governance processes should *not* be copied from any existing document. The small groups do *not* attempt to describe an ideal situation ("what *should* be"). Rather, they sketch out what they believe actually happens in **governance practice**, according to their experience and observations. Their discussions and resulting graphic renditions reveal the complexities at stake, and— likely— also the difference between what is supposed to happen *de jure* and what is observed as happening *de facto*. If the participants are unsure about decision-making in an abstract sense, they ask themselves who decides something concrete and important for them, such as when the fishing or tourist season is to be opened or closed, when transhumance is to start, or who takes charge when a serious problem arises. Importantly, besides decision-making, the groups discuss and sketch out the **implementation of decisions** and the ways by which rules are enforced. For

instance, who allocates the management budget for the conserved or protected area or territory? Are the current rules considered as fair? Is everyone respecting them? Who makes sure that a surveillance mechanism is in place and functioning? Are there known ways to avoid respecting the rules?

The groups may also identify the social emotions related to the governance of the area or territory (e.g. related to contentious decisions such as allowing fishing in the local streams by members of other communities; forbidding or restricting tourism in sacred areas; spending more for the parking lot than for the heritage interpretation centre). Do some such emotions— positive or negative— exist? If so, do they emerge openly or are they unexpressed and maybe unresolved or festering? To answer the questions, the groups may imagine what main consequences would result from a halt of the current governance operations, including implementation and surveillance. Would wildlife be poached? Would companies come to extract timber or start a mining operation? Would tourists scar the land with heavily motorised equipment or vandalise common property 'just for fun'? Would people access and use land indiscriminately? Or would the most important consequence just be that the current employees of the conserved or protected area would lose their jobs?

From an analysis of the consequences of halting the governance operations, the groups derive a richer sense of the crucial 'meanings' that the institution embeds from the perspectives of diverse actors— the very sources of energy that may support its functioning or create problems for it. Such sources of energy (e.g. 'Indigenous pride and independence', 'attachment as recreation area and source of fun', 'appreciation of unique biodiversity', 'income because of products of nature that can be sold' or 'salaries for the government employees') are noted and highlighted with specific symbols and colours in the graphic rendition. The actors that share the same 'sources of energy' are associated with the same symbols and colours, offering a rough overall rendition of the 'energies' at stake. This part of the exercise takes at least 75 minutes.

After all groups have prepared their graphic renditions of the territory timeline, governance structure and processes, and listed the 'sources of energy' for the governance institution… they all get back to plenary and describe their results to the other participants. Clarification questions are asked, but the facilitator explains that this is not the moment to open debates or discussions. Rather, it is the moment to become aware that different groups perceive the same governance institution in different ways (see again Picture 22) and have possibly discussed different issues. The desired result of this first session is a realisation of the **complexity** of patterns of decision-making, implementation and respect of decisions, of the **diversity of perceived meanings** of the governance institution, and of the multiple **interests, concerns and emotions** it generates in diverse social actors— that is, of the main **'sources of energy'** that affect its operations. While the workshop participants explore what the governance structure and processes *are*, how they currently function and what affects them… they inevitably also consider in their minds what they *could be*, how governance could fulfil unmet needs and clearer roles, avoid disproportionate influences, function with more energy, creativity and wisdom, and elicit a more positive sense of meaning and better emotions in society. All this can well remain unsaid and undiscussed as the facilitator thanks everyone and closes the first session of the workshop.

Take the pulse of vitality

In the afternoon of the first day, after a generous lunch break,[1530] it is possible to 'take the pulse of governance vitality' by going through a series of questions in a plenary setting. For this session, the questions in Table 2 and the indicators listed in Table 3 offer a starting point. The facilitator takes inspiration from these to stimulate a discussion that addresses the situation at hand (see below). The ensuing discussion is open and participatory but needs to be well recorded/ documented.[1531] As governance issues are often sensitive, the facilitator openly recognises that not everyone may feel confident and comfortable publicly sharing views. Some discrete and anonymous avenues for sharing information are thus also provided and announced (see below).

The first question in Table 2 and first row in Table 3 refer to the history of the conserved or protected area or territory and of its governance institution(s) through time. Building upon the results of the small group discussions in the first session, has the governance history been smooth or turbulent? Are there noticeable key events? Did the current institution naturally evolve from a previous local institution or was it 'set up' based on an external design? Would you say the institution is 'recent' or 'experienced'? In all cases, what was there before? Was any feature of earlier institution(s) incorporated into the current one? Questions about history are a good entry point for a discussion as they are not about the people or decisions of immediate relevance but introduce the crucial issues and scope of the subject. Ideally, the facilitator or a gifted participant pulls together a **history timeline** based on the information offered by the diverse groups, noting key events and issues that closely concerned the conserved or protected area.

Gradually, questions closer to the present are then introduced. Is the institution currently **demonstrating motivation** and work energy? Can it be said to work with **excellence**, or seeking excellence? Does it appear to recognise for itself a clear **purpose and meaning** (*self-inspiration*)? Has it **earned respect and legitimacy** in society (*inspiration to relevant others*)? If emotions are attached to the conserved or protected areas, are those recognised and well used by the governance institution? Has the institution generated a **sense of confidence** in its role and trust in its functioning in the future? While the discussion evolves, the focus is, as needed, brought back to the governance institution by the facilitator.

After considering the initial questions of Table 2 and first row of Table 3, the facilitator explores the following rows of Table 3 that are relevant for the specific context by transforming the indicators into open questions (e.g. do you recall instances when the governing body demonstrated responsiveness to a sudden problem or opportunity? Has it ever taken unusual, self-determined decisions? Does it support abundant exchanges and collaboration with other actors, institutions and sectors? Does it demonstrate respect for the relevant people and places? Does it demonstrate respect for nature, and beings that are non-humans? Does it demonstrate creativity? Does it promote moments of celebration of the conserved or protected area or territory? Are there any remarkable 'rituals' related to the conserved or protected area, such as the opening of the fishing or grazing season, some regular monitoring visits (e.g. as described for the Maya K'iché of Totonicapán in Guatemala, case example 26), a yearly visit by children from the local schools, the celebration of a patron saint, etc.?

The discussion clarifies the **main features of the governance institution that sustain and describe its vitality** and possibly also some **challenges and issues** that call for governance improvements. For instance,

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1530   Occasions for informal exchanges among participants are invaluable moments for the success of the workshop, they build the group spirit and greatly facilitate its results.
1531   Someone is dedicated to the task, possibly taking notes on a computer while projecting the screen for everyone to see and possibly add and correct. A partially unfilled version of Table 3 could also be used (see below).

the participants may note that the institution has earned respect in society and demonstrated leadership in difficult conditions, but that it suffers from lack of engagement of young people and is strongly dependent on tourism revenues. The facilitator makes sure that neither a self-congratulatory nor a hypercritical mode dominate the discussion. An appropriate attitude is that of a collective open mind, interested in understanding how the institution has functioned through time and different circumstances, and even more interested in understanding how it could function more positively in the future.

The discussion stimulated with the help of Tables 2 and 3 are summarised with the help of Table 5. During the discussion, the participants are encouraged not only to speak their mind but also to write down their key ideas and observations and physically post them up on the appropriate row and columns of Table 5. To offer a sense of what such posts may contain, a fictional Table 5 is shown below with examples of observations and opinions in *handwritten font*. During the self-assessment process, Table 5 starts with all cells blank, except the first column, where the facilitator notes down the key issues that s/he is asking about. The partially empty Table 5 drawn on a couple of large sheets of paper is placed on a wall in the meeting room (rows added or removed by the facilitator, as needed). For each main feature (each row), the participants are openly invited to identify examples of strengths and sources of strength, but also of weaknesses and internal barriers.[1532] The answers are offered in plenary, starting from the discussion of Tables 2 and 3, but are then written down on post-it notes and placed on the relevant cells of Table 5 on the wall, as the participants see that they fit a particular feature. The notes can also be left in a box below the table for the facilitator to later type up and add in an appropriate visible form.[1533] For the participants who are uncomfortable writing and posting a note, the facilitator offers the option of private meetings with him/her, and suggests that other trusted participants can also be asked to write notes on behalf of others at the end of the session.

In summary, the workshop session on 'Taking the pulse of vitality' sees first the facilitator stimulating the open discussion of various vitality issues and features by taking inspiration from Tables 2 and 3. If time allows, during the discussion, all participants are asked to compile on post-it notes their observations relevant for the features listed in the first column of Table 5, explain them in plenary (if desired) and post them on Table 5, in the position they see as appropriate. As the discussion comes to an end, all participants are asked to collect their thoughts individually, write down any further observation they may have and physically 'post' those on Table 5 or place them in the box below (which allows anonymity). When no one has anything else to add to Table 5 or to leave in the box, the meeting is adjourned for a rather long break. During the break, however, the participants are still allowed to add new notes and the facilitator keeps integrating Table 5 with what is left in the box below it.[1534]

When all this is done, the participants are called back into the plenary and the full results of Table 5 are reviewed to identify the **one to three key sources of strength** and the **one to three key weaknesses and internal barriers** deserving further attention. To articulate this, a specific exercise can be useful, such as listing all issues identified and asking all participants to score them with coloured dots, each participant having a limited number of dots to assign. The synthesis skills of the facilitator are essential. The desired result of this second session is a richer perception of the functioning of the governance institution and a good sense of the key strengths and weaknesses that nourish or impede its vitality.

1532   Many are familiar with this exercise as 'SWOT analysis'.
1533   This box offers a way to reveal more sensitive information. At the very end of the discussion, the facilitator could ask everyone to take five minutes to reflect and write on a note to place in the box anything relevant that has not yet surfaced, assuring that the notes will remain anonymous.
1534   The post-it notes in the box should be typed up by the facilitator and the relevant strengths and weaknesses of specific features added to the Table.

Critical analysis of governance vitality for a specific conserved or protected area or territory

The table below is filled with possible answers provided as examples for diverse *fictional* areas or territories [*handwritten font*]. In a workshop setting, the participants are asked to fill a blank table with as many answers as they consider relevant, added to the table as 'post-it' notes

Features	Strengths/ sources of strength	Weaknesses/ internal barriers
Purpose and meaning of the governance institution (self-inspiration)	*All families represented in the General Assembly respect the fishing and shell collection rules in the community conserved area, and benefit from them*	*Only the board members and the expatriate technical staff appreciate the existence of the protected area*
Respect earned in society (inspiration of relevant others)	*Most people know that the elders prevented problems by forbidding the charcoal makers to have access to the forest*	*Recently arrived residents have no memory and no awareness of what the elders have done for the territory of life*
Motivation and energy	*Several members in the governing board of the protected area are very experienced, they know what they are doing, and they care*	*The governing board requires the participation of someone who is usually busy and needs to travel from far away (which is not always possible)*
Emotions elicited by the conserved or protected areas	*The members of the local historical association are deeply attached to the place and would never miss their bi-annual events in the heart of the conserved territory*	*The protected area has created a large amount of motorised traffic and nearby residents are fed up about the nuisance, having no solutions in sight — some people are angry; parking conflicts have emerged*
Responsiveness and timeliness	*The governing board is easily reached by the public via social media channels*	*The governing board meets only two times/ year — interim issues must wait*
Flexibility and capacity to learn	*The governing board has established an advisory council, which meets frequently and is listened to*	*The General Assembly has not been able to solve a long-standing conflict among two families and this has major consequences for the management of the area*
Strategic thinking and action	*Exchange visits have been organised with other communities to create a network of territories and develop a policy advocacy initiative for the regional council*	*The territory is affected by deforestation & pollution that could have been foreseen and avoided*
Positive agency, endogenous initiatives	*The territory is open to tourism investments on conditions established by the local governing board*	*The boundaries of the protected area are no longer appropriate, but the governing board has taken no action on this*

Empowerment and sense of responsibility	*The governing board and concerned users have developed and sustained initiatives to resist oil extraction in the protected area*	*It is not clear if there are any hunting and fishing rules in the territory and who may currently oversee their implementation and respect*
Creativity, innovation, capacity to embrace change	*The communication team diffuses information via diverse channels, such as phone-based social media but also traditional meetings among neighbours*	*The territory has been managed under the same rules for decades, despite evident problems*
Connectivity and collaboration	*The governing institution for the conserved area has met and agreed to collaborate with similar institutions in neighbouring communities*	*Only powerful foreigners have the ear of government about development and conservation decisions for the protected area*
Capacity to procure the needed human, material, technical and financial support	*Some enthusiastic and capable young people have been recruited to support the surveillance of the conserved area*	*The available budget is largely insufficient to effectively manage the protected area*
Capacity to secure the needed flow of information	*A PhD student has researched the local effects of a recently constructed dam, discussed those with elders and resource users and communicated the results to the General Assembly*	*No one knows where the current or old management plans are kept, or how to consult them*
Appreciation and learning from history (the area links people with their common past and desired shared future)	*Everyone knows that the trees close to the main water source should not be cut, as this would create troubles with the quality of the water* *All local clans are directly represented in the elders' council that advises about the conserved forest and wetland, exactly as it happened centuries ago*	*Some long-time residents have not been invited to contribute their experience and ideas for the new management plan* *No one is doing anything to prevent that excessive grazing impedes the regeneration of the forest, as we know happened when the colons first arrived*
Thoughtfulness and consideration, demonstrated wisdom	*An important conflict with a local industry owner has been solved because of the engagement and diplomatic skills of the governing board*	*Women continue to be asked to provide advice to the governing board, but there are no women members on the board itself*
Demonstrated commitment to collective, future-oriented goals	*We have a strong sense of solidarity, and we rekindle it each year with a celebration in the conserved area* *The local communities have a good income, healthy environment and wellbeing because of sound choices made in the past. Most people are aware of it, and thankful*	*A major emblematic species with key habitat in the area has gone locally extinct*

| Inspiring collective values related with the conserved or protected area | We all feel proud that we conserved the forest as our fathers and mothers left it to us, and as we wish our children will keep it for their children… | No one protested or informed the police when a mining company started prospecting in the conserved area |
| | The elders and youth have decided together that access to the sacred area should be limited; but they will allow a trusted researcher to study the local ecology | There was a time when schoolchildren would visit the protected area each year … but they no longer do, and no one has asked for it |

Check with the territory and people

A step that fits well for the second day of the workshop is a field visit to the conserved or protected area or territory. The visit starts early in the morning and includes a **transect walk**, direct **observation** (possibly supported by pictures and videos) of relevant phenomena, a **comparison** of first-hand data with what is available on maps and reports, and the possibility of freely **conversing** with local actors and users of the area. Even if the participants in the self-assessment exercise know the area or territory well, it is useful to organise a visit while keeping in mind the elements of strength and weakness that contribute to governance vitality. The exercise is again carried out in small groups that go in different directions and take notes and/or pictures (with due permission) about their observations. As necessary, each group is accompanied by a local resident capable of describing points of interest and replying to clarification questions. It remains crucial, however, that the participants freely ask questions to people casually encountered along the way.

During the visit, the respect of management rules (or lack thereof) is directly observed; some problems appear minimal or already resolved; new issues become evident; and the strengths and weaknesses identified so far are counterchecked and verified in the field. Ways to enhance governance vitality are discussed within the small groups, and concrete ideas for improvement are identified, as well as indicators for future monitoring (e.g. "the conserved area was signposted and different locations were given local names… are the names used by residents and visitors?"; "when visitors enter the protected area, they receive a map with a phone number and email where they can reach the governing board… have suggestions been received and taken into consideration?"). As they check directly in the field and with the concerned peoples, the workshop participants are bound to refresh and balance their perspectives and concretise some ideas regarding the governance, and the management, of the concerned area or territory.

Before they close the field visit, each group **notes down its main observations** and briefly discusses any ideas– large or small as they may be— that could help to enhance governance vitality. Noticeably, **recurrent field visits** are a common practice of traditional governance institutions and are frequently used as the basis for planning and rulemaking, as we have seen for the Maya K'iché of Totonicapán, in Guatemala (case example 26). Besides being an important step of sound self-assessment processes, recurrent field visits and in-depth discussion of relevant issues can **sustain and enhance governance vitality** *per se*. Such visits could be taken up as a specific initiative as part of a governance vitality enhancement plan.

Explore options

Following the field visit, for instance in the afternoon of the second day of the self-assessment workshop,[1535] the participants meet again in plenary and each group offers a brief report about the main observations that arose from their visit of the area or territory (but they do not yet report on proposals to enhance governance vitality). Then everyone gets back to small groups and briefly reviews the collective work of the first day (identified **key sources of strength** and **weaknesses and internal barriers** deserving further attention) and identifies a **minimum of one and a maximum of three ideas for improving governance vitality**. The ideas should be *feasible* and the members of the group should be in a position to do at least something small to start the work. To help with the task, the facilitator offers for the attention of all groups— besides a printout of the results posted on Table 5—a list of new questions, useful to conceive ideas for action (see Table 6 below).

Table 6.

Questions and ideas for enhancing governance vitality for a specific conserved or protected area or territory

Is the governance institution applying lessons from local **social-ecological history**?	Could the relevant communities be more aware of local history, including how the area or territory evolved, and why, how and by whom its governance institution(s) were established?
	Could they develop a clearer vision of the desired future for their area or territory, and for themselves?
	Could they be supported to strengthen themselves 'as custodians' of the area or territory?
	Could the governance institution promote a fairer distribution of the relevant benefits and costs?
	If necessary, could the conserved or protected area or territory be 're-founded' upon more legitimate grounds (constitutionality)?
Are **energy and motivation** abundant in the governance institution?	Would it be useful to provide the institution with new or more substantial inputs in terms of human, technical or financial resources?
	What about stronger engagement of gender-based, age-based or other relevant groups?
	New trainings, exchange visits, distinctions, awards?
	New initiatives for environmental restoration or support to local livelihoods?

[1535]   Or on the third day if the field visit requires at least one full day.

Does the governance institution engage communities by calling into play **inspiring collective values?**	Could communities feel prouder about the local conserved or protected area or territory?
	Could they better appreciate that it contributes to local security, beauty, identity and even morality?
	Could they identify themselves as 'custodian communities'?
	Could public celebrations be organised in the area or territory?
	Could these be made recurrent?
	Could young residents visit the area or territory regularly and relate to it in engaging and fun ways, as part of— but also outside of— education curricula?
	Could specific measures ensure that the inspiring collective values that elicit local support remain life-supportive for nature and *all* people?
Is the governing institution engaged in **meaningful connections** with other relevant actors and networks?	Could exchanges be promoted with institutions governing similar conserved or protected areas or territories in other locations?
	Could exchanges or even alliances with such institutions address common challenges, for instance regarding nature conservation, livelihoods, technical and financial resources, etc.?
Is there a **good fit between the social and ecological topographies** pertinent for the area or territory?	Could governance meetings become easier, more relevant, more effective and less expensive?
	For instance, could *some* decisions be taken and implemented by 'sub-governing bodies' closely in touch with relevant social and environmental challenges and needs?
	Could the timing and agendas of governance bodies be informed and enriched by local voices and ideas?
Is the governance institution knowledgeable about the **key actors and phenomena** that do, or may, affect it?	Could the institution regularly review and update its understanding of the actors and phenomena that affect, or may soon affect, the area or territory?
	Could it figure out whether the relevant causes and effects are situated in proximity to the communities or in distant environments?
	Whether the impacts concern human livelihoods or nature or both?
	Whether the impacts are positive, negative, mixed… for whom specifically… and what can the institution do to properly respond to them?
Is the governance institution ready to **respond to new scenarios** and embrace any possibly required **transformative change?**	Could the institution regularly examine and discuss likely future scenarios and their related opportunities and threats?
	Could they conceive appropriate responses, able to preserve livelihoods and nature in the conserved or protected area or territory?
	Could such responses include institutional change (e.g. in governance type, structures, roles or administrative affiliation)?
	Are such possible changes understood in terms of pros and cons?

Back in plenary, the small groups offer their ideas. A helper, with a computer and projected screen or on a large board, visualises all ideas in the format '*who should be doing what?*'. For each specific identified action, the answers to questions such as '*when?*', '*what resources are needed?*' and '*who could provide them?*' are noted. After all groups have spoken, the discussion turns to whether some ideas can be combined, before moving to the desirability, feasibility and relative priority of the ideas. In case of partisan and contentious arguments, the facilitator reminds everyone of common basic concerns.

The facilitator does all that is possible for participants to reach **consensus**[1536] **on** one and possibly more **action**(**s**) **worth taking** to enhance the vitality of the governance institution, including clarity about *who* is expected to take such action, with *what resources*, and with *what expected results* ('*what would demonstrate that the initiative has been successful?*'). Some proposed actions are likely to remain controversial, but they can be retained for further discussion and refinement by the concerned participants. Someone not directly involved in the plans is invited (and agrees) to monitor progress and report on it to all participants. This brings the workshop to a celebratory close, possibly with a pleasant refreshment time… not before having decided, however, when a future meeting will take place to review the expected follow-up.

Let vitality unfold

While the vitality of a governance institution cannot be created from scratch, we believe it can be promoted and encouraged. Even a simple workshop such as the one outlined here may be useful for that purpose and prompt concrete initiatives that strengthen vitality. As described in the case examples offered in this work, vital governance institutions need to be agile and responsive, as new challenges present themselves with unfailing regularity and need to be responded to. Despite moments of possible uneasiness, a self-assessment workshop may foster the **self-awareness and self-confidence** that stimulate such agility and responsiveness. Some of the participants in the assessment— hopefully including individuals who occupy positions of relevance in the governing bodies— should take responsibility to see that the agreed initiatives are planned in more detail, as needed, and implemented. And, even if no agreement on follow-up initiatives is achieved, a self-assessment workshop is useful to promote better awareness of issues concerning the governance of the conserved or protected area or territory.

Initiatives to enhance governance vitality can be practical and focused— from modifying the schedule of the meetings of the governing body to investing in a yearly celebratory event, from setting up a website to engaging a new group in the governance process. They may also be broad-ranging— from including ecological restoration subjects in the local school curriculum to strengthening community awareness of the historical and cultural values rooted in the area or territory.[1537] It should be clear to all that well-meaning interventions can also damage vitality, for instance, when they end up enhancing system rigidity and disempowering governance capacities and practices that are essential for local autonomous action.[1538] Finally, there are situations where the key problem is a fundamental **lack of internal motivation and energy** to govern the area well, a **lack of caring** by the relevant governing organisation, community and society. Can anything be done in such cases? Drawing from the insights gathered in Parts I and II, are there ways of consciously 'revitalising custodianship' for the precious biological and cultural diversity included in conserved and protected areas? This is a most challenging question to which the next section attempts to respond with a focus on possible supportive policies.

1536   An excellent publication that includes processes, exercises and tools conducive to consensus in decision-making is https://www.seedsforchange.org.uk/consensus accessed 2014.
1537   McCarter *et al.*, 2014.
1538   Some conservation initiatives that have done that are discussed in Borrini-Feyerabend *et al.* (2010), e.g. about territories of life in Madagascar.

Autonomy does not mean 'fending for oneself', but being part of a world of shared knowledge, where reciprocal obligations and common rules weave bonds of solidarity that liberate us from impersonal forms of domination.

<div align="right">Aurélien Berlain, 2021</div>

Promoting custodianship of territories of life

Should State legislation and government policies have a role in promoting and nourishing custodianship of conserved and protected areas and territories of life? If so, how could this be done? Are there elements of enabling legislation that could be secured and key policy steps that could be taken? And, at what 'level' may it be best to intervene? Let us start with the last question. Insightful conservationists have stressed that a **direct and intimate connection** with the natural world is essential for ecological literacy and biophilia.[1539] Great examples of that are found in the attitudes and capacities of **individuals**— all the labourers, managers, landowners, scientists, artists, researchers, spiritual leaders, policy-makers, peasants or simple residents who demonstrate a knowledgeable and caring relation with nature. We refer to them as 'custodians', in particular when they have the will and demonstrated capacity to care for specific places through time. Custodianship, however, can flourish even better, and generate lasting results, when **communities** are involved. There are several reasons for that.

A first reason why communities have advantages in custodianship is that communities pull together the **variety of relevant capacities** possessed by many individuals— from wisdom grounded in experience to proximity to the territory, from physical strength to political connections and economic resources. By an evident economy of scale, communities can distribute diverse roles and build a collective connection to place that is stronger than any one individual connection... just as a bundle of fibres is physically stronger than any fibre alone. In this sense, a community's capacity to conserve a territory stands well above that of any individual. A second reason is that communities have a stronger **continuity in time** with respect to individuals. Communities typically identify themselves by a tie with ancestors who lived and developed their cultures in a territory. They engage with the land and expect to be followed by their descendants in the same place. Some individuals perceive a similar sense of continuity with other members of their family, but the chances of a single family enduring are fewer than those of a community. A third reason is that several **self-reinforcing feedbacks** support custodian communities in a given place. For instance, custodianship sustains local livelihoods and food sovereignty,[1540] fosters a sense of collective identity and wellbeing,[1541] and may even bond people and place by some form of 'social morality'. Custodianship even provides a sort of insurance policy or safety net for a community, as a territory well known and cared for may offer the only chance of survival and relative self-sufficiency in case of catastrophic social-ecological change.[1542]

Some who agree with the above also believe that the advantages just described apply to national, regional and municipal *governments* as well. In fact— they may stress— governmental agencies are better equipped than communities to play a custodianship role. For instance, some government employees are professionally

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1539   Pyle, 2003.
1540   See, for instance, Pimbert and Borrini-Feyerabend (2019).
1541   This includes physical and mental health (Hartig *et al.*, 2014) also through occasions for meaningful and positive social engagement, too often an unmet need in modern societies (Dik, 2009.)
1542   See Gowdy (2020). Among the case examples of territories of life described in this work, many already secure community livelihoods.

prepared and fully dedicated to conservation (it is their job). They can identify the territories that provide key ecological functions in the broader landscape and comparatively choose those that must be protected and those that can be sacrificed for economic purposes. They can even command the legal and police powers necessary to establish and provide surveillance for protected areas. This is true— others may reply— but are we sure that governmental agencies are more conservation effective than communities?[1543] Are they truly able to deliver the *intimate*, caring, long-term connections with territories at the heart of custodianship?[1544] Are they able to nourish the multiple bonds of custodianship, as communities do, *through time*?

The questions above sketch a **false dilemma**. Communities taking an active role in governing conserved and protected areas and territories in no way imply diminished **roles for other actors at diverse levels**, for the government, private sector, academia or NGOs. On the contrary, the roles of governmental agencies and others may even be **enhanced**, although **diversified**, when defined to be **complementary** to the roles of communities. Yet, communities are often 'invisible' and rarely expected to play a role in conservation, in particular regarding protected areas. Government administrations have accumulated experience with decentralisation for a variety of sectors and services[1545] and the conservation sector has at times experimented with deconcentration[1546] and delegation.[1547] There is, however, hardly any experience of the **devolution**[1548] of authority, responsibilities and resources earmarked for protected areas. Following Ribot (2002), this would require that authority, responsibility and appropriate resources are transferred **to entities that are accountable to their constituent people** rather than to higher level authorities.

Both custodian communities and governmental agencies that aim at conserving nature offer a form of 'socialisation of nature', a way of insulating nature from the destructive power of the market and placing it **under the collective protection of people**.[1549] In this, State governments often have **comparative advantages** in terms of mandate and some resources. For instance, they can more easily mobilise the police, the national security apparatus and the judicial system, they can arrange for regulatory, financial and information support, can set local initiatives within suitable legal frameworks, monitor phenomena with advanced technologies, and much else. Indigenous peoples and local communities, on the other hand, have comparative advantages of proximity and often a well distributed (capillary) presence in the territory, with familiarity and capacity for custodianship as they develop collective, intergenerational, cultured and affective connections to specific places. If conservation of nature *cum* local sustainable livelihoods is the objective, communities and governmental actors need one another.

1543   While comparisons are always tricky, studies comparing state-governed protected areas and Indigenous territories in the Amazon region appear to favour the latter (Nepstad *et al.*, 2006; Baragwanath & Bayi, 2020; Alves-Pinto *et al.*, 2022).

1544   Because it lacks these characteristics, State conservation may prove ineffective. A telling example is provided by Gonzales Duarte (2021), who recounts how a reserve— established to protect the monarch butterfly as part of neoliberal engineering in the Michoacán and Estado de México regions undermined social control of the local forests and created an artificial frontier zone where organised crime was rapidly able to penetrate. In her analysis, proper support to community-based ecological ethics would have produced far superior conservation results.

1545   See, for instance, Dick-Sagoe (2020) and Olson and Brennan (2017).

1546   'Deconcentration' refers to the administrative decentralisation of certain authorities to lower levels of government, which remain accountable to the central government (Ribot, 2002).

1547   Delegation refers to central governments transferring some specific managerial responsibility to organisations outside government control. Besides several countries in Africa, European countries like Serbia, Slovenia and Romania used to delegate the management of all or some of their protected areas to NGOs, universities, municipal councils or companies (Stanciu & Ionita, 2012). While some still do, Romania offers an example of 'sudden reconcentration' of the conservation sector. In 2018, in fact, the Romanian government adopted an emergency ordinance that removed the notion of 'custodian' of protected natural area (equivalent to 'responsible for delegated management') and authority to the newly established National Agency for Protected Areas. The 'custodians' included NGOs, municipal governments, county councils, universities and companies. The change was adopted rapidly and without consultation, supporting suspicions of hidden interests as custodians had been blocking projects in protected areas that include hotels, roads and mining exploitation (Marica, 2018).

1548   Devolution refers to central governments transferring not only management responsibility but also governance (i.e. decision-making) responsibility to an entity under limited government control.

1549   Foster, 1999. See, however, the possible motivations for the 'sudden reconcentration' of the conservation sector in Romania mentioned in footnote 1547.

Overall, **communities** seem best positioned to take care of **conservation and livelihoods action**— whatever needs to be done based on local knowledge, mētis and feet on the ground at a specific location. And **governmental agencies** at diverse levels seem best positioned to ensure **support, coordination and synergy** among diverse activities, securing various types of rights, promoting fair practices, or assisting with broadly shared needs, from meteorological forecasts to university education. Together, communities and governmental agencies have a much better chance of overcoming the forces of commodification of nature.[1550] Mutually supportive, **complementary roles** for communities and governments— integrated by roles best performed by academia, NGOs and the private sector— thus seem ideally suited to deliver conservation of nature. Yet, despite the obvious benefits of complementary roles and despite the good fit to the current conservation rhetoric... such complementarity is rarely realised.

Even the very idea that 'conserving an area or territory' often depends on the presence of **a community willing and able to play a custodian role** may appear far-fetched to the average citizen of industrialised societies. 'Communities' are seen as a feature of the past and little seems to counter the relentless rush towards the commodification of nature and specialisation and standardisation of all our relations with it. Yet, as described in Part IV, while the *hubris* of modernity has greatly damaged the prospects for custodianship, it has not destroyed its potential for vitality in governing nature, and its richest biocultural territories in particular. Paradoxically, the struggles that surround the general demise of custodian communities have also thrown light on the benefits they may still be able to provide for the conservation of nature and for society at large. And the risks they face in the 'recognition crescendo' described in Part IV encourage us to imagine what kind of **'custodianship policies'** could encourage and appropriately support communities willing to care for conserved or protected areas and territories of life.

...organic and 'fluid' character of Indigenous peoples and local communities... [who] often express and regulate themselves in sui-generis ways...

At the most basic level, legislation should recognise that Indigenous peoples and local communities do *exist* and are capable of acting and exercising rights and responsibilities in society. Many Indigenous peoples and local communities define themselves via their historical and cultural origins and character— they rarely 'fit' the administrative levels and subdivisions of State governments. Legally recognised actors are individual persons and formal entities, such as municipalities, corporations or associations regulated by the law. These actors are more easily 'understood' and 'interacted with' by State governments and are designed to fulfil important attributes, including accountability. They do not possess, however, the organic and 'fluid' character of Indigenous peoples and local communities, who often express and regulate themselves in *sui-generis* ways.[1551] Because of these and other political considerations— including their collective nature— Indigenous peoples and local communities are rarely properly contemplated in national legal systems. Their representation is expected to be exercised by local municipalities or other elected bodies.

The phenomenon just mentioned has important economic implications. For instance, the community commons and traditions of 'civic uses' that were widespread up to the 20th century have often been incorporated within the property of newly established municipalities and decided upon by the political parties in power. This has taken place without substantive discussion, legal process or even acknowledgement of pre-existing legal or customary rights.[1552] In addition to economic implications, there have been cultural and political impacts: a variety of historical considerations and traditional relations and practices of public life were deemed outdated and unimportant, and swept away at the stroke of a pen. The subject is too vast to be properly

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1550   It is not by chance that land under both State 'protected areas' and community-governed territories is usually legally and customarily protected from selling, subdividing and use as collateral.

1551   Illustrations are offered by the institutions described in this work (e.g. case examples 6, 7, 10 and 14).

1552   For instance, certain rights were neglected, e.g. communal properties belonging to specific hamlets only were incorporated by entire municipalities (a municipality being the sum of many hamlets).

discussed here and only a few national legislations have begun to tackle it.[1553] The key questions regard how to secure community rights and responsibilities with **enough flexibility** for legislation to recognise self-defined groups and their informal, adaptable and 'fluid' relations to territory— generally multiple and complex, but possibly also more profound and sustainable than the formal relations foreseen by national legislations.[1554]

Besides basic recognition of Indigenous peoples and local communities as legal actors, what **policy** suggestions could be considered **to promote custodianship of territories of life** (including as part of conserved or protected areas)? Custodianship policies including rights and responsibilities could be developed as part of national or sub-national conservation strategies and action plans,[1555] but also as part of support to local food production and livelihoods, as part of incentives to tourism, forestry and fisheries, water and energy production, disaster prevention, climate change mitigation, etc. We briefly describe below this extensive subject by offering **four policy steps**, generally applicable to a variety of sectors. **First**, the policies could encourage **communities** to **identify and propose themselves as custodians** of specific territories. They would do so collectively and voluntarily, recognising custodianship as their choice, desired responsibility, and privilege. **Second**, the policies would **refer to coherent territorial units**, where conservation and other objectives and indicators would be agreed and provide a reference framework for community responsibilities. Units identified **in conserved and protected areas**, in particular, are already perceived as valuable for the society at large, a fact that facilitates recognising and supporting their custodians. **Third**, the **communities** would **work in partnership with governmental and non-governmental actors** at various levels, receive social recognition for their custodian role and negotiate specific (not generic) agreements: they would take on specific responsibilities for the territories of life and receive economic and other benefits, as appropriate. **Fourth**, and as a fundamental incentive for the three preceding steps, the communities would consolidate **security of governance for** their **territories of life** or, as the case may be, embark on a clear path towards that.

Extend a call for willing custodian communities to self-identify

Only a pluralist and flexible approach, tailored to the specific of context and focusing on incentives and volunteer engagements seems appropriate for national policies meant to encourage and support custodianship.[1556] A first step could thus involve an **open call for communities to identify themselves** and name the territory they are willing to care for as their commons. This could be independent of living within the territory, but communities would state their willingness and capacity to **commit to a communal, long-term relationship** with what they are willing to engage as 'territories of life'. In so doing, they would be taking on specific conservation responsibilities while drawing from the territories a variety of social, cultural, economic and other types of benefits. While each territory would nourish the self-reliance of a custodian community,[1557] custodianship

1553   One example is the Forests Rights Act of India, approved in 2006 and mentioned in case example 15. Another example is Italian Law no. 168 of 20 November 2017, which recognises the constitutional significance, private nature, non-alienability, non-divisibility, impossibility of using as collateral, and perpetual agro-sylvo-pastoral destination of 'collective domains'. The 'collective domains' of Italy include the broad and differentiated traditional possessions of communities for joint use according to customary rules.

1554   See Lindsay, 1998. The literature on the commons and the sui generis organisations governing them is extremely vast. The Digital Library of the Commons (https://dlc.dlib.indiana.edu/dlc/) offers a useful entry into it. Historical analyses are adding important considerations about the multiple actors and relations too often lumped under the terms 'community' and 'commons' (see Various Authors, 2021).

1555   Particularly relevant are plans to develop Regional Natural Parks, where national governments, local municipalities, conservation NGOs and private entrepreneurs collaborate towards regional sustainable development goals (see case example 8, but also case examples 20 and 28). The overall approach may also be seen as part of moving the emphasis "from natural resources to natural assets" as aptly described by the economist James Boyce (2001).

1556   These are persuasively recommended by Gavin *et al.* (2018).

1557   In describing his Theory of the Community (https://davidkorten.org/theory-firm-theory-community/ accessed 2024), David Korten calls for "place-based, living communities" with a meaningful level of self-governance (e.g. citizen participation far beyond current structures of representative democracy, demonetised human relationships) that strive for material self-reliance and sustainable, spiritually fulfilling, and creative lives.

would not serve local livelihoods only, as others in society would continue to benefit from the ecological functions and gifts of nature conserved by custodians.

The call would make clear that custodian communities would need to do more than drawing benefits from nature. They would actually take formal **collective responsibility to care** for a territory, in partnership with government services and others. This would include management responsibilities compatible with the livelihoods and cultural and spiritual bonds they would wish to nurture, as well as other specific activities, such as territorial surveillance, biological monitoring or path maintenance. For that, they would need to collectively **invest time and resources** in the territories based on their **sustainable livelihood plans**. For their engagement and investments, they could negotiate and receive appropriate compensation from governmental agencies or private enterprises drawing specific benefits (e.g. freshwater). Beyond compensation, they would be **socially recognised** for their custodian role for territories of life and for maintaining and enriching their **local knowledge, mētis** and **governance and management capacities**. If desired, the respondents could also be supported to strengthen themselves 'as communities' and to develop a full set of capacities as custodians, possibly in association with wise elders, academia, research organisations and relevant NGOs. The call would also make clear that the ultimate vision and goal of the custodianship policy is that the volunteer communities acquire— or strengthen and consolidate, as applicable— the **security of their collective governance** for their territories of life. This would be legally formalised and provide a **key incentive** to respond to the call.

What kind of replies could be expected? Some may come from long-standing communities, like Indigenous peoples with ancestral territorial rights. Others may come from communities ready to consolidate or even 'create' themselves by caring together for the same territory. Some respondents may be desperate to obtain recognition of their collective rights, while others may choose custodianship mostly because of the livelihood opportunities it may offer. Crucially, the volunteer custodians should **possess, or strive for**, a genuine sense of **collective identity, autonomy, and social morality**… possibly based on shared interests or an *ad hoc* legal personality, for instance, a cooperative, but also conceiving and aiming for deeper aims.[1558] It is in this sense that an organised group may respond to the policy call and engage in self-strengthening initiatives.[1559] The respondents would see themselves as a 'community', based on a **shared vision of a desired future** and a willingness to engage in **mutual solidarity**[1560] and **long-term engagement to care** for the territory they would take responsibility for.

Before replying to the call with an expression of interest, all concerned groups and communities would go through an important **internal reflection** to take informed decisions on the role they wish to play and how they should organise for that. Ancestral custodians motivated by customary ties to the land are likely to wish to retain and empower their customary institutions. Communities that have gone through important changes since they last exercised a custodianship role, or groups 'aspiring' to become custodian communities, will need to understand how their livelihoods and wellbeing will change and improve via the custodianship of their renewed, or new, commons. The natural gifts of the territory— water, land, food, biodiversity, microclimate, places of spiritual and cultural significance, places favourable for public recreation, other resources of economic value— should be reviewed and discussed, learning from a variety of sources, and envisioning **a long-term, collective relationship with a territory of life** that requires community investments and provides benefits. What arrangements could best secure the collective investments and generate livelihoods and other

Some respondents are desperate to obtain recognition of collective rights... others may choose custodianship because of livelihood opportunities...

...a long-term, collective relationship with a territory of life requires community investments...

1558   As mentioned in Part IV, Ferdinand Tönnies defines a community (gemeinschaft) as an 'affective' social unit.
1559   See https://ssprocess.iccaconsortium.org/.
1560   Those who doubt the possibility of mutual solidarity may consider the words of Kropotkin (1902, reprinted 1955, p. 292):"…neither the crushing powers of the centralized State nor the teachings of mutual hatred and pitiless struggle which came, adorned with the attributes of science, from obliging philosophers and sociologists, could weed out the feeling of human solidarity, deeply lodged in men's understanding and heart, because it has been nurtured by all our preceding evolution."

benefits? What forms of organisation could ensure transparency and fairness in collective governance and management? By providing answers to these questions, the engagement for the territory would become part of conscious efforts at **envisioning the present and desired future of the community**.

The need to formally interact with governmental agencies and other actors may require that the communities are recognised and/or structure themselves as **legal entities**— collective organisations formally **able to take responsibilities and receive benefits**. As part of this, the custodianship policy may support some **self-strengthening processes** for the custodian communities (e.g. to clarify a community's governing body, representation and functioning rules). While *sui generis* customary organisations should never be excluded, the communities could be asked to clarify how they take and implement decisions (e.g. via a general assembly, an elders' committee) and if they are able and willing to set up a formal legal entity (e.g. an association or cooperative) to interact with governmental agencies, and local municipalities in particular. This step is not anodyne and, while it could help a community to strengthen itself, it could also present serious challenges.[1561] The community may also be asked to pull together the basic management rules they already operate, or they intend to operate in the territory, to be further refined through time. If the policy they respond to is a conservation policy aiming at establishing a formal 'community conserved area' linked with other areas in a system, they may need to review and agree to specific management objectives as well.

It is to be expected that the 'call for custodian communities' may remain unanswered for some time. Limited local organisation and experience in collective action and limited trust in government relations may make communities reluctant to reply. After a while, however, long-standing custodian communities may be willing to reply, in particular Indigenous peoples with ancestral territorial rights eager to secure them and their associated collective responsibilities. For the conserved and protected areas characterised in Part IV as 'territories of life', Indigenous peoples or custodian communities with relevant institutions, experience, relationships, knowledge, mētis and rules developed and enforced through time may be, against the odds, alive and functioning. As noted, territories of life could even be *defined* by the fact of having nourished a community of forest dwellers, fisherfolks, pastoralists, peasants or other caretakers who have sustained strong bonds with the land, waters and sea, deriving food, income, cultural and spiritual nourishment, and much else. These are not rare or exceptional situations as thousands of village-associated sacred groves, hills, ponds, pastoral areas and sustainable hunting grounds were recently listed in Burkina Faso,[1562] 25,000 Orans were reported in the Indian State of Rajasthan,[1563] and tens of thousands of community fishing and hunting grounds and millions of hectares of forests, wetlands and pasture under customary guardianship are reported in Asia, Central Africa, and Meso and South America.[1564] If information about a 'custodianship policy for territories of life' is well communicated, and if the options are concrete, many communities are likely to be willing to at least explore them.[1565]

Quite a few custodian communities have had the bonds with their territories weakened, altered or even cut altogether in traumatic **colonial and neo-colonial experiences**. This has included land dispossession (e.g. for the establishment of infrastructure, extractive industries, large-scale agriculture and protected areas) and/or imposed discontinuities in the way of governing and using the land, which disrupted customary experience, and collective rights and responsibilities. In such cases, custodian relations may still be feasible, in particular

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1561   See note 1407 for an example where a legal form of organisation was imposed from outside as entry to a national support programme.

1562   Alexis Kaboré, Coordinator of Burkina Faso's APAC Network, personal communication 2017; see also: https://www.iccaconsortium.org/fr/2017/10/25/les-apac-au-burkina-faso-se-preparer-a-la-creation-dune-organisation-nationale-2/ and follow-up articles accessed 2024 in www.iccaconsortium.org.

1563   See Rahman, 2020.

1564   WWF *et al.*, 2021; ICCA Consortium, 2021; Asia Indigenous Peoples Pact *et al.*, 2022. Many country specific and region specific reports are also available from www.iccaconsortium.org.

1565   An example are the thousands of Indigenous communities that have mapped and registered millions of hectares of customary territories in Indonesia (see https://news.mongabay.com/2022/09/mapping-of-indigenous-lands-ramps-up-in-indonesia-without-official-recognition/ accessed 2024) in the hope of gaining a formal title to them.

with the help of appropriate investments in the restoration and management of ecosystems, but communities may need to **rekindle and strengthen** their **territorial governance institutions** before fully assuming their renewed role. If the communities still 'belong' to their territories, they may remain willing to self-identify as custodians and perceive the appreciation of governmental agencies as a moment of **healing**.[1566] Depending on context, this may prove easy, difficult or impossible.[1567] The custodianship policy could offer support for community self-strengthening, participatory action research and **environmental restoration** activities, in particular for the Indigenous peoples and local communities whose customary governance authority might have been negatively affected or who have not managed to exercise their territorial responsibilities for a long time.

For the conserved and protected areas for which communities with bonds of indigeneity and other historical relations with the territories no longer exist, new (or partially new) **'aspiring custodian communities'** could be invited to offer themselves as candidates. Such communities may self-identify in rural but also in urban areas (e.g. a neighbourhood willing to care for a territorial unit in a nearby protected area), possibly with the hope that their own economic and socio-cultural vibrancy might be kindled by the association with a specific territory under their care.[1568] As mentioned, these communities would need to be ready to invest time and resources, and **envision a desired shared future** for themselves and the territories of life they would 'adopt'. They might benefit from support for self-strengthening processes, participatory action research and environmental restoration activities, but also for participatory development of territorial governing bodies and rules. Importantly, in both traditional and modern economic environments, custodian communities would likely benefit from the existence of **local savings and loans cooperatives**,[1569] which allow to invest locally and provide low-interest financing for community initiatives. While this is a relatively simple service in support of local development, it is rarely available to those in need. State governments usually privilege a banking sector that serves capital and is geared to profit rather than a banking sector that operates as a service for people in need. Providing legal recognition and policy support to local savings and loans would be an important addition to the call for communities to take on a custodian role.

Self-identified, volunteer custodian communities may constitute a relatively small minority in any country… but not necessarily an irrelevant minority, as they may be able to combine custodianship of social-ecological units with a variety of **appealing livelihoods strategies**, from the most technologically oriented to the most natural and traditional, responding to the changes fast affecting all societies. Examples of today's possible incentives include the travel limitations and the **re-localisation of food systems** as well as water, housing and other services that are becoming common,[1570] and should expand in the years to come, to limit carbon emissions and mitigate climate change or to slow down the spreading of pandemic diseases. Another example may be the relative abundance of **semi-abandoned rural environments** in industrialised countries, that could be revitalised by national investments in connectivity (e.g. to allow smart working), social services and

...communities would invest time and resources, and envision a desired shared future for themselves and the territories of life they would 'adopt'...

1566 For this, protected areas have important advantages with respect to other natural environments where the original custodians were 'replaced' by colonisers and invaders, who subdivided, 'developed' and irremediably transformed the territory. Discussions of such opportunities for healing are currently happening for protected areas in the USA, including Yellowstone National Park, the first national park ever declared (Grant, 2021). The union of Indigenous peoples of Taiwan is asking the government to "heal the trauma of colonization and exploitation that have caused pervasive insanity, corruption and destruction on the land and its peoples" and to "restore the disturbed tribal communities... on a consensus vision of reconciliation and restoration of homeland connectedness" (Sutej Hugu, personal communication, 2021).

1567 As socio-economic change has become extremely rapid, a community separated from its environment for even a few years or decades may find it difficult to re-accommodate to it even under relatively favourable conditions. See the instructive case of the Maluleke in South Africa, who were removed by force from their ancestral home in the late 1960s to make room for Kruger National Park. They regained title to the land in 1998 and were convinced to co-manage it for conservation via tourism initiatives over which they had limited room for manoeuvre (Turner, 2006). See also: Stevens *et al.*, 2016a; Stevens *et al.* 2024a.

1568 Some such initiatives are underway in Europe (see for example: https://comunivirtuosi.org/ accessed 2024) and in North America (see for example: https://www.bostonfoodforest.org/ourwork accessed 2024). Examples of US farmers restoring land while decolonising and revitalising their cultural ties to it— something referred to as 'regenerative agriculture'— are provided by Carlisle (2022).

1569 Brannen & Sheehan-Connor, 2016. When the resources of the savings and loans operations of many communities are pulled together, the aggregated results can be impressive and provide competition to the profit-motivated banking sector, so much so that the latter mobilises to impede them. See Cooperativa de Ahorro y Crédito Jardin Azuayo, 2019 and https://www.jardinazuayo.fin.ec/ accessed 2024.

1570 The Local Futures website https://www.localfutures.org/ accessed 2024 offers interesting ideas and examples:

job creation for communities willing to care as custodians of conserved and protected areas. Strong bonds and connections between custodian communities and their ancestral territories of life or more recently 'adopted' natural environments and commons— properly secured and supported in the long term— could help to make **localised lifestyles** more feasible, enjoyable, and socially and ecologically valuable.

Consistently with the mentioned social changes, new lifestyles are also emerging because the boundaries between rural and urban communities and families are blurring. While remote work capabilities allow more people to settle permanently in rural areas,[1571] rural families invariably have migrant members employed in urban areas, in foreign countries, and/or in productive activities remarkably diverse from their family traditional activities, including employment in universities and the media. This blurring allows **new kinds of communities** to emerge and develop new sources of **livelihoods**, related to **diverse ways of governing and managing the land**. An increasing number of communities reflect this emerging reality by expressing demands for **a level of autonomy and control of their territories**, openly seeking social and environmental justice and solidarity with other communities.[1572] The attitudes of such communities vary from quietly alternative to openly committed to a different social order, but a common feature is pride in social-ecological diversity and the capacity to live according to endogenous, chosen values.

In sum, the communities who may volunteer for a custodian role and see the opportunity as a desirable **privilege** are likely to be varied, from the most traditional to the most modern. Whether self-organised to demand support or in reply to the hypothetical 'call' we are describing here, the contact they would be invited to establish would be the first step of a **negotiation process** that will engage them with governmental agencies and others. The process will hopefully lead towards agreements by which the communities take on a **formal responsibility** towards the larger society while receiving **formal recognition** of their custodian role and some form of compensation and/or **benefits** for their engagement and investments. The most important of such benefits— which should be foreseen openly and offer a key incentive to the process— would be the **security of governance** they would consolidate or acquire for the territories of life under their care.

Nourish custodian agreements for territories in conserved and protected areas

Promoting custodian communities requires capable efforts and appropriate resources, including to support communication initiatives, self-strengthening-processes, and effective territorial management, possibly comprising restoration. As investments should have a geographic focus, governmental agencies may wish to start with ecological units considered crucial for their national ecosystems and biological diversity, such as highly valuable forests, drylands, grasslands, wetlands, coastal areas, high pastures, marshes, seagrass beds and coral reefs already part of the country's conserved and protected areas. Other suitable ecological units may be those listed by the Convention on Biological Diversity as "areas of particular importance for biodiversity and ecosystem service",[1573] which comprise, often overlapping among themselves, Key Biodiversity Areas; areas important for birds, plants, butterflies, mammals and freshwater life; areas crucial for the production of the ocean's oxygen (e.g. seagrass beds); World Heritage Sites; Ramsar sites; biosphere reserves; IUCN Green List protected

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1571   E.g. residents of rural communities can work online taking care of administrative or communication services for large national and international companies.

1572   Barkin, 2023. See also: Camacho & Barkin, 2022; Kothari, 2022; and the many examples of communities seeking self-determination illustrated in this work.

1573   See Target 11 of CBD Strategic Plan for 2010–2020 (CBD, 2010) and the discussion of its rationale https://www.cbd.int/sp/targets/rationale/target-11/ accessed 2024.

areas;[1574] etc. Among these, the social-ecological units that appear well-identified, coherent[1575] and with an evident priority to resist fragmentation and degradation[1576] should be prime candidates for **investments in supporting communities** willing to strengthen or develop a custodian role for territories of life.[1577]

An important element of the 'custodianship policy' would be the provision of **appropriate social recognition** to the communities willing to take on such a custodianship responsibility. This would be a tone-setting step in the process by which the agency in charge of the policy would later **negotiate** custodian agreements with the relevant communities. For instance, the communities willing to play a custodianship role could be listed and acknowledged at national level and/or receive special visibility, training opportunities or free technical assistance upon request. While agreements would be specific to the context, it is imaginable that they could foresee taking responsibility for management tasks to maintain a **desired level of ecological integrity** in a territory of life. A variety of social actors— protected area agencies, municipal authorities, technical authorities, conservation and development NGOs, academic and research organisations, communicators, artists, entrepreneurs and others— could collaborate with the custodian communities to support and secure their bonds with their territories. Funding would be required and may come from various sources, including but hopefully beyond, the budget lines that focus on supporting conservation and climate change mitigation at the grassroots. The entire society would need to internalise that **territories of life have caretakers**, and that caretakers may be moved by economic considerations (e.g. livelihoods, productive investments…) but also by the bonds and **relations** they sustain with the land and among themselves. This would include a sense of heritage, ceremonies, elements of local knowledge and mētis, freely assumed engagements and responsibilities, solidarity, time spent together working and caring… All this would be recognised as having benefits for the caretakers but also for the society at large.

...taking responsibility for management tasks to maintain a desired level of ecological integrity in a territory of life...

Besides **social recognition** of the custodian role, some **incentives** and possibly even forms of **compensation** in cash or kind and a **process towards governance security** for territories of life could be discussed as part of **negotiations**. The **economic** and **governance aspects** of the agreements that emerge from such negotiations deserve careful consideration (see, for instance, the uneasy and unsteady collaborative governance efforts for national parks in Colombia, Canada, Lebanon and Ecuador described in case examples 11, 13, 20 and 25, illustrating both challenges and positive outcomes). A compendium of good practices for laws, policies and governance arrangements for recognising and supporting territories of life within protected areas under State authorities or private landowners is in press.[1578] Such inclusive arrangements and agreements are crucial for national reconciliation and healing (see the case of Indigenous Protected and Conserved Areas of Canada described in Part IV) as they are for security and prosperity (see the instances of Indigenous guardians opposing, in a capillary way, the penetration of illicit crop production and processing in the Amazon region).

More broadly, the experience of initiatives that have supported community governance and management for decades— such as the community forestry initiatives in Nepal— is that communities that wish to move beyond subsistence and attain fair economic benefits need good relations with the State and markets.[1579] Such 'good relations' may help to protect them against cheap imports, simplify their bureaucratic requirements or even help them to reach economies of scale (e.g. the government may offer favourable market conditions or

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1574   IUCN Resolution 6.030 (https://portals.iucn.org/library/sites/library/files/resrecfiles/WCC_2016_RES_030_EN.pdf accessed 2024) calls for the recognition of overlapped ICCAs in all protected areas, included those on its Green List. See also Stevens *et al.*, 2024a.

1575   The social-ecological coherence of a territorial unit is discussed by Borrini-Feyerabend and Hill (2015, pp. 172-173).

1576   Such social-ecological systems are those that could be, at least partially, governed by system-specific institutions to prevent damages and secure sustainable use. In India, the Western Ghats ecosystem was optimistically proposed for that. Predictably, the proposal was not welcomed by politicians (Western Ghats Ecology Expert Panel, 2011).

1577   Guidance to strengthen custodial bonds to territories of life is available at https://ssprocess.iccaconsortium.org/

1578   Stevens *et al.*, 2024a.

1579   Paudel *et al.*, 2021. They may also need local assets and good internal relations, see Allen (2007).

tax rebates to their federations). **Promotion of community businesses** by local administrations could also help them to gain business experience while supporting the local economy. All these incentives— as well as support to the local savings and loans mentioned above— could be discussed as part of the custodianship negotiation processes, including in view of a variety of social and ecological benefits of humanly scaled industries and technologies that respect both the workers and the environment, from local solar power to organic agriculture.[1580]

The agreements would secure **specific benefits for the custodian communities**. For instance, if the territory contains a forest, a custodian community could receive privileges in sustainable use quotas for timber, or non-timber forest products such as mushrooms, shea butter or water. If the territory is a habitat of an endangered species, the custodian community could gain exclusive rights to guide visitors there or to use a product label related to the protected area. If the territory is a watershed, the community that keeps it well managed could receive suitable economic compensation for 'water rights' and carbon credits.[1581] If the territory is within a government-governed protected area, special privileges for the custodian community could include access[1582] to the unit, visits for in-depth understanding of ecological phenomena and historical records, priority in being assigned volunteer and paid jobs, privileges of collectively attributing names, carrying out research, establishing local celebrations, receiving a free quota of water or other harvest rights, exclusive use of the name of the area as product label, and so on. Economic arrangements such as those just mentioned are familiar and tested in many countries.[1583]

The agreement would also secure **specific responsibilities** for the custodian community, which would be seen as benefits for the society at large. These responsibilities could include area surveillance, biodiversity monitoring, and a variety of management activities, from fire prevention to maintenance of habitats and pathways, invasive species control, etc. Importantly, the custodian community would have a strong say about the management objectives and priorities for the territory and there would be **no imposition of blueprint plans and agreements** conceived at national level.[1584] On the contrary, flexibility would be privileged, with management objectives agreed, shaped and *owned* by the community itself, not imposed as a condition to receive economic benefits. This could be facilitated by some forms of support to **participatory action research** and **citizen science** in the 'adopted' territories, including an exploration of options for **environmental restoration** and sustainable livelihoods based upon, and compatible with, environmental care and integrity. Such flexibility would not impede, but encourage, forms of control,[1585] and **graduated sanctions for non-compliance** applicable to all parties in the agreement— government parties included.

A process for addressing non-compliance and disputes, and assessing eventual penalties, would need to be clarified from the beginning, and made accessible to all parties in the agreement. More than a formal judicial setting, this could involve **facilitated processes** towards the mutual recognition of the roles, capacities and comparative advantages of all parties and legal and technical advice to develop appropriate compromise solutions. Importantly, the organisation in charge of facilitating the management of disputes should be **fair, competent and balanced**, as it may need to enter into issues that pertain more to a 'truth and reconciliation' commission than to simpler and more technically oriented facilitating bodies. For that, a team approach may be adopted, engaging

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1580   In the words of Boyce (2001) this would mean "building natural assets" and securing those "in the hands of low-income individuals and communities". See also Pimbert *et al.*, (2001) and Pimbert (2022).

1581   While economic incentives may be equated to some form of 'commercialisation of nature', the multiple and collective nature of the bonds relating custodians to their commons offers some buffer against the negative consequences, which are always possible.

1582   Including no need for tickets where other visitors and tourists are requested to pay.

1583   There is an urgent need to compile and implement lessons learned in such agreements.

1584   Ideas developed in a participatory way and articulated for specific social-ecological units (see examples in Borrini-Feyerabend & Hamerlynck, 2011) are regularly left unimplemented because more powerful interests are at stake.

1585   Possibly by teams of representatives of governmental agencies, national associations of custodian communities and independent actors.

representatives of national associations of custodian communities, governmental agencies and independent actors. Graduated sanctions could involve various forms of compensations and fines, up to the nullification of the custodian agreement.

A complex issue that inevitably surfaces in negotiations between governmental agencies and communities is the one of **representation**. Who 'represents' a specific community offering itself as a custodian of a specific territory? In the case of Indigenous peoples there are often customary organisations that developed their legitimacy through time— although internal disputes are possible and not uncommon. But who can fairly represent a community that does not possess customary bodies and may even be relatively 'new'? While only the relevant communities may properly reply to these questions, most State governments privilege representation by elected politicians.[1586] While there are examples of elected politicians who excellently represent the collective concerns of their constituencies, there are reasonable doubts that politicians may be the best representatives of natural, self-established 'communities'. Forms of community organising that are not affiliated with nationally organised political parties are possible,[1587] and the governments that wish to nourish custodianship may need to equip themselves with the capacity to **recognise legal standing in diverse types of collective bodies**. Some of those may be local *sui generis* organisations, such as the Regole of Cortina d'Ampezzo described in case example 7. A measure of flexibility in national legislation and policies is required to extend legal standing to *sui generis* or novel organisations, which could be agreed based on their capacities and engagement.

On their part, communities may also need to demonstrate flexibility by dealing with government institutions at local, sub-national and national level, and by adopting some new, at times 'legally required', behaviours and features. Some of those may be designed to enhance governance equity (e.g. participation of women and minorities in decision-making) and accountability (e.g. transparency in accounting). Some governmental agencies may not only need to acknowledge the existence of **customary collective bodies**, but also the positive **roles of traditional livelihood activities**... possibly involving learning about their merits, at times unrecognised by 'experts'. On their part, the communities should be willing to participate in specific sessions and discussions on ecological sciences, medical sciences, processes of accounting, communication skills and the like. It may be wishful thinking to imagine that such discussions may proceed without the prejudices and impositions that regularly characterise cross-cultural communication between the more and the less powerful. Yet, as recently noted by a major international body dealing with the science-policy interface,[1588] there are few alternatives to such dialogues... and the dialogues can be expertly facilitated. In this sense, the most difficult step in the process may not be the negotiation of local agreements, but the **presence of an ecologically and politically viable landscape/ seascape** where custodianship may still have a chance to flourish, as destructive political and technical decisions have already scarred a huge part of the planet.[1589]

... capacity to recognise legal standing in diverse types of collective bodies... positive roles of traditional livelihood activities...

1586   See case examples 4 and 13 in this work.

1587   See case examples 7, 10 and especially 15, in this work. In general, forms of organising that are not affiliated with political parties manage to remain more idiosyncratic and locally grounded, while political party affiliates at local level may be affected and even overpowered by the interests of their parties at national level. Responding to this, it is not rare that even local municipalities, e.g. in Switzerland, elect to their councils individuals unaffiliated with political parties.

1588   IPBES, 2019.

1589   An impressive visible element of custodianship throughout the world are traditional irrigation facilities, such as earth and stone bunds and channels developed and maintained by communities through centuries of experience during dry and wet years. In many situations these traditional systems have been revolutionised by new development infrastructures, a case in point being Pakistan, where decades of an ever-expanding, immense network of 'modern' irrigation channels has been reshaping the Indus floodplain. Described by some as 'against nature', this irrigation network was made possible by enormous development investments, which entrenched in the landscape political and economic powers of local and non-local origin. In 2022, as Pakistan experienced a very wet year, the errors of such colonial and post-colonial development infrastructures came to the fore in disastrous floods that submerged a third of the country and devastated the lives of millions. No custodian community could have saved itself or its territory. Preventing future disasters may require billions in investments in reviving the natural routes of rivers and torrents... as a prerequisite for policies in support of custodian communities (Kohari, 2022).

As mentioned, government agencies who distrust any self-proposed 'custodian community' as caretaker of a conserved or protected area could require that the community's serious intentions and capacities be 'demonstrated', including by progressive steps in devolved authority and responsibilities. While this may be feasible and willingly accepted by communities in the course of negotiations, Weston and Bollier[1590] have cogently argued that patterns of self-organisation best emerge when **communities** act as "decentralised agents responding to local circumstance [...] **without the directive control of a central sovereign or bureaucracy**". For them, the power of vernacular law shows itself in processes of an *emerging*, self-adaptive, "rights-based ecological governance of commons" that coordinate people and manage territories in dynamic and robust ways. These new forms of governance may be **enabled and catalysed** but are **best not controlled** every step of the way in a top-down fashion.[1591]

In a similar vein, Carl Folke and colleagues recommend that authorities and agencies **enable self-organisation processes, provide funding and create spaces for collaborative learning**— an idea they refer to as **"framed creativity" for self-organisation**.[1592] While Pahl-Wostl and Patterson suggest that funding should be made available for policy experiments at different levels, and that **legal flexibility** is required to allow **creative transgressions**, such as innovation platforms and **hybrid governance** regimes.[1593] In spaces of framed creativity there should be a collective capacity to hear and discuss the claims, interests and concerns of multiple actors, for instance, through information sharing, dialogues, consultations and negotiation meetings,[1594] possibly with the help of modelling and simulation tools.[1595] If the views of Weston and Bollier, and Folke and colleagues are pertinent, the *kinds* of agreements that self-identified, custodian communities foster with other communities and governmental actors at various levels are best left to the local creative responses they would provide to the unique requirements of their contexts.[1596] In this, communities would seek not only rights and benefits, but also collective responsibility for their territories and discover new dimensions of freedom in self-determination and the capacity to "live not at the expense of others".[1597] Some political economists see in **collective rules and capacity for self-limitation**, which they refer to as 'societal boundaries', the most hopeful alternative to our current disregard of most 'planetary boundaries'.[1598] Others stress that only such **a plurality of bottom-up realisations of sustainability** can match a global vision of sustainability and avoid planetary disaster.[1599]

Secure the governance of custodians of territories of life

The **investments** involved in custodianship are major. Besides **economic assets,** such as time and financial resources, custodians engage their **sense of self** and their **vision of the desired future**, requiring a strong commitment indeed. We thus assume that anyone engaged as custodian believes that it is worthwhile to invest in maintaining the long-term integrity and productivity of an area or territory rather than focusing on

1590   Weston & Bollier, 2013a, p. 114–115.
1591   Ibid, p. 104 and following.
1592   Folke *et al.*, 2003.
1593   Pahl-Wostl & Patterson, 2021.
1594   This is not uncommon. The Great Barrier Reef Marine Park Authority (Australia) organised several huge campaigns of information and consultation regarding its zoning plans, each involving hundreds of meetings, and leading to some form of collaborative governance with Aboriginal Owners (Jago *et al.*, 2004).
1595   Le Page *et al.*, 2013.
1596   While it would be important to examine this in conditions of no government support, in the literature it is more common to find examples of 'framed creativity' when support was wisely made available (see Hunziker & Hofstetter, 2020).
1597   Brand *et al.*, 2021. See also Berlain (2021).
1598   So far, the evidence of humans overstepping planetary boundaries (Meadows *et al.*, 1972; Rockström *et al.*, 2009; Steffen *et al.*, 2015) has not put a brake on environmental degradation, climate change or the socio-economic policies that feed them. See, however, Hill and Duncan (2017) and Korten (2021).
1599   Downing *et al.*, 2019.

its short-term exploitation for consumption and income. For that level of commitment to take root, custodians need a sense of security of governance.[1600] Any policy that aims at revitalising custodianship should include a proper legal framework and mechanisms— even better, a *variety* of legal frameworks and mechanisms— by which custodians can secure their capacity to decide about their territory and draw benefits from it, in the present and foreseeable future. While this is true for all custodians, it is particularly true when the custodians are Indigenous peoples and local communities, as their status and rights are often poorly secured. There is thus a remarkable novelty about the custodianship policy we are sketching here with respect to other policies committed to pursuing 'community conservation'—[1601] a novelty central to the meaning and requirements of 'custodianship'. The novelty is that the policy should provide **an explicit pathway for communities to *consolidate* or *lead to*—** as the case may be— the **security of governance for the territories of life** they care for.

The pathway towards security of governance should be open for all communities who reply to the call for 'willing custodians', although the processes, legal mechanisms and timing may differ because of prior status, capacities of the community, pre-existing collective rights, etc. Certainly, ensuring security of governance is not a simple task, neither conceptually nor in practice. Some Indigenous peoples and local communities willing to play a custodian role may start from a situation of open conflict with government authorities. Others may even face concrete threats, harassment or forced eviction.[1602] A necessary early step in the implementation of the custodianship policy would thus clarify a fair **process for managing disputes** while discussing, negotiating and eventually agreeing upon the specific rights and responsibilities for the territory at stake.

security of governance does not necessarily imply land ownership... property not the preferred choice of all communities...

A strong and well-known way to formalise security of governance for a territory is by acquiring it as property, an option recognised among the universal human rights of individuals and providing a bundle of rights that includes access, use, disposal, selling, etc. A variety of local organisations, NGOs and political alliances advocate land redistribution so that land can be owned by the peasant families who directly depend on it.[1603] In addition, or as an alternative, to individual property some advocate **collective property**, whereby rights belong to a group or community of owners. Customary collective rights generally include access and use but often exclude the right to sell the land, to partition it, and to offer it as collateral— providing a safer long-term horizon for all owners.[1604]

Somehow counterintuitively, security of governance does not necessarily imply land ownership, and property is not the preferred choice of *all* communities wanting to acquire land rights or govern a territory. Some do not seek private property as it would be accompanied by various forms of taxation, which may be unaffordable. Other communities (e.g. mobile pastoralists) require access to very large territories that are not utilised in an intensive way. This does not require ownership but use rights. Others are accustomed to sharing a territory with other communities and do not wish to create problems, as customary systems are much more flexible and fine-tuned than the legal attribution of private property. Customary rights can include sophisticated ways of regulating access and use by diverse groups or communities, such as seasonal rights of access, rights to one type of resource only (e.g. fruits and timber of one kind of tree only), rights of grazing the land only with

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1600   An example of a major multi-country study that led to such conclusions is Roe *et al.* (2000). Security of governance is described as a 'guiding principle' and 'good practice' for the formal recognition of territories of life as part of a country's conservation efforts in Stevens *et al.*, 2024a.

1601   Most such initiatives have been seeking community 'participation' in conservation and/or offering local 'benefits' without contractual agreements or any discussion of community governance options. In contrast, the PES policies of the Mexican government supporting the Xcalot Akal community (case example 29) or the IPCA support provided by the Canadian government and described in Part IV, offer examples of contractual agreements where community governance is already secured. There is hardly any experience of policies or programmes that provide a path towards governance security as a result of demonstrated conservation results.

1602   This is stressed in FAO (2022).

1603   For instance, the International Land Coalition (www.landcoalition.org) is an international alliance of over 300 organisations dedicated to securing Indigenous and community land rights.

1604   As discussed in footnote 1448, the residents of the village of Mendha Lekha (Maharastra, India) donated their lands to their gram sabha to empower it as their governance institution of direct democracy.

certain animals, rights of extracting timber or stone to meet family need but not for the market, etc. These finely tuned rights can rarely be specified under diverse types of legal ownership.

Many communities, however, do appreciate the collective ownership of a territory— let us say a forest, a lake or an extensive pasture— as it implies **security of access** for all the owners, the security of being able to **use the territory** and take its **key management decisions**, such as timing and quotas of harvesting, opening or closing areas to fishing or grazing, refusing entry to those who do not belong to the community, refusing destructive developments, etc. These are the basic faculties that— when safely acquired and trusted to remain stable through time— are likely to convince a community to engage in governance and invest in a territory. Some emblematic territories of life, such as the long-standing territory of the Regole of Cortina d'Ampezzo in Italy (case example 7), are under collective ownership with the additional provision that the land cannot be subdivided or sold. The *ejidos* of Mexico (case example 29) offer more recent similar examples, as do customary territories and commons in Colombia, the Philippines, Australia or Madagascar.

Besides and beyond collective ownership,[1605] what other mechanisms could secure the governance of a territory? As mentioned, the legal recognition and enforcement of **customary law** may open a rich and flexible set of options (e.g. to combine the diverse rights of diverse communities), but other ordinary legal mechanisms, such as **servitudes** listed in a relevant cadaster or **contracts** and **extended leases**, do also provide a form of security of tenure. Specifically relevant for the custodianship policies described here would be a **national framework of 'governance security *for conservation*'**, whereby a governance role would be indefinitely secured for all governing agents (including *sui generis* organisations) that demonstrate legitimacy and 'conservation effectiveness' through time. This might apply to territories that are part of protected areas comprised in the national system, regardless of governance types (including collective governance, also referred to as type D), to territories recognised as OECMs, to territories self-identified as 'territories of life' by their custodians, etc.[1606] Besides security of land tenure, the framework and regulations would **formally exclude** the imposition of **extractive concessions** and **destructive development** operations, currently and in the future.

Security of land tenure that merges into custodianship necessarily involves community awareness and engages all community members— elders, women, men, children… Their roles for the land may differ profoundly (e.g. only some may be allowed to speak for the community and only others may be allowed to harvest resources) but all members of a custodian community would broadly share a vision for the territory and engage their capacities to care for it. Several concepts have recently emerged to describe processes of engagement and collective care, including 'relational values',[1607] 'boundary work',[1608] 'community-agency',[1609] 'quality production at local or regional level'[1610] and 'insider environmental law'—[1611] all referring to place-based foundations to local rules. A particularly appropriate concept is **'place-based governance'**, which has been defined as governance that "seeks to utilize local or regional place-based identities to motivate and engage civil society, government and other organizations in decision-making processes" and as one that "promotes [institutional learning] and a local sense of place and community development, *without being constrained by politically delineated boundaries*".[1612]

1605   Some legal experts believe that community rights cannot be adequately served by anything short of collective land ownership (Liz Alden Wily, personal communication, 2022).

1606   For more on these, see Part VI. An example of conservation policies implemented for decades with broadly recognised success is the Australian policy that defines and supports Indigenous Protected Areas.

1607   See Brown, 1984; Jones *et al.*, 2016; and Pascual *et al.*, 2018.

1608   Zurba *et al.*, 2018.

1609   Eversole, 2011.

1610   Berlain, 2021.

1611   Rosenbloom & Hirokawa, 2019.

1612   George & Reed, 2017. See also Pollock, 2004, and Stewart *et al.*, 2013.

Returning land rights to traditional owners; supporting communities to re-awaken and restore the bonds with their ancestral territories; or even assisting new communities to 'adopt' some territorial units— one community and one territory at a time— is profoundly different from fostering community *participation* in management practices decided and carried out by others. It is also different from engaging communities in so-called *co-management* forms of shared governance, too often limited to inviting political representatives to channel sectoral interests, attend assemblies, or vote on predetermined decisions at intervals of months, if not years. In the countless, diverse situations of conserved and protected areas where custodianship is desirable, effective supporting processes need to involve stronger and more direct engagements. These may involve a combination of initiatives, from governance self-assessment[1613] to conflict management and 'truth and reconciliation' processes, from information sharing and mutual learning to field-based experimentation, from negotiation and progressive devolution of authority and responsibility to custodians to setting up local democratic deliberative bodies for the territory.

In practice, the key activities the communities would agree to take on are those that, until recently, were normal practice for most human communities. They include **sustained frequentation**[1614] of the territory, as socio-culturally and ecologically appropriate. **Learning** and caring about the territory. Actively engaging in thinking and doing **research** about how best to manage it. Developing and respecting **regulations** about that. Engaging directly and with others in **management** activities. Participating in the **surveillance** of the territory. As appropriate, drawing **livelihoods** from the territory, including economic and spiritual sustenance. And exchanging **information** and providing **mutual support** within the community and with other communities involved in similar efforts[1615] and with a variety of other partners. If sustained frequentation is difficult or inappropriate because of specific territorial characteristics or ecological needs, more indirect connections could be chosen,[1616] although it would be good to maintain direct connections whenever possible.[1617] With time, and as the bonds strengthen, most communities grow experience and capacities in governance and management. Some may then realise that the custodian role does not suit them and withdraw or dissolve as communities. Others may struggle because of a variety of obstacles and keep only weakly devoted to their role. Still others, however, may find that their commitment and results progressively empower them, enhance their awareness of the values at stake and promote a sense of **collective responsibility** for what becomes a **territory of life**.

...a sense of collective responsibility for a territory of life...

The idea of devolving governance to local organisations capable of appropriately carrying out the concerned tasks is neither far-fetched nor new. Under the name of 'subsidiarity', the principle is adopted by many countries and researchers have stressed that protected areas could greatly benefit from a deeper understanding of the bundles of governance rights that can be attributed to local actors for part or the totality of the protected land.[1618] In fact, clearly recognised local rights and responsibilities can strengthen place-based governance and fend off illegal resource extraction and land conflicts.[1619] Successful examples of **formal recognition** of

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1613   E.g. see the section on 'Self-assessing vitality' in Part V of this work.

1614   In Taiwan, some Indigenous tribes take advantage of any possible occasion to visit their ancestral territories, from where they were relocated about one hundred years ago (Sutej Hugu, personal communication, 2013). In the words of Adams (2004, p. 235) "The challenge is not to preserve (or restore) 'the wild', but peoples' relationships with the wild."

1615   See, for instance, https://ssprocess.iccaconsortium.org/

1616   For instance, regular surveillance by drones or satellites, provision of animal collars for endangered species.

1617   Direct connection can be maintained even in 'daring' circumstances. Sariska Tiger Reserve (Rajasthan, India) was declared in the last century on the ancient hunting ground of a prince and many sacred forests (devbanis or orans) of Gujjar pastoral communities. Even after its recognition as a national park, Gujjar communities continued to live there. Tigers and leopards also continued to prey on their domestic animals but the Gujjars— who are vegetarians and never kill animals, including their own cattle— developed a form of peaceful co-existence with the predators (Aman Singh, personal communication, 2021). Currently, however, the Indian government has embarked on a major initiative to relocate all villages outside the park.

1618   Pulhin *et al.*, 2021. Theories of meta-governance (Torfing, 2022) are also seeking insights about how subsidiarity and 'network governance' can themselves be governed.

1619   An impressive example regards the Banc d'Arguin National Park, in Mauritania— a coastal-marine park crucially important for the fish and bird diversity of the West African region. A variety of issues affect the governance and management performance of the park, but it is well recognised that only the local Imraguen communities can carry out the needed surveillance and preserve the park from aggressive fishing operations by outsiders (Stevens *et al.*, 2016a). Traditionally dedicated to fishing on foot along the beaches, the Imraguen have been provided with sailboats to fish within the park and— while doing that— carry out surveillance operations.

Indigenous peoples and local communities in governance and management roles for territorial units that are part of official protected areas[1620] or of biodiversity-rich or otherwise valuable territories[1621] do exist, but they are not frequent and may need to be implemented against the grain of vested interests. This makes it even more important to investigate the conditions that made those cases possible and ensure effective complementary roles for custodian communities, governmental agencies, non-governmental organisations and the private sector.

As noted in Part III, even the most capable and caring custodians can be overpowered by the forces that drive social and environmental injustice around the world. We then expect that custodianship is facilitated by **fairness** and **respect of human rights** in society at large and— in specific cases— by some form of **affirmative action** (i.e. special help for all those who have suffered social and environmental inequities). All this is consistently called for by organised Indigenous and community activists and researchers in the international conservation policy arena.[1622] National policies such as those in favour of custodianship sketched out in this work meet these calls. In their absence, custodianship may emerge as the 'revolutionary' result of endogenous processes— what Indigenous thinkers refer to as **decolonisation** and **resurgence**—[1623] whereby Indigenous peoples and local communities **fight against social and environmental injustice,** nourish self-awareness and healing, and seek to take on their collective territorial responsibilities.[1624] This is fully desirable... but may face overpowering repression. Ideally, then, endogenous processes and external supportive policies may meet, so to speak, 'midway', and prove mutually reinforcing.

Non-governmental organisations devoted to conservation and sustainable development, academic and research bodies, bilateral assistance agencies, philanthropic organisations and inter-governmental organisations such as UN agencies can play important roles in support of custodianship policies. They may facilitate processes and exchanges, provide information, promote active communication among custodians and partners, and support **learning networks** among custodians.[1625] They may serve as **'independent guarantors'** of negotiated responsibilities among custodians, governmental agencies and others, and contribute to monitoring the ecological integrity of the concerned territories and the benefits received by communities. They may also take on some **conflict prevention** roles, acting as ombudspersons to foster the peaceful resolution of controversies as well as fairness and accountability in the relations between governmental actors and communities.

Various supporting partners may also be needed to support communities willing to strengthen their capacity to face powerful private and governmental actors. They may be needed to facilitate inter- and intra-community communication and negotiations. For instance, they may promote dialogue among communities in richer and less abundant ecosystems, living upstream and downstream of specific initiatives, feeling directly or indirectly the impact of what other communities do (or do not do), etc. Based on the constitutions of diverse countries and on the Universal Declaration of Human Rights, supporting partners may also be needed to promote gender justice, prevent 'elite capture' of benefits, or warn about the emergence of nativism, racism, apartheid,

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1620   In Colombia, the national park that coincides with the territory of the Yaigojé Apaporis Resguardo was established in 2009 under a special governance agreement among traditional authorities, local communities and the national protected area authority. The agreement adheres to the traditional worldview, knowledge and management practices, including by ensuring the respect of the livelihoods needs of the custodian Indigenous peoples and their traditional calendars for agriculture, hunting and fishing, care of sacred sites and prevention of health problems. Decisions are taken by consensus (Castro & Montero, 2019). Similar examples are surfacing in diverse countries (Indigenous Circle of Experts, 2018; Stevens *et al.* 2024a). In this work, see the example of the Regole of Italy (case example 7) and the evolving relations between custodians and protected areas described in case examples 11, 12, 13, 20 and 24.

1621   Examples of formal recognition in this work are illustrated in case examples 1, 7, 10, 27, 28 and 29. See also ICCA Consortium, 2021.

1622   See, for instance: https://www.iccaconsortium.org/index.php/2022/11/01/cbd-cop15/ accessed 2024 and footnote 1392.

1623   Corntassel, 2012 and 2021b; Sutej Hugu, 2021; Lucio & Barkin, 2022.

1624   Among other cases discussed in this work, see case examples 3, 10, 19, 23 and 30 and the mentions in the text and references in the notes related to Gangjeong (South Korea) and Sinjajevina (Montenegro).

1625   On this see also Camacho and Barkin (2022).

intolerance and hostility towards 'outsiders'. All these are delicate roles, to be designed for context-specific situations in a highly transparent way and with the help of experienced professionals.

The processes that promote and support custodianship policies may engage NGOs for interface roles between communities and other partners. NGOs are not free from real or perceived vested interests, but they may have more latitude than other actors. It is to be expected that communities remain anchored in local environments and governmental agencies need to follow national and sectoral logics. NGOs, however, may find their niche in highlighting our **common humanity** and planetary **ecological boundaries,**[1626] and in seeking **social and environmental justice** for the many who, having lost control over their territories and livelihoods, end up suffering the social and environmental impacts of initiatives conceived by others.

Keep learning and promoting social and environmental justice

Is it likely 'custodianship policies for territories of life' like those sketched so far are agreed upon and successfully implemented? Most probably not.[1627] We cannot forget that the current widespread geopolitics of social and environmental injustice maintain about two billion people in squalid living conditions, suffering from hunger, scarce and polluted water, poor health, and, often, also land dispossession and violence.[1628] While powerful authorities plan ever larger military budgets, huge numbers of marginalised people do not even have a chance to *think* about all their problems becoming worse because of climate change.[1629] Against the odds, however, we still propose to take custodianship policies into consideration as they offer a chance for **vital forms of governance for conserved and protected areas**. After all, even in the absence of dedicated policies many examples of heartening custodianship do exist, as described and discussed in this work. Custodian communities keep governing and managing their territories, resist destructive change, fight for all the dimensions of justice, win for themselves some institutional roles and spaces, offer hope to us all… Imagine what they could do if properly promoted, supported and secured.

Beyond waiting for governmental policies, we encourage **active networking and self-organising**[1630] among those keen to maintain and nourish their territories of life, as there is a need to refresh some human capacities left dormant and inactive in highly specialised urban societies— capacities that risk ending up atrophied. These include being a community rather than scattered individuals, **living in solidarity and reciprocity**, cultivating the wisdom of the group and caring together for a shared natural environment— in other words engaging as a **collective custodian**. These capacities have nourished our life on the planet for hundreds of thousands of years and, countering the arrogance of believing ourselves at the pinnacle of progress and civilisation, may provide healing opportunities for us all. They may allow us to benefit from our recent technological achievements but also emerge from our predicaments by developing **caring** and **meaningful relations** with

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1626   The values of our 'common humanity' may be approximated by the evolving Universal Declaration of Human Rights, while the planetary boundaries are increasingly being investigated (Rockström *et al.*, 2009; IPBES, 2019; SCBD, 2020; IPCC, 2022).

1627   In the words of Bookchin (2015): "There should be no self-deception about the opportunities that exist as a means of transforming our irrational society into a rational one. Our choices on how to transform the existing society are still on the table of history and are faced with immense problems. But unless present and future generations are beaten into complete submission by a culture based on queasy calculation as well as by police with tear gas and water cannons, we cannot desist from fighting for what freedoms we have and try to expand them into a free society wherever the opportunity to do so emerges. [...] we now know, in the light of all the weaponry and means of ecological destruction that are at hand, that the need for radical change cannot be indefinitely deferred. What is clear is that human beings are much too intelligent not to have a rational society; the most serious question we face is whether they are rational enough to achieve one." Interestingly, while Bookchin sees enhanced rationality as a prerequisite for justice, others (see the quote by Niebuhr on page 144) consider that a measure of 'sublime madness' is also (or instead?) necessary.

1628   See, for instance, Schlosberg (2007); Brockington *et al.* (2010); Büscher *et al.* (2017); and Malin *et al.* (2019). At the time of writing, in the fall of 2023, many are watching in impotent desperation the renewed crimes unfolding in diverse theatres of political decision-making and war.

1629   Murphy (2011) forcefully makes the point that social and environmental injustices are key drivers of many of our social and environmental ills. He quotes the Global Health Watch Report 2005–2006 stating "The forces shaping many of the socio-economic and health inequalities between poor and rich countries are also driving climate change."

1630   As discussed in Part IV, the ICCA Consortium exists for this purpose.

territories and within communities. These capacities may even help us to identify and oppose the forces that spell out the demise of biocultural diversity and the other fast-developing environmental crises— another task that can only be tackled by organised groups.[1631]

There is much to learn about governance vitality and custodianship. Theoretical research and modelling in academic settings do generate relevant results, but those seem slow to percolate from the world of scholarship. They rarely offer practical guidance to practitioners governing and managing conserved and protected areas, or even to the policy-makers willing to support them. Hoping for learning to continue and become more relevant and *applied*, Part V of this work offered some ideas for a governance self-assessment process for a conserved and protected area and sketched a few elements of policies designed to promote custodianship of territories of life. With those, it may become easier to explore **questions that make sense for practitioners** ("how can our institution enhance *its own* vitality?") and **questions that make sense for policy-makers** ("what mechanisms and incentives can promote vitality and custodianship for conserved and protected areas in ways that fit our national concerns?"). We believe that these questions— rarely asked— are crucial for the present and future of conservation.

...questions that make sense for practitioners...

...questions that make sense for policy-makers...

Compared to only a couple of decades ago, it is progress that practitioners and policy-makers think about governance of conserved and protected areas *at all*. Beyond governance diversity and quality, also governance **vitality**, **custodianship** and **territories of life** are concepts useful for understanding and supporting conservation and livelihoods. We encourage all institutions governing and managing conserved and protected areas and all other concerned actors, including Indigenous peoples and local communities, UN agencies, governmental agencies, administrators at different levels, development and conservation NGOs, academics and researchers, landowners, donors and financial institutions— to keep asking:

- What features and conditions of governance institutions appear to promote their **capacity to function** through time, fully and in inspiring ways?
- What features and conditions of governance institutions appear to foster a collective sense of **purpose, engagement, responsibility and emotional attachment to place**?
- How best can governance institutions self-assess their vitality and capacity for custodianship? Which **indicators** are most telling of a positive situation? Which indicators offer valid **red flags** for impending problems?
- What **advocacy arguments** can best encourage governments and other actors to develop, implement and support custodianship policies and to promote governance vitality for conserved and protected areas? What **barriers to change** are there, practically and in perception?
- What **forms of recognition** encourage individuals and communities to commit themselves as custodians of territories of life? What can best strengthen them 'as custodians' to deliver positive ecological and livelihoods results?
- What **forms of governance security** may best guarantee their engagement and investments (e.g. common property, long-term security of access and use, contractual agreements for conservation)?

1631   An umbrella term used to describe hypothetical post-capitalist societies is solidarity economy— encompassing human solidarity, participatory democracy, pluralism, and striving for social equity and environmental sustainability. Loh and Shear (2022) describe solidarity economy as both resisting capitalism and building modes of production and consumption not based on profit. The crucial grounding of a solidarity economy— as it is being built in some communities in the USA— are 'relations' and the collective creation of new spaces, institutions and practices that offer 'alternatives to development'. This echoes the social ecology developed by Murray Bookchin as part of his broad call for cooperation, empathy and responsibility for the biosphere based on a humanitarian use of human rationality (Bookchin, 2006 and 2015). In practice, social ecology translates into Communalism and Libertarian Municipalism. Communalism (with capital C) is direct democracy anchored in loosely confederated popular assemblies and human-centred forms of production. Libertarian Municipalism organises power at the level of municipality— city, town, village— wherever face-to-face democracy has a chance to happen.

- What **forms of support** are suited to sustain governance vitality and custodianship of territories of life despite the presence of social and environmental injustice and ongoing ecological and socio-cultural change?

As peoples and communities engage with the challenges ahead for conserved and protected areas, reflecting on these questions may offer some insights and inspiration. As noted in Part III, factors intrinsic to an institution need to combine with a supporting and non-overpowering context to deliver any lasting form of 'governance vitality'. While Part V has focused on enhancing the governance institution from within and promoting custodianship policies, the greatest obstacles for vitality of governance and territories of life may come from elsewhere. The forces that maintain pervasive social and environmental injustice on our planet and feed environmental destruction and perennial war are formidable. How they might be transformed into more peaceful and enlightened forces is not the subject of this work, but such transformation remains a critical challenge for everything else, including governance vitality for conserved and protected areas, and custodianship of territories of life.

Vitality interlude

Most seeds of food plants cannot be kept for more than a few years. They need to be regularly planted, cared for and regenerated. They pass through the hands of people and are chosen by their eyes, their sense of taste, their work, their memories, their conversations, their understanding of what would be good in the future. Seeds are kernels of future— irreplaceable 'living beings', far more precious than jewels or gold...

Part VI: A lexicon about territories, governance & conservation

...for readers keen to revisit people and nature
as they relate in ecological integrity, sustainable livelihoods and wellbeing...

…just like roads across the Earth. For actually the Earth has no road to begin with, but when many men pass one way, a road is made.

Lu Xun, 1921

Many words walk in the world. Many worlds are made. Many worlds make us. There are words and worlds that are lies and injustices. There are words and worlds that are truthful and true. In the world of the powerful there is no space for anyone but themselves and their servants. In the world we want, everyone fits. In the world we want many worlds fit.

Zapatista Front of National Liberation, 1996

What is conservation?

A small volume entitled *World Conservation Strategy[1632]* was published in 1980 as the result of a multi-year discussion within and among international environment advocacy groups.[1633] One of its main original contributions was an agreed definition of the concept of 'conservation', which we can synthesise[1634] as follows:

- **Conservation** is a positive human endeavour that includes preservation, maintenance, sustainable use, restoration and enhancement of the natural environment.[1635]

This definition may be puzzling. Nature *on its own* sustains the ecological functions and biodiversity essential for the life of human communities, without people intervening or helping in any way. Yet, conservation is defined as a positive, in other words '**active', endeavour**. Why? This definition finds meaning only as a *reaction to environmental impacts* brought about by people— who interact with nature in ever larger numbers, with growing needs and ever more powerful technologies. Today, what is usually recognised as 'conservation efforts' imply thoughtful **policies and regulations** and/or the purposeful **governance and management** of biological diversity (ecosystems, species, genetic diversity) in specific spatial units (habitats, areas, territories)[1636] in all planetary environments— terrestrial, freshwater and marine, including coastal and high seas. These area-based conservation policies and practices identify the functions and values of biological and cultural diversity that ought to be 'spared from damage', specifically, maintained as essential for healthy nature, livelihoods and wellbeing. In association with broader environmental regulations (e.g. about preventing air and water pollution at large), the area-based conservation policies and practices aim at compensating, at least in part, for the damage done elsewhere.

1632   https://portals.iucn.org/library/efiles/documents/wcs-004.pdf accessed 2024.
1633   McCormick, 1986. See also the section 'The discovery of community conservation' in Part IV of this work.
1634   The verbatim definition is: "Conservation is the management of human use of the biosphere so that it may yield the greatest sustainable benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations. Thus, conservation is positive, embracing preservation, maintenance, sustainable utilization, restoration, and enhancement of the natural environment.".
1635   IUCN, UNEP & WWF, 1980.
1636   In CBD parlance, these types of conservation interventions are referred to as 'area-based'.

What are conserved areas, protected areas and OECMs?

Like territories of life, conserved and protected areas and 'other effective area-based conservation measures', abbreviated as OECMs, are **geographical spaces**[1637] related to **conserving life on our planet**.[1638] There are, however, important differences among the concepts and practices that are worth exploring here.

- A **conserved area** is a geographical space where ecosystem **conservation** is **achieved *de facto***, and/or is in a positive conservation trend and likely to maintain it in the long term.[1639] Conservation *de facto* is revealed by a level of **ecological integrity**—[1640] the capacity of the ecosystem to support its ecological processes and the life of its communities of organisms in ways that maintain the ecosystem as resilient, bioculturally diverse,[1641] and as close as possible to its natural[1642] or authentic[1643] status. In a nutshell, we may say that an ecosystem 'conserved *de facto*' is **healthy**.[1644] While, as defined above, the act of 'conserving' is a human endeavour, conservation *de facto* is **a property intrinsic to an ecosystem**. In this sense, a 'conserved area' is an ecologically healthy area, regardless of human activities like governance and management.[1645]

- The term '**protected area**' is a **label** assigned by State (or sub-State) governments and other organisations. For IUCN the 'protected area' label can be assigned to any "…clearly defined geographical space, **recognised, dedicated and managed**, through legal or other effective means, **to achieve the long-term conservation** of nature with associated ecosystem services and cultural values".[1646] Thus, for an area to be 'protected', **an *agent* of recognition, dedication and management must be identified**.

  Establishing formal protected areas is a key land-use mechanism by which State governments exercise their responsibility for the conservation of ecosystem functions and biological and cultural diversity. In this sense, the protected area label is supposed to describe a different 'status', with appropriate regulations and management practices. Depending on the context, however, those may be fully, partially or not at all implemented, resulting in different levels of conservation *de facto*: not all protected areas are also conserved areas.

1637   Some use the terms 'spatial', 'area-based' or 'territorial' 'units'.

1638   Conservation of nature may be pursued directly (through direct preservation or restoration of habitats) or indirectly (e.g. via water conservation or via the conservation of cultures with relevant capacities).

1639   This definition is not a label, in the sense that it is not contingent on recognition and dedication by any actor for any purpose, and it is independent of specific governance and management practices. It is a property of the territory or area per se, referring to a given moment in time and irrespective of prior history (see also Borrini-Feyerabend & Hill, 2015).

1640   The concept of ecological integrity can be referred to the ecosystem approach as it values the relations among the components of the system beyond the protection of individual species or biodiversity richness. A variety of ecological indicators can provide information on that, especially when monitored in association with 'drivers' of change (Rapport & Hildén, 2013). A simple and intuitive definition of 'integrity' is offered by Karr *et al.* (2022) as "…one endpoint on a gradient of biological conditions, ranging from relatively free of human disturbance to nothing left alive". This can be assessed by multiple metrics of human influence, including presence of pollutants, habitat structure, flow regime, biotic interactions, etc. See also Pimentel *et al.*, 2002; Parrish *et al.*, 2003.

1641   Posey, 1999. For the way 'biocultural diversity' is understood in this work see Sajeva *et al.* (2019).

1642   Parrish *et al.*, 2003. Parrish *et al.* discuss conservation aims more reasonable than restoring ecosystems to their 'natural' conditions. Defining "natural", in fact, is all but infeasible. This is so because of the extensive human alterations of the environment but also because of our limited knowledge of ecosystem dynamics.

1643   Dudley (2011) offers a technical definition of authenticity in view of the difficulties of defining 'natural ecosystems' under widespread non-equilibrium conditions and climate change, hoping to avoid "…sliding inexorably towards ecosystems dominated by weeds, brown rats and feral pigeons…".

1644   The meaning of 'healthy' is here as rich, and as ambiguous, as when used for individual human beings or populations. In fact, ecosystems, as human beings, are open systems, and their ecological integrity is a dynamic phenomenon. See: Pimentel *et al.*, 2002; Haines & Frumkin, 2021.

1645   This definition does not solve the difficulties implicit in both the concepts of 'ecological integrity' and 'conservation' as an activity— neither of which can be determined in an absolute sense or in relation to any single parameter describing an ecosystem. A recent proposed redefinition of 'conserved area' as "areas that are equitably governed and achieve long-term conservation outcomes" (Jonas *et al.*, 2021) complicates the matter even further. We see it as less helpful than considering ecological integrity ('conserved area') and equity (e.g. in governance and outcomes) in their own terms.

1646   Dudley, 2008. The Convention on Biological Diversity uses a similar definition, i.e. "…a geographically defined area, which is designated or regulated and managed to achieve specific conservation objectives". The CBD definition is widely considered as compatible with (if not equivalent to) the IUCN definition.

Most countries possess a national protected area system (or network) with dedicated legislation, personnel, budget and reporting channels,[1647] but **different countries have adopted diverse definitions and policies for their protected areas**, which may be quite distant from the IUCN and CBD definitions. In particular, in accordance with the IUCN and CBD definitions, not only governmental agencies but also private actors, Indigenous peoples and local communities, and coalitions of actors can equally establish, govern and manage protected areas as part of a national system.[1648] This is rarely possible in accordance with national legislations and policies.

- The term **'other effective area-based conservation measures'**— **OECM** for short— is another **label** assigned by State governments or other organisations. For the Convention on Biological Diversity, OECMs are "...geographically defined areas, *other* than protected areas, which are governed and managed in ways that *achieve* positive and sustained long-term outcomes for the *in-situ* conservation of biodiversity with associated ecosystem functions and services and, where applicable, cultural, spiritual, socio-economic and other locally relevant values."[1649]

  The OECM definition was agreed by CBD Parties only in 2018, but the concept is related to a Decision of the Convention made in 2010.[1650] As sites that are not 'protected' but, like a healthy forest, lake or coastal environment, *deliver in-situ conservation of biodiversity*, **OECMs are to be *identified* rather than designated** by State governments.[1651] Their label must correspond to a situation assessed in the field. As part of identification, however, **an *agent* of the relevant governance and management must still be acknowledged**. It is broadly accepted that such agents may be governmental agencies at various levels but also private actors, Indigenous peoples and local communities, and coalitions of actors.

  Only a few countries have already developed policies related to OECMs, including ways of recognising and securing the governance and management efforts of a variety of social actors as agents of conservation. The value of the OECM concept is likely to prove itself wherever the legislation about protected areas is restrictive enough to represent an impediment to embracing a variety of governance types in the national protected estate. In such cases, legislation on OECMs may offer new and interesting options for custodians to secure both livelihoods benefits and conservation results.

Often overlapping with the 'conserved areas', 'protected areas' and 'OECMs', other terms are increasingly used to describe spatial conservation, in particular **'ecological corridors'**, which are areas understood as essential for ecological connectivity, and **'ecological networks for conservation'**, which describe systems of diverse types of conserved areas, such as protected areas and OECMs, connected by ecological corridors established to restore or maintain the connectivity of the system.[1652]

1647   Data for different countries are accessible via the CBD Clearinghouse: https://chm.cbd.int/.
1648   Dudley, 2008.
1649   CBD, 2018b.
1650   Target 11 of CBD Strategic Plan for 2010–2020 (Aichi Target 11) in CBD Decision 10/2 of 2010 (CBD, 2010) https://www.cbd.int/sp/targets/rationale/target-11/ accessed 2024.
1651   Recent reviews and examples in Jonas *et al.* (2018) and IUCN-WCPA Task Force on OECMs (2019).
1652   See Hilty *et al.*, 2020.

What are territories of life?

Territories of life[1653] are a time-honoured, diverse and dynamic **socio-cultural and ecological phenomenon**, well-illustrated by the interactions that allow human communities to find their livelihoods and wellbeing in specific natural environments. Ecosystems as diverse as drylands, tropical forests, coral islands and the arctic tundra have enabled human communities to live, grow, develop cultures and make sense of their lives. Communities have settled in such diverse ecosystems, or moved within them following the weather and other natural phenomena. They have differently managed and cared for 'territories' within broader ecosystems and have given them a myriad of names. Yet, the interactions that have bonded communities to their territories have often shared similar characteristics, a fact that gave origin to the unifying concept of 'territory of life'.

The ICCA Consortium states that a **territory of life**[1654]— at times also referred to as 'ICCA'—[1655] exists wherever:

- There is a **deep connection**[1656] between a territory and its *custodian* Indigenous people or local community;[1657]
- The custodian people or community makes and enforces decisions, customs and rules about the territory via a **functioning governance institution;**[1658]
- The governance and management efforts of the custodian people or community positively contribute to their own **livelihoods and wellbeing** as well as to the **conservation of nature** in the territory.

Territories of life are thus territories **capable of supporting human life and wellbeing.** But they come to life (so to speak) only when *governed*, *managed* and *conserved* by *custodian* **Indigenous peoples and local communities**. Such territories are found in terrestrial, freshwater and marine environments, both coastal and high seas.[1659] Regardless of legal recognition, they generally overlap with customary **land commons**[1660] and relate to other types of **commons**, such as water, fisheries or wildlife, and intangible values, such as Indigenous and local knowledge.

The term *territory* is purposefully used by the ICCA Consortium to signify that, for the concerned custodians, it represents a combination of ecological, historical, cultural, political and social values together with, but much beyond, the economic values it also includes. A territory is a **cultured landscape/seascape**— for its custodian people or community it merges with **life** and the **meaning of life**, and it links in unique ways to a **collective past** and a **desired shared future**. Perceiving a 'territory' may also mean refusing a separation

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1653   See also Part IV of this work.
1654   See Sajeva *et al.*, 2019 and https://www.iccaconsortium.org/index.php/discover/ accessed 2024. See also the short movie: https://youtu.be/70mt7bozJb8?list=PLuBpRnNXhKyQciWz4bRRdPqtLBaT5tdts accessed 2024.
1655   Other terms closely related to the abbreviation 'ICCA' and found in the literature include 'territories and areas conserved by Indigenous peoples and local communities', 'Indigenous and community conserved areas' and 'community conserved areas' (see Borrini-Feyerabend *et al.*, 2010; Kothari *et al.*, 2012).
1656   "…a connection richer than any single word or phrase can express… a bond of livelihood, energy and health… a source of identity and culture, autonomy and freedom… a link among generations, preserving memories from the past and connecting to the desired future… the ground on which communities learn, identify values and develop relationships and self-rule… a connection between visible and invisible realities, material and spiritual wealth… community life and dignity, and self-determination as peoples …" (Sajeva *et al.*, 2019, p. 5).
1657   In this work we often abbreviate "custodian Indigenous people or local community" as 'custodian' or 'community'.
1658   As discussed in Parts I and V, this work focuses on local institutions governing conserved and protected areas. We understand as 'governance institution' that complex of organisations, processes and rules— embedded in larger relations, policies, cultures and worldviews— by which key decisions are taken and implemented, and their respect is ensured in the relevant community or society.
1659   Vierros *et al.* (2020) discuss that many migratory species— e.g. of salmon, marine turtles, albatrosses and seals— are culturally and economically important to coastal communities, who suffer if these species are overexploited or decline due to inadequate management. In consideration of this, their territories of life extend to the high sea through which these species migrate.
1660   Land commons are estimated to cover more than half of the terrestrial surface of our planet, although formal ownership extends to only 10% of the land and an additional 8% of land is under some degree of government-recognised management rights (Veit & Reytar, 2017). Two-thirds of the global land owned or controlled by communities is in five countries: China, Canada, Brazil, Australia and Mexico.

between nature and people, an understanding embedded in many Indigenous cultures. And 'territory' goes beyond legal ownership, as it may encompass common property land but also land owned by the members of the community or others, and/or land owned by the State, within or outside protected areas. Diverse legal jurisdictions and even diverse countries may be concerned.

A few qualifications have come to be used for **territories of life**. Those that exhibit all three defining characteristics listed above (in short: bond of custodianship, community governance, positive results for livelihoods and nature) are said to be *defined*. Those that have lost one or more such characteristics, but whose custodians are still willing and active to regain them, are said to be *disrupted*. And those that never possessed the three characteristics but have peoples or communities willing to become custodians and ready to work to achieve the characteristics, are said to be *desired*.[1661]

Specific territories are essential for the livelihoods of specific communities all over the world: their meaning is not a matter of concepts or qualifications but of survival and wellbeing in its broadest sense. Respecting this, only the custodian Indigenous peoples and local communities themselves should consider what qualifications can be used, whether their territories possess the characteristics we discussed, and whether they are 'territories of life'. In this work, we have used the term only when the custodians themselves are known to have used it.

Recognising conservation in the landscape/seascape

We use the term 'conserved' to describe an intrinsic feature of a spatial area, that is, being healthy and in good ecological condition (possessing 'ecological integrity') regardless of formal conservation designation or lack thereof. In this sense, a team of ecologists exploring a landscape/ seascape can broadly identify some spatial units that appear 'conserved' and other units that appear degraded. The team of ecologists inspecting a specific spatial unit would gather a number of observations and, based on these, affirm that the entire unit and/or some sub-units within it appear ecologically healthy and are expected to reasonably remain so in the near future. These areas or sub-areas **identified by** the team of **ecologists** would be labelled as '**conserved areas**'. Alternatively, their observations may reveal the presence of ecological problems and/or phenomena reasonably expected to affect and worsen the local conditions in the near future. These could *not* be labelled 'conserved areas'. Others may dispute either statement, but the discussion would need to be pursued **based on specific field observations and ecological criteria**.

As noted in its definition, the term **'protected area'** is not based on concrete field observations. It is rather **a label assigned by a given authority** after an historical, political, legal and administrative analysis of the governance and management situations of a specific site. 'Assigning the label' generally requires following some legal prescription, for instance that the management of the site is explicitly *dedicated* to conserving some of its specific values.[1662] In some countries, there are also specifications about land ownership (e.g. in Sweden protected areas are designated on land owned by the State). Interestingly, **'OECM' is a mixed situation.** On the one hand, they do not start by being legally established but by being *identified* among existing situations in the landscape/seascape.[1663] On the other, in order to fit the CBD definition, the sites must meet, or have the potential to meet, some nuanced conditions regarding the specific governance and management regimes

1661   Sajeva *et al.*, 2019. The original distinction owes to insights of Delfin Ganapin, crucial enabler of ICCA-GSI.
1662   Of course, such analyses and labels may also be disputed by other concerned institutions.
1663   Harry Jonas, personal communication, 2020.

expected to sustain them in the long term. So, it requires **both intrinsic conditions and a label**, and the label implies the existence of a specific governing and managing agent.

It is desirable, and it is reasonable to expect, that most protected areas overlap with conserved areas, meaning that they exhibit ecological integrity and health. OECMs are at least in part *defined* by that overlap with conserved areas.[1664] Importantly, the governing bodies ('**agents**') in charge of territories that receive the label of 'protected area' or 'OECM' **need to express their agreement**, not least because such labels likely imply new conditions and obligations. It is not advisable for any social actor who governs and manages an area or a territory to accept a label without clarity of what it means legally, as well as in terms of economic, social, political consequences, etc. As legislation and policies are being developed, however, it is advisable to engage in **advocacy** about what the specific label (e.g. OECM) *should* mean, including some form of **security of governance** for custodians who have proved successful through time.[1665] Not being a label, 'conserved area' does not have similar implications.[1666]

The definition of **territories of life** includes the idea of being '**conserved areas**'. Yet, while *defined* territories of life are healthy and exhibit ecological integrity, *disrupted* or *desired* territories of life may not do so. In such cases, the self-definition of a territory of life may rest on a **positive trend** towards ecological integrity and on the custodians' engagement in activities that promote and support that. For instance, the custodians may be actively seeking to (re)gain the health and ecological integrity of their territories through defence, protection, sustainable use and/or restoration practices.

Fundamental characteristics of a territory of life are the **self-identification of its custodian** Indigenous people or community and the **mutual recognition among peers**. This implies that the custodian people or community is aware and caring about its relationship with the territory, and that other peoples and communities are also aware and in acceptance, and possibly active support, of that self-identification and caring. The ICCA Consortium has insisted on the idea of 'mutual recognition' by promoting networking among custodians at the regional, national and local level, as appropriate. This has proven essential for exchanges, collective situation analyses and policy advocacy— all key elements of self-strengthening. In fact, as territories of life (then called ICCAs) started being listed by the UNEP-WCMC as potential protected areas, conserved areas or OECMs,[1667] the Consortium rejected the idea that national or international 'conservation experts' would provide an appropriate 'review' of such listings, stressing that only the peers of custodians are able to provide acceptable forms of 'mutual support and review'. The ICCA Consortium also stressed that the processes and forms of such peer recognition and support are by no means uniform, should not be codified and ought to be developed by the concerned peers themselves.[1668] This is well in line with the work of Indigenous scholars who stress the reciprocity and multiple sources of authority and sovereignty among Indigenous nations, clans and communities.[1669]

1664   In this sense, we assume that "positive and sustained long-term outcomes for the in situ conservation of biodiversity with associated ecosystem functions" (CBD Decision 14/8, 2018) is equivalent to 'possessing and maintaining a sound level of ecological integrity'.

1665   As OECMs contribute to governments' efforts to attain their conservation targets and provide national benefits (ecological, image, funding, etc.), it would be appropriate and fair to acknowledge their value by formally recognising the legitimate OECM governance authorities (e.g. by providing security of tenure) and enhancing the security of their long-term role (e.g. by providing policy frameworks and regulations that protect OECMs from undesired extractive concessions, currently and in the future).

1666   ...but conserved areas 'un-labelled' as either protected areas or OECMs may be more freely grabbed for destructive uses.

1667   See https://www.protectedplanet.net/en/thematic-areas/indigenous-and-community-conserved-areas, accessed 2024.

1668   See https://www.iccaconsortium.org/creating-a-critical-mass-of-support/, accessed 2024.

1669   See, for instance, Corntassel, 2021a. See also: https://www.iccaconsortium.org/2021/12/15/recap-solidarity-exchange-indigenous-decolonization-sustainable-self-determination/ accessed 2024.

Besides peer recognition, some custodians also agree that their territory of life may be **officially recognised also** by State governments (e.g. by adding a label as protected area or OECM) possibly in exchange for specific benefits and support. Other custodians explicitly refuse State recognition. Still others are in the laborious process of considering the options and have not yet decided. This is understandable. For protected areas, the definitions adopted by specific countries are often more onerous than the generic definitions of IUCN and CBD, and the corresponding policies often imply access restriction and use limitations. For OECMs, the policies are still nearly invariably vague. As OECMs contribute to national efforts to attain conservation targets and provide other benefits (image-related, funding, etc.), it would only be appropriate and fair to acknowledge their value by enhancing the governance security of the caretakers that have proven both legitimate and effective. This could be done, for instance by providing them with **security of tenure** as well as frameworks and regulations that **formally exclude the imposition of extractive concessions**, currently and in the future.

Interestingly, both the 'protected area' and 'OECM' labels tend to be assigned to precisely located and controlled geographic spaces managed by entities that state precise conservation objectives. Territories of life, on the other hand, may *deliver* conservation but be governed and managed by informal and complex arrangements with a multiplicity of purposes in mind (e.g. cultural, spiritual, livelihood-related). Moreover, their borders may be loosely defined and porous, and it is not uncommon that the territories of life of diverse communities overlap, at times based on diverse management activities, in diverse seasons and under flexible and evolving agreements. It is complex to decide whether a territory of life 'fits' any of the conservation labels offered by the State where it happens to be situated. And the custodians of territories of life should understand, and possibly negotiate, all the costs and benefits they expect to face before accepting any label.

Many territories of life have been in the past, and are still today, ignored, undermined, occupied by infrastructures and extractive concessions, or incorporated into national protected area systems without their custodians' Free, Prior and Informed Consent.[1670] This has too often taken place without an appreciation of the wealth of culture and gifts of nature that were being destroyed because of ignorance, indifference and/or arrogance.[1671] Recent guidance strongly recommends appropriate recognition and respect for the continuing self-governance of existing territories of life even when recognised as,[1672] or overlapped by, State-recognised protected areas.[1673]

Monitoring conservation in the landscape/seascape

One of the key objectives of the Convention on Biological Diversity is the conservation of biological diversity across the world.[1674] To keep track of land and marine areas dedicated to biodiversity conservation, the coverage of protected areas is monitored and reported by the World Conservation and Monitoring Centre (WCMC) of the United Nations Environment Programme (UNEP). The World Database on Protected Areas (WDPA) of WCMC includes **information on protected areas**. Since 2010, WCMC information is made available on the protected

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1670   The Convention on Biological Diversity strongly encourages Parties to seek and respect the Free, Prior and Informed Consent of Indigenous peoples in the establishment or management of protected areas (CBD Decision VII.28, 2004 and Annexes II and III to CBD Decision 14/8, 2018). The United Nations Declaration on the Rights of Indigenous Peoples also foresees Free, Prior and Informed Consent in many of its articles. It is widely considered that best practices for custodian local communities should be as similar as possible to those adopted for custodian Indigenous peoples.

1671   Here the literature is too vast to be properly cited. Some thoughtful early examples include Farvar and Milton (1972); Berger (1976); Agarwal *et al.* (1987). A recent paper by Fletcher *et al.* (2021) debunks the very concept of wilderness, implying that the presence and influence of people may have been, in places, just missed entirely. See also: ICCA Consortium, 2021; WWF International *et al.*, 2021 and Asia Indigenous Peoples Pact *et al.*, 2022.

1672   Borrini-Feyerabend *et al.*, 2013.

1673   Stevens *et al.* 2016a; Stevens *et al.* 2016b; Stevens *et al.*, 2024a.

1674   This is the first of three objectives, with the other two (sustainable use and equitable share of benefits) possibly subsumed.

planet website[1675] and **includes governance type**. Since 2019, information is also made available on OECMs. At the time of writing, just over 16% of terrestrial and inland waters and just over 8% of the marine surface is under protected areas. The proportions are slowly but significantly growing as OECMs are also included.

The **extent of 'conserved areas' on our planet** is **not known, monitored or reported**. WCMC does not collect data on conserved areas *per se* but for a few years has been collecting data on ICCAs— territories of life. Information is voluntarily submitted by the relevant custodians and WCMC keeps an **international ICCA Registry**.[1676] WCMC has also been asking the ICCA custodians whether they consider it possible and appropriate to include their territories in the WDPA and, more recently, in the OECM database.

While the amount of information gathered so far in the ICCA Registry is minimal, the estimate that customary commons may cover over *half of the terrestrial surface*[1677] reveals the work ahead if WCMC wishes to identify and possibly help to secure and support the territories of life that exist there. Crucially, the surface under the original commons is known to include most forests, rangelands and wetlands, and arguably also coral reefs, hence the territories and coastal areas richest in biological diversity on our planet.[1678] Recently, some studies have started making quantitative estimates of the coverage of 'conserved areas' to derive conservation-related results.[1679]

What is governance?

'Governance' describes the process of making **decisions** and ensuring that such decisions are **implemented** and **respected** in society. The key relevant questions are 'who?' and 'how?' (see also Table 7), which describe the properties of 'diversity' and 'quality'. To those, the property of 'vitality' adds information about duration and excellence of performance, and inspiration. Governance processes are grounded in decision-making but involve much more than that— from well-informed situation analyses to allocation of resources, from diligent implementation of decisions to the capacity of eliciting respect and a caring attitude in society.[1680]

Governance is related to, but **distinct from, management**, which is the sum of activities undertaken to achieve specific objectives. In this sense, management may be a purely technical subject— carrying out activities with given means and monitoring their results. Governance, on the other hand, is about deciding the objectives and rules that are appropriate and feasible in the given context, making sure that managers have the means to reach the objectives and that society at large is willing and able to respect the rules. Excellent governance not only achieves the desired results in the present. It is also inspiring, and able to evolve and maintain the desired results through time.[1681]

1675   See https://www.protectedplanet.net/en. The site is updated regularly, but data on governance type may not be wholly consistent and data on OECMs is relatively scarce. Another relevant website is the Digital Observatory for Protected Areas (https://dopa.jrc.ec.europa.eu/dopa/ accessed 2024) maintained by the European Union.

1676   www.iccaregistry.org

1677   Veit & Reytar, 2017.

1678   Alden Wily, 2011.

1679   See Corrigan *et al.*, 2018; Garnett *et al.*, 2018.

1680   See Borrini-Feyerabend *et al.*, 2013 and Borrini-Feyerabend & Hill, 2015. Governance can also be described as "the interactions among structures, processes and traditions that determine how power and responsibilities are exercised, how decisions are taken, and how citizens or other stakeholders have their say" (Graham *et al.*, 2003).

1681   Decisions and rules are usually respected when they are well understood and perceived as legitimate by the relevant society. So, effective governance goes beyond taking decisions and attributing resources. It involves understanding, cultural fit, persuasion, accepted values and behaviours and many types of capacities. The institutions and practices of governance for conservation (Borrini-Feyerabend & Hill, 2015) although considered by some as crucial (see Franks & Booker, 2018) remain limitedly acknowledged and understood, including in professional conservation circles, as pointed out by Barret *et al.* (2006); Bennet and Dearden (2014); Bennet *et al.* (2017); and Schreckenberg *et al.* (2018).

This work focuses on **governance institutions** for conserved and protected areas, which we understand as **dynamic systems of organisations** and **processes** by which people conceive decisions, customs and rules and ensure their implementation and respect (including by assigning the necessary resources and providing inspiration to society). Institutions exist and operate embedded in their own language, history, worldviews, and sets of policies in society.

Table 7.

Key questions that describe and distinguish 'management' and 'governance' for conservation

Management *(effectiveness)*	• *what is done* in pursuit of given conservation objectives, with given means, and through time? • are the *objectives achieved*?
Governance *(diversity, quality and vitality)*	• *who decides* the conservation objectives? • *who ensures* that decisions are implemented and respected? • *how* are those decisions taken? • *how* is implementation ensured? • for *how long* has the institution been 'functioning'? • is the institution functioning with *excellence*? • has it been *evolving?* • does it demonstrate *motivation and energy?* • is it *inspiring* for society? • for *how long* is it likely to maintain conservation, evolve and inspire?

Governance institutions for conserved and protected areas can be **remarkably diverse**— from elected committees and governing boards presiding over large staff and enormous budgets regulated by national legislations to councils of elders relying upon traditional practices, cultural values and only social pressure to ensure the respect of rules. The institutions may be formal or informal, and at times are fully 'perceived' and understood only by the people most directly concerned. In some cases, and particularly so during periods of social turmoil and change, the governance institutions that consider themselves legitimately in charge of the same area may be **multiple, overlapping, competing and even contradictory**— including as bearers of diverse notions of 'conservation' and 'wellbeing'.

Why should we care about governance?

Governance institutions are **political and cultural** entities. As they hold and exercise decision-making power, they **regulate access to, and use of, land, water and the other gifts of nature** necessary to nourish the livelihoods and wellbeing of human communities. As institutions also express and articulate language,

history, norms and values, they also **contribute to creating worldviews and regulating meanings** in society. Together, regulation of access and meaning shape the political economy and culture of societies. There are thus several reasons for striving to understand and strengthen the governance institutions for the territories and areas we value and depend upon:

- Governance institutions are key determinants of what happens to **nature**. Depending on how landscapes, seascapes, ecosystems and species have been governed and managed through time, we find them today 'conserved' and thriving, or in various ways degraded and impoverished.[1682] The accumulation of impacts can even affect global phenomena, such as planetary climate.
- Governance institutions are key determinants of what happens to **people**. As key determinants of **political economy** at various levels, they can immensely contribute to human livelihoods and wellbeing, but also undermine them (e.g. via unfair sharing of the gifts of nature and of the costs and benefits of production and conservation practices).[1683]
- Governance institutions weave connections among the political, socio-cultural, economic and ecological elements of our lives. As "…human history is the continuous products of diverse modes of human-environmental relations…",[1684] the institutions that govern nature reflect the **hierarchy of values** of the concerned societies and their dominant **worldviews**.[1685] Their adopted **narratives** motivate and orient people.
- Governance institutions can generate in people deep **emotional resonance** and **meaning** (e.g. being 'custodians', 'stewards' or 'guardians' of a 'territory of life', having an identity as the 'peoples of a given territory'). This is particularly true for those who live in close contact with nature, depend on it, and perceive themselves as an integral part of it. The emotions connecting people to their territories can prompt tremendous work, generosity and creativity but also unleash racist hate and the capacity to commit abuses and violence against those perceived as 'others'. In this sense, beyond fairness and equity, governance institutions embody the challenging task of **empowering the vision of the present and of the desired future**[1686] of those who live with and by nature.

What are governance diversity and quality?

Three essential and closely related aspects of governance are its diversity, quality and vitality. Governance diversity and quality have been discussed in depth at the IUCN World Parks Congresses of 2003 (Durban, South Africa)[1687] and 2014 (Sydney, Australia)[1688] and during meetings of members and partners of the IUCN Commissions and ICCA Consortium. The results of all those discussions are described in relevant literature and policy documents.[1689] We note below only their basic definitions, while much of this work— in particular Parts I, II, III and V— is dedicated to vitality.

1682   In a degraded ecosystem, resources are depleted or polluted, ecological processes are altered, and habitats are being lost— the ecosystem's ecological integrity and health are diminished.
1683   In a time of environmental crises, governance is bound to make the key difference between sanity and disaster; see Biermann & Boas, 2010.
1684   Descola & Palsson, 1996.
1685   In this sense, many believe today that conservation institutions should go through a thorough process of de-colonisation (Adams & Mulligan, 2003).
1686   Some would mention social projects or life plans (planes de vida), others would reject the focus on projects that such plans seem to imply and refer to worldviews (cosmovisions) instead (Alex Alvarez, personal communication, 2020).
1687   IUCN Protected Areas Programme, 2004.
1688   See https://www.cbd.int/doc/meetings/sbstta/sbstta-20/information/sbstta-20-inf-40-en.pdf accessed 2024; IUCN WCPA, 2015.
1689   See, for instance: Borrini-Feyerabend *et al.*, 2013 and references therein; Worboys *et al.*, 2015 (for relevant articles and case studies); and https://www.cbd.int/doc/c/75d4/07a8/95d2c59b0963a9845fd40d3d/sbstta-22-inf-08-en.pdf accessed 2024. Three short movies summarizing the achievements of the governance stream at the IUCN World Parks Congress in Sydney are also available: https://www.iccaconsortium.org/2016/03/01/the-heart-of-a-stream/ accessed 2024.

To understand **diversity**, we need to clarify that any area or territory can be classified as belonging to one of **four main governance types** (no hierarchy implied in the order), according to their key social actors in charge:

- Type A. Governance by government (decisions made by governmental agencies and technical services at various levels, as is often the case for protected areas);
- Type B. Governance by various actors together, also referred to as shared governance (decisions negotiated among diverse actors, also common for protected areas);
- Type C. Governance by private actors, also referred to as private governance (decisions made by individuals, organisations or corporations— usually the landowners);
- Type D. Governance by Indigenous peoples or local communities, also referred to as collective governance (decisions made locally and collectively, as by custodians of territories of life).

For a specific territory or area, we thus speak of **governance type** (who takes the main decisions and makes sure that managers can implement them?) but also of **appropriateness**[1690] of the type (does the current type fit the socio-cultural and ecological context? Does it result from gradual and 'organic' historical evolution or from abrupt and resented land grabbing by private or corporate landowners, or by the State?).[1691]

As governance type characterises a specific single territory or area, **governance diversity** usually refers to the presence of diverse governance types **in a system of conserved and protected areas**. For instance, a national system of protected areas may include areas governed by different actors (e.g. municipalities, private entities, Indigenous peoples, associations, NGOs, diverse ministries, and agencies) and/or protected areas under many and diverse governance arrangements (e.g. direct governance, shared governance, governance coupled with diverse actors in charge of 'delegated management', etc.). We say that such a system is more diverse than a system that, for instance, includes only national parks under a single park agency. The diversity of types of governance can multiply by being combined with the diversity of management categories. This is synthesised in the so-called IUCN Matrix (see Table 8), showing various possible combinations of management category and governance type. These combinations were identified and described by IUCN for protected areas[1692] but can also— *mutatis mutandis*— be used to describe conserved areas.

While 'governance diversity' is best assessed for a system of protected and conserved areas, it can also apply to a single area or territory. This is so when such an area or territory includes geographic **sub-units under different governance types**, as is the case of a protected area that includes private estates and territories of life with diverse governance institutions. In such a case, the protected area could be described as exhibiting governance diversity, possibly under the overall type of shared governance.[1693] Conservation systems or single areas that exhibit **governance diversity** require **efforts to coordinate** among diverse governing actors. They are, however, more **inclusive**, and generally perceived in society as more **legitimate**. As they may devise and implement a greater variety of solutions to problems and shocks, they may also be more responsive, resilient and sustainable through time.

1690   Ibid.
1691   See Haller *et al.*, 2020.
1692   Borrini-Feyerabend *et al.*, 2002; Dudley, 2008.
1693   See Stevens *et al.*, 2024a; Stevens *et al.*, 2024b.

Table 8.

The IUCN Protected Area Matrix, a classification system juxtaposing protected area governance types and management categories

(adapted from Borrini-Feyerabend *et al.*, 2013, p. 44)

IUCN Governance Type / IUCN Management Category	Governance by government			Shared governance			Governance by private landowners			Governance by Indigenous peoples and local communities	
	Federal or national ministry or agency in charge	Local/municipal ministry or agency in change	Government-delegated management (e.g. to an NGO)	Trans-boundary governance	Collaborative governance (various forms of pluralist influence)	Joint governance (pluralist management board)	Governed by individual landowner	…by non-profit organisations (NGOs, universities, etc.)	…by for profit organisations (such as corporate landowners)	Governed by Indigenous peoples	Governed by local communities
Ia. Strict Nature Reserve/ Ib. Wilderness Area											
II. National Park											
III. Natural Monument											
IV. Habitat/ Species Management											
V. Protected Landscape/ Seascape											
VI. Protected Area with Sustainable Use of Natural Resources											

Governance quality concerns the 'how' of taking and implementing management decisions. **'Good governance'** is **guided by socially agreed principles**, expected to promote governance that is both effective and equitable. The principles noted by IUCN include *legitimacy and voice*, *direction*, *performance*, *accountability*, *fairness and respect for rights*.[1694] All these principles are inherently valuable but become essential in contexts of power-asymmetries and diverse cultures and concerns. Quality is generally examined with respect to the governance of a specific territory or area, but it can also refer to the governance of a *system* of territories and areas.

For any given conserved or protected area, **governance** can, and does, change with time. Type and quality of governance **can improve and adapt to changing contexts**, enhancing their results for conservation of nature and for the livelihoods and wellbeing of the concerned communities and society at large. The analysis of governance vitality makes clear that changes in type and quality of governance institutions are often *necessary* to enable appropriate responses to the inevitably changing surrounding conditions.

Governance vitality expresses the capacity of a governance institution to **function through time, fully, and in inspiring ways**. For an analysis of governance vitality, please refer to this entire work, and, in particular, to Parts I, II, III and V.

1694   The good governance criteria adopted by IUCN (Dudley, 2008; Borrini-Feyerabend *et al.*, 2013) were inspired by criteria developed by UN agencies in the second half of the 20th century. The annexes of Borrini-Feyerabend *et al.* (2013): https://www.iucn.org/sites/default/files/import/downloads/annexes_to_governance_of_pa.pdf accessed 2024 offer specific questions and indicators for all the IUCN-adopted criteria. Other criteria— and other concepts and terms to describe similar criteria— are possible. For instance, Annex II of CBD Decision 14/8 (CBD, 2018b) discusses the concept of equity as central to good governance, and spells it out according to the three dimensions of recognition, procedure and distribution.

Vitality interlude

What we see in a forest as 'mushrooms' are just the tiny fruiting bodies of fungi— huge living entities in healthy soil. Within soil, fungi exist as mycelium, a self-reproducing dynamic entity that breaks down rocks, creates new soil and allows plants to nourish themselves and communicate. Like water, mycelium continuously 'networks' and adjusts to fit its environment, taking all sorts of forms and dimensions. Mycelium is composed of hyphae— hollow filaments that transport nutrients and water in seemingly anarchic pulsations. Mycelium is alive. And it may indeed represent vitality at its purest… as it perceives the world, responds to it, partners and interacts with it via a variety of exchanges, reproduces itself opportunistically and is hardly ever overpowered and brought to die…[1695]

1695   The literature on fungi has grown exponentially in recent decades. An accessible and wonderous summary is provided by Sheldrake (2020). The picture of forest mushrooms in Switzerland is courtesy of Gianfranco Borrini.

Part VII: Conclusions

Everyone does this in different ways.
Knowing that conscious decisions and personal memory
are much too small a place to live,
every human being streams at night into the loving nowhere.
Or, during the day, in some absorbing work.

Jelaluddin Balkhi, known as Rumi (1207–1273)[1696]

Il faut cultiver notre jardin.

Voltaire (1694–1778)

I cannot cope with the idea of objectivity and neutrality. I'm not
neutral about suffering, I'm not neutral about injustice.

Chris Hedges, 2022b

This work has proposed a **journey through stories, insights and attempts at shedding light** on phenomena as rich as life, and as arresting as change, waste and loss. We doubt the power of any concept to make full sense of the abundance of what is offered by the past and present relations of peoples in/as nature. Yet, our exploration has revolved around a few broadly encompassing concepts: **'governance vitality'**, as it applies to the institutions that have been conceiving, implementing and securing the respect of decisions and rules about their natural environments; **'custodianship'**, describing the vital, affective bonds connecting communities with their territories, bridging a heritage from the past with a collective vision of a desired future; and **'territories of life'**— those territories that generate and sustain the wealth of nature… but also the livelihoods, culture, identity and living legacy of their custodians through time. These concepts and the connections we found among them describe for us, at least in part, why some people and nature have been flourishing in the past *together*. There is little doubt that they are in jeopardy today but, hopefully, they may continue to apply for the institutions that will support humans and nature in the future. For that, we offered in this work some insights, tools and policy suggestions.

The genus *Homo* has thousands of millennia of accumulated experience of life in small groups. Building upon that, human **institutions** have been evolving— generally slowly, trying to better fit their ecological and social context, becoming more complex in terms of organisations, rules, technologies, systems of enforcement, and symbolic justifications of their own roles and functions. As in the past, our contemporary institutions interweave with political powers and cultural expressions, distribute fortunes and disasters, and nourish worldviews and narratives. The last couple of centuries, however, have brought about a vertiginous acceleration of institutional change, which is seemingly independent from context. Today, only a few institutions (some described among our case examples) have a long-term view and remain closely tailored to place, maintaining the unique features that connect a custodian community to its heritage. Most institutions with the power to decide over

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1696   Translation by Barks (1995).

territories are large-scale, distant and professionalised. Many are mostly, if not exclusively, geared to short-term economic benefits. Even those that are not, are often staffed by professionals with impressive scientific credentials but little experience with specific local knowledge and caring: the territories they manage could be 'anywhere'. As environmental crises deepen, as social and environmental disparities ('injustices') become ever more evident, as State governments keep engulfing themselves in military adventures, as cultures are flattened by market interests and the tools of persuasion and addiction… we perceive a sense of diminishing vitality in our connection with nature, we recognise a need for a more compelling sense of social and territorial identity, and of meaning.

Governance vitality

We explored the vitality of governance institutions as their **"demonstrated capacity to function through time, fully, and in *inspiring* ways"**. So defined, vitality seems an excellent indicator of the health of 'humans *in/as* nature' (including for those who still see the two as separable). It describes the functioning of organisations and rules capable of maintaining the life-supporting functions of nature, including its diversity of ecosystems, species and genes, while providing for human livelihoods and responding to social-ecological change. We thus discovered vitality in examples of traditional institutions governing the **conserved areas** that have, for centuries, sustained the mobile lifestyles of foragers, pastoralists and shifting cultivators, the settled lifestyles of monastic communities, and the various regimes of communities governing their commons. We also found vitality in some examples of **protected areas**— a phenomenon quite recently superimposed by governments upon many pre-existing realities. In different countries, protected areas were born for diverse reasons, adopted different approaches, and generated a variety of results and social impacts. In the last couple of decades, considerations of 'governance types' and 'governance quality' have enhanced the awareness of such impacts and broadened the spectrum of institutional choices. We briefly discussed how this is offering new opportunities for conserved and protected areas in all countries, including opportunities for enhanced sustainability and social and environmental justice.

Drawing from real-life experiences of conserved and protected areas, including thirty case examples described in this work in a bit more detail, we identified **five features of institutions** that appear **associated with governance vitality**: 1. strategic adaptability; 2. innovation and creativity; 3. connectivity and collaboration; 4. wisdom from local experience; and 5. capacity to elicit 'inspiring collective values' grounded in the relevant territories and areas. While all such features seem valuable and desirable, the latter stand out by providing a direct connection with the kernel of 'biological purpose' we assume to exist in all human groups (i.e. survival and reproduction), enriched by culture-dependent 'symbolic meanings', and forms of 'emotional attachment' to specific places and people. From diverse mixes of biological purpose, symbolic meanings and emotional attachments emerge the bonds that connect people and nature. And, from those bonds, the institutions governing conserved and protected areas draw the **energy to function** and the **arguments to convince** their communities and societies to adhere to, and respect, the decisions and rules they devise. Remarkably, **strong bonds between communities and their territories** can generate some of the most rewarding sentiments felt by humans, including identity, kinship, pride, dignity, collective security and responsibility, a sense of achieved justice, contentment, personal commitment and shared celebration. Yet, the same bonds demonstrate their power also by being able to elicit some of the worst and most miserable sentiments and behaviours, such as fanatic nativism, intolerance, racism, and brutality and violence towards 'outsiders' and 'others' in general.

As we reached one of the stepping stones in this work— achieving a sense of where institutions draw the spirit and breath necessary for vitality— we did not derive a theory, explanatory model or general statement. We

did consolidate, however, our perception of the features that support vitality, of the opportunities and dangers intrinsic in strong motivations, and of the many impacting circumstances that are both within and outside the grasp and control of the people concerned. Our answer to the question 'what keeps a governance institution vital?' is simple and relatively open, but also rich enough to draw a parallel between the vitality of governance institutions and the vitality of biological creatures. And the answer is affirmative. Yes, there exist **intrinsic elements of governance vitality**, including the five characteristics that we have described in concrete examples, but they all **need to combine with a supporting and non-overpowering context**.

Our exploration continued in Part V by conceiving a **governance institution** as a **system**. This helped us to discuss its vitality in light of other concepts explored in academic circles in recent decades, such as resilience, constitutionality, social-ecological fit or sustainability. We identified important similarities with those concepts, but also what is new in the perspective introduced by vitality. Further, describing institutions as 'systems' helped us to highlight the importance of factors like **language** and narratives, mainstream **worldview**, and perceptions of reality. As the forces of modernisation have globally standardised management practices and commercialised nature, we wondered what the consequences may be of re-articulating governance in the local communities' own and diverse languages, worldviews and perceptions of people in/as nature. In tune with some powerful Indigenous voices, we considered whether vitality may be dependent upon a **plurality of endogenous governance processes**— each community governing its territory according to the path proper to its own heritage and culture.

In Part V, we described some tools and insights to try to respond to problems. We offered a **simple exercise** aimed at **better understanding and enhancing governance vitality**— a workshop designed for people engaged in governing and managing a specific conserved or protected area and willing to collaborate with concerned others. We listed questions and indicators and outlined a process for the workshop to facilitate the self-assessment of institutional vitality as a ground for action towards desired change. Despite 'vitality of governance' being already included as part of conservation standards (i.e. as one of the criteria for the IUCN Green List of Protected and Conserved Areas), we recommend self-assessment rather than external assessment. There seems to be less meaning in assessing vitality to develop a report or a score than in **self-assessing vitality** to promote one's own functioning, to identify and tackle impeding factors, to **develop the full potential of one's own institution** to obtain conservation and livelihoods results. Awareness of the sources of one own's vitality, after all, is bound to deeply affect such vitality itself. Such formative self-assessment processes may take place as part of broader governance assessments, or of processes of institutional self-strengthening, renewal and healing.

Custodianship

At the heart of our exploration of examples and insights about governance vitality, we found custodianship— a bond between a community and a territory perceived not as 'property' but as 'heritage', which is fundamental for the collective identity and autonomy of the caretaker. Custodianship is nourished by **sustained attention**— often consequent to direct dependency and time spent in close touch with nature. It is nourished by **curiosity** and **imagination**, a desire to understand which behaviours generate positive responses and which ones are wasteful and destructive. Often, it is also nourished by a sense of wonder, the **awe** and spiritual wellbeing that people perceive as grounded in specific places. Crucially, custodianship is revealed by the **local knowledge and mētis** that inform the behaviour of a community and by the **long-term view** embedded in decisions. Not least, it is revealed by the **emotions** experienced by people— the feeling of intimacy and **affectivity** and the sense of place that link the vitality of their institution with the vitality of nature. Communities who experience

such attachment to place may feel a sort of umbilical connection with nature and other people, something akin to the life instinct itself.

We avoided offering a definition of custodianship, hoping that examples, words, music, silence and the inner knowledge of unity and separation among all that exists may provide sufficient insights. We need no special effort, in the porous space between the 'real' and the 'mystical', to find echoes of the contentment and fear, quietude and excitement, mutual solidarity and spiritual awareness that our ancestors could have felt while perceiving themselves '*being in/as nature*'. With that, communities have experienced their own survival and death, thriving and perishing. They have associated rituals, ceremonies and symbolic meanings. They have accumulated and passed on bodies of knowledge, mētis, and the inspiring collective values that nourish **a sense of what is good**, **precious and just**. It is likely here that custodianship merges with the feeling of **'being a community'**, relates to satisfied needs but also to the sense of **kinship**, **collective identity**, **autonomy** and **social morality** that a community develops across generations. It is likely here that custodianship bridges heritage and a desired collective future, and— in our understanding— also merges with **governance vitality**.

Based on these considerations, we proceeded to examine '**community conservation**'— the protective and sustainable interaction of communities with their natural environments that is easily associated with custodianship. This phenomenon is positive for human survival and, arguably, it may have taken place since the beginning of time. Closer to us, however, when it has become most needed, the practice of community conservation is seen by many as outdated, it may even seem to be fading... To understand why it may be so, we traced the **history of the concept as a strategic approach to conservation**. Surprisingly, the discovery and description of 'community conservation' are remarkably recent— **only about 50 years old**. Historians and commentators have been more forthcoming in stressing the early conservation role of powerful individuals, such as the scientists and philanthropists who, in the 19th and 20th centuries, inspired societies to set aside protected areas and regulate human behaviours for the love of species, scenery and sustainable hunting.

There is no doubt that enlightened individuals have played a role in saving an important part of the diversity of life from the mounting degradation of the last few centuries, in particular as counterweights to colonial exploitations and 'development' initiatives. There is no doubt that State governments also do so, today, when they establish and maintain protected areas. But human communities have been gathering and refining knowledge and mētis about their local environments *for millennia*. They have been devising, implementing and respecting their own rules. They have been maintaining, using sustainably and often modifying, even locally enriching, the wealth of nature. Yet, while their behaviour spells out the very meaning of 'conservation' as we understand it today... their role has long remained invisible, when not openly antagonised. For some, their role is still invisible or mistrusted today. In this sense, the overdue recognition of **'community conservation' is a cornerstone of a different worldview in the relations between humans and nature**, on a par with understanding and supporting the various dimensions of social and environmental justice. In Part IV of this work, we recounted how 'community conservation' emerged in the 1970s, at the time when grassroots custodians were struggling possibly more than ever to keep *practising it* on the ground. We also briefly recalled how, soon after that, community conservation was discovered, forgotten, debated, belittled, resuscitated... and how today it is hailed in some conservation discourse while in the strongest danger of disappearing in practice.

Among the possible reasons for the **recent alternating fortune** of community conservation is that, after the Earth Summit in Rio and across the turn of the millennium, the concept and practice of 'protecting nature' developed into a major enterprise and started to attract large financial resources. As a consequence, the choice of intervention approach carried more than strategic meaning— it deeply intertwined with the interests of governments, development actors and relevant professionals, among many others. On its part, the concept of

community conservation was also becoming increasingly connected with issues of environmental and social justice, which were inspiring for activists and community leaders but made others feel threatened. We briefly discussed this and related policies and events across the turn of the millennium, when topics like '**traditional knowledge**', '**sustainable use**' and '**self-determination**' came to the forefront as both meaningful and controversial. With those, the community conservation idea came to be owned and described, by and large, by custodians in their own terms and by international policy actors in theirs. Meanwhile, Indigenous peoples and local communities started organising in many ways, including by self-identifying and self-strengthening 'as custodians' and by offering mutual recognition and support among peers for self-determination in 'territories of life'.

At the time of writing, community conservation is facing a **recognition crescendo**, as **territories of life** also came to be **perceived** in society **as conserved areas**— one of the few **beacons of hope** capable of stemming environmental crises and climate change. In this light, we noted that the **recognition** of the global value of territories of life offers a **powerful ground for self-determination** of their custodians. But we also saw an entirely different and equally possible fate: custodian communities absorbed into the mainstream, captured into the same trap that perpetuates social and environmental injustice and creates ecological disasters in the first place. To gain insights into this, we considered some recent calls to provide economic support and legal land rights to custodian communities. These calls may, and hopefully will, end up achieving excellent results. **Equally probably**, however, they may lead to providing inappropriate or counterproductive support and firing up destructive local conflicts, leading to the **demise of community institutions**. If a community loses the sense of 'being a community' and the capacity to act as such, where would it find the collective will, knowledge, mētis and affective care necessary to care for a territory? Community custodians may pretend to exist while losing their liveliness, capacities and meaning… as if their inner life-giving sap had run dry. Facing such ominous prospect, **did we learn anything useful**, in the journey recounted in this work, **to orient communities and policy-makers** towards the one or the other possible outcome just mentioned? We hope we did.

For one thing, we understood that traditional lifestyles— foraging, mobile pastoralism, shifting cultivation, community governance of territories and commons— possess many of the features that characterise both institutional vitality and custodianship. Regardless of the deficiencies and ills that some traditional societies demonstrate, they have drawn their livelihoods in many and diverse environments in ways that remained sustainable through centuries. Their **bonding** with their territories, the **long-term orientation** and their **emotional attachment** to place are usually strong, providing outstanding sources of energy and vitality. As we deplore the *hubris* of modernity that too often has misunderstood, maligned and criminalised them, we should not underestimate the extent to which **contemporary societies may learn from traditional lifestyles** in order to become sustainable. Their strategic adaptability, wise use of the gifts of nature and allegiance to the common good of the community before the private goods of individuals offer general hints. More specifically, the study of the **social-ecological history** of each territory and of the lifestyles that developed there can provide excellent lessons for the people who still want to care for specific lands and gifts of nature. Thus, our journey strongly encourages the exploration of local social-ecological history, the **revaluation of** the **local knowledge and mētis** of custodians and, as appropriate, of the **institutions fitting the** specificities of ecological and cultural **context**.

Yet, many traditional governance institutions that did fit their contexts well have been overpowered and flattened by destructive phenomena or by the lack of needed internal and external support. We briefly illustrated this with examples of struggles, in the last couple of centuries, where territories were sacrificed for the sake of economic development, made unliveable by market-driven exploitation, or torn apart by conflicts that remain active or festering today. Evidently, sound local knowledge and mētis and institutions that have a long-term

vision and fit the context are not, in themselves, sufficient. As their needs and their environments evolve, communities need to navigate a perilous strait between disastrous shores. One such shore is the possibility of dissolving as communities, becoming groups of loose individuals controlled only by outside political and economic forces. The other shore is the possibility of remaining a community but entrenching in nativism, intolerance, and the lack of perspective and critical capacity that too often engenders arrogance and brutal, violent behaviours towards all 'others'.

Communities *can* navigate that strait successfully. Their governance institutions can demonstrate their vitality by maintaining their capacities for custodianship even as they move outside the confines of traditional lifestyles, cultures and worldviews. Among the case examples described in this work, we found the **characteristics of vitality also in 'modern' institutions**, often benefitting from the enhanced connectivity available in contemporary societies, and from many other of the achievements of modernity and globalisation. To be sure, the potential benefits of globalisation are enormous, including the recognition of *global interdependence* of diverse ecosystems and societies both at the highest level of decision-making and at the level of normal citizens. But there are also enormous dangers. Closely intertwined with our hugely unequal distribution of power and wealth, new challenges are introduced by enhanced connectivity around the world (e.g. epidemics, new dependencies, active disinformation and propaganda leading to violence and war…) but also by the lack of value assigned to local perspectives and 'realities'.

In light of the above, we then discussed how all the characteristics that support vitality might be consciously recognised and highlighted. And we mentioned a few visionary thinkers who have called for a **spiritual reawakening** among the Indigenous peoples and local communities as victims of social and environmental injustice. Will they manage to **'decolonise' themselves**, enhance their self-awareness and embrace their own **resurgence**? As described by Corntassel, Escobar, Farvar and Sutej Hugu— but also Alcorn, Anderson, Banuri, Barkin, Bookchin, Chomsky, Coulthard, Hedges, Kothari, Johnstone, Pimbert, Rahnema and other thinkers briefly recalled or mentioned in this work— this involves becoming **aware of both the politics of depredation** that unequivocally oppress communities, but also **of the politics of distraction** that focus on appealing monetary benefits, concessions of 'rights', and even superficial forms of affirmation of gender, race and ethnic identity. Communities need all their strength and luck to overcome the politics of depredation. To safely withstand the politics of distraction (e.g. offers of monetary benefits, granted 'rights', and affirmations of gender, race and ethnic identity within pre-arranged spaces) they also need to reaffirm their **moral economy of relationships** and **responsibilities and** their **overarching humanity**. Ideally, this would happen with roots in specific territories. Living close to the land, being responsible for what happens to it and to one another, reappropriating local knowledge and mētis, and recreating local kinship and institutions may be needed and constitute fundamental elements of decolonisation and resurgence. All this can and should combine with respecting cultural diversity while recognising the common humanity of all.

Indeed, custodianship can be supported by policy recognition of all sorts of rights, economic valuation of nature, market incentives, compensations for management efforts, and the likes. But it would be foolish for policies to commodify nature to the extreme and then expect that people respect and care for nature. Similarly, it would be foolish for custodians to gain rights to their land without understanding that **nature is the common heritage of humanity**, or to gain respect for one's own people by debasing and discrediting others. Resisting the forces that see nature as a mere commodity while also resisting the traps of fanatic nativism and intolerance is the narrow but feasible path ahead for communities willing to strengthen themselves as 'custodians'.

Territories of life

Custodianship bonds communities to their territories. Adopting an expression born among networks of Indigenous peoples in Latin America and today used across continents, we described those as 'territories of life' and explored them in recent history as they faced the *hubris* of modernity and the unfolding variants of dominant 'reality', 'development', 'economy' and 'democracy', too often unable to see and value them. Most of the case examples of the conserved areas and some of the protected areas recalled in this work deal with territories of life. We go out on a limb in saying this, as we argued that only the relevant custodians can say whether the term is appropriate for them. In a general sense, however, we believe that the very fact of 'being a community' and wanting to build a common future in a given territory generates a **collective sense of responsibility and care** for it. Collective care does not fit the idea of mere 'property' of a territory, seeing nature as an economic asset and thus the imposition of destructive developments as possible. It rather fits the idea of 'heritage', and the demonstrated responsibility of maintaining the relations with the land and within the community. Collective care illustrates much of what we have described as 'custodianship', allowing us to use the term 'territory of life'.

A responsible and caring relation engages communities in shared awareness and values, **physical presence in the territory**, monitoring of its key ecological features, investments in governance, management and research. It is often also expressed in collective events and celebrations. Such an **engagement** with a territory is meaningful, in the sense that it **adds value** to the lives of custodians, but it is also effective as much of it is about **conserving the integrity of a territory** and its capacity to keep offering its gifts through time. While communities may make mistakes in taking and implementing decisions about nature, a growing wealth of literature illustrates that local governance usually has good conservation value. Many communities that enjoy long-term security of governance offer examples of effective and efficient caring for nature, not least because of the vitality they draw from a combination of biological will to survive and reproduce, self-generated cultural meanings, and emotional attachment to place. If we push the imagination beyond the fleeting characteristics of the political powers of today, would we imagine any institution delivering lasting 'conservation of nature' *better* than custodian communities?

Yet, supporting communities in governing territories of life is not a prominent concern of many of today's conservationists. Some even wonder if custodian communities can exist *at all* in contemporary societies. For those who believe they *can*, another question takes priority: could such communities be encouraged and supported to secure the governance of their territories, against the grain of much else that is taking place? Attempting to respond to this challenging question, this work offered specific suggestions for policy-makers, governmental agencies, NGOs, UN agencies and concerned others. In Part V we sketched a few elements of **policies in support of custodians of territories of life**, which could be tailored and adopted at national or sub-national level, as part of strategic approaches to conservation, climate change mitigation and/or other sustainable livelihood goals. The elements include **a call for willing custodian communities** to identify themselves and the specific territories they wish to care for, focusing on the ecologically most valuable units in conserved and protected areas.

Some Indigenous peoples and local communities are currently eager— at times desperate— for policies that could secure the long-standing bonds of custodianship with their territories of life. Others may be weakly engaged today, but willing to strengthen themselves in such roles. Still others may be far from being 'a community' but believe they may *create* a collective spirit by nurturing their attachment to a territory that they will make socially meaningful for them. The policies we proposed in this work see State governments and other actors responding to the self-identified custodian peoples and communities by offering appropriate **social recognition** to them, and **negotiating** with them **specific agreements**, including rights and responsibilities that fit the needs of the

relevant territory. Crucially, this should lead to— or strengthen and consolidate, as the case may be— some **security of governance for the territories of life**. Besides appropriate forms of legal recognition, this may imply keeping at bay the political and economic forces that can overpower the vitality and engagement of custodians.

Custodianship of one's own territory of life is a natural, rewarding and meaningful social engagement, which possesses a long-standing history and could fill a need often unmet in contemporary societies. As we face a future of crises and enhanced turmoil, remarkably little attention is being paid to **local solutions** to environmental problems versus large-scale investments and 'technological escapes'. This work tried to take a step against the current by bringing that possibility **into view**. We believe that **rediscovering and nourishing as many territories of life as possible in the world** deserves to be part of our vision for social and environmental justice and a sustainable future.

Territories of life should be identified, governed and managed following the **endogenous** voices and will of the **custodians** themselves— those **who self-identify** as such, **are mutually recognised by their peers** and go through **self-strengthening processes**. This is what some of the visionary thinkers we recalled, such as Corntassel and Coulthard, have referred to as 'decolonisation' and 'resurgence', processes that often reject the *status quo* and ground themselves on acts of separation and refusal, blockades of unwanted 'development', and the likes. This said, it is a fact that even decolonisation and resurgence can dovetail with sensitive policies and combine with a variety of lifestyles— from the most traditional to the most modern. The willingness and capacities of the custodians are indeed necessary, but often not sufficient, for territories of life to thrive. At least non-interference and at best positive assistance from others are needed for custodians to conserve the integrity of their territories while drawing part, or all, of their livelihoods from them. In fact, for thriving territories of life, other actors in the governmental, non-governmental, inter-governmental and private sectors play important roles. In this sense, the ideal situation is one of **endogenous processes that meet**, so to speak, **'midway' with sensitive supportive policies** and **complementary capacities**— all being mutually reinforcing.

Beyond the apparent success of *Homo sapiens*— demographic expansion, technological prowess, livelihoods developed in a variety of ecological niches— our species has generated the nightmares of weapons of mass destruction and permanent war, social and environmental injustices, diminished functionality of ecosystems, loss of biocultural diversity and climate change. The forces that keep fuelling such nightmares present us with the most serious **challenges to vitality**, not only for the governance of specific territories but for our own species. There is little doubt that an amalgam of hard interests tied to economic growth and controlled by financial, military, industrial, political and media powers regulates the lives and livelihoods of most people alive today. The weakening, demise or implosion of this all-pervasive model is overdue to lessen social and environmental injustices and break the momentum of self-feeding greed and devastation. For that, the complexity of the issues at stake demands **a variety of interventions and changes**— from revaluing cultural diversity to stopping perverse incentives, from rehumanising communication and unmasking self-serving narratives, to empowering social and environmental justice.

Valuing and conserving territories of life by also rekindling the role of communities willing to care for them is just one of such needed changes. But it is not the easiest and cannot be the product of improvisation. It requires time for negotiations and adjustments, in full awareness of dealing with a veritable china shop of culture-based relations, worldviews and institutions. We saw how new sources of energy, new technology and new ideas have created both liberating and pernicious effects during the last few centuries. Had the UN and State governments more seriously engaged with community conservation at the grassroots— as foreseen by the World Conservation Strategy of 1991 and Agenda 21 plan of action of the Earth Summit— we might be better equipped, today, to scale up **support to** communities willing to care for **innumerable territories of life** and **help to fend**

off impending crises. Impressive general pronunciations, however, proved then more appealing than dealing with the complexity of interests entangled in diverse local situations in many countries. In all cases, a regressive backlash soon got rid of the pronunciations as well.

As in the 1990s it is still easier, today, to make broad promises of benefits rather than setting up safeguards, respecting social-ecological complexities and engaging in detailed local negotiations and learning. This is why we underlined, in Part IV, the risks of fast recognition and support to 'community conservation' by State governments and others— the **possible** demise of community institutions and consequent **loss of integrity and diversity of** their **territories of life**. As recommended by some organised custodians themselves, we also argued that processes of self-identification, mutual recognition by peers and self-strengthening are even more urgent than the necessary legal recognition and support in society. Here is thus another lesson we draw from our journey: nourishing decolonisation, resurgence and self-determination within an overall framework of respect for biological diversity and cultural diversity and pluralism is crucially important for people as it is for nature. Pluralism and self-determination are visible expressions of vitality in society as in the landscape. As custodian communities and **territories of life hang in the balance between 'resurgence' and cooption** into the economic mainstream, part of the difference may be made, as we discussed, by '**what comes first**'. Have communities managed to nurture their self-awareness and internal solidarity and made that visible by their respect of rules, and the thriving integrity of their territories? Have they strengthened their governance institutions to be vital enough to stand up against the 'politics of distraction' and fight against the devastation and commodification of nature? Have they been recognised among peers and sought harmonious relations between their territories and the territories of others? Or the forces that drive assimilation in the mainstream arrived first and pre-empted local pathways to decolonisation and self-determination, any kind of community self-strengthening, any resistance to the demise of nature?

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Vitality of governance expresses the **capacity to navigate change and nurture meaning**. As we realise that contemporary societies must evolve in major ways in order to become just and sustainable, we inevitably see the institutions governing conserved and protected areas as a reflection of such societies. If they must also evolve, the concept and practice of local, collective **custodianship of territories of life** may offer some inspiration as part of larger solutions. Building upon the amazing but unwise and unsustainable achievements of the carbon burning age, we may come to value people, nature and their kinship and *relations* more than money and power, to regulate markets to benefit everyone rather than the other way around, to nourish critical inquiry and collaboration and to appreciate the vitality and biological diversity of nature as they thrive in **cultural pluralism**. Crucially, we may **refuse the scourge of colonial and racist attitudes and their accompanying wasteful and destructive militarism and perennial war**… possibly, the only path that could free the resources now necessary to stabilise the climate and respond to our many social and environmental needs.

At the time of writing, a dramatic acceleration in the amount and severity of global crises sees countries entangled in old attitudes and short-sighted interests. Financial speculations and militarism are being fuelled, rather than diminished, and the SDG targets are regularly unmet. Most countries seem unable to break out of the impasse, the most powerful seemingly the most entangled. This work calls for a radical change of course. It invites us all to set clear limits to financial and military might and **strengthen** all that nourishes the collective, affective, diverse, peaceful, just and vital **relations** that bring us together as communities, bond us with our territories as custodians, and keep us alive in/as nature.

'Endlude'

Faint, drifting from the city, a crow's cry
Fades. Full of wild grace, egrets sleep.
Hair white, a guest of lakes and rivers,
I tie blinds open and sit alone, sleepless.

Tu Fu (712–770)
(translated from the Chinese by David Hinton)

城烏啼眇眇
野鷺宿娟娟
皓首江湖客
鉤簾獨未眠

杜甫

References

Aagesen D., 2000. "Crisis and conservation at the end of the world: Sheep ranching in Argentine Patagonia", *Environmental Conservation* 27 (2): 208–215.

Aaronson T., 2013. *The Terror Factory: Inside the FBI's Manufactured War on Terrorism*, Ig Publishing, New York (NY, USA).

Abram N., H. McGregor, J. Tierney *et al.*, 2016. "Early onset of industrial-era warming across the oceans and continents", *Nature* 536: 411–418.

Acosta A., 2013. "Extractivism and neo-extractivism: Two sides of the same curse", in Permanent Working Group on Alternatives to Development, 2013. *Beyond Development*, Rosa Luxemburg Foundation, Amsterdam.

Adams W.M., 2004. *Against Extinction: The Story of Conservation*, Earthscan, London.

Adams W.M., 2009. *Green Development: Environment and Sustainability in a Developing World*, Routledge, New York (NY, USA).

Adams W.M. and M. Mulligan (eds.), 2003. *Decolonizing Nature: Strategies for Conservation in a Postcolonial Era*, Earthscan, London.

Adubato S., 2017. "Toward a monastic notion of the common good", *Church Life Journal,* https://churchlifejournal.nd.edu/articles/toward-a-monastic-notion-of-the-common-good/ accessed 2024.

Agarwal A., D. D'Monte and U. Samarth, 1987. *The Fight for Survival*, Center for Science and the Environment, New Delhi.

Agarwal B., 1992. "The gender and environment debate: Lessons from India", *Feminist Studies* 18 (1): 119–158.

Agrawal A., 2001. "Common property institutions and sustainable governance of resources", *World Development* 29 (10): 1649–1672.

Agrawal A. and C.C. Gibson, 1999. "Enchantment and disenchantment: The role of community in natural resource conservation", *World Development* 27 (4): 629–649.

Agren D., 2018, "The Mexican Indigenous community that ran politicians out of town", *The Guardian* https://www.theguardian.com/world/2018/apr/03/mexico-indigenous-town-banned-politicians-cheran accessed 2024.

Aguilar S.A., 2020. *Sistema de Autogobierno: Ayutla de los Libres, Guerrero*. Tesis de maestría en ciencias políticas, Universidad Autónoma de Puebla, Mexico.

Aladin, N.V. and W.T.W. Potts, 1992. "Changes in the Aral Sea ecosystems during the period 1960–1990", *Hydrobiologia* 237: 67–79 .

Alcorn J.B., 1993. "Indigenous peoples and conservation", *Conservation Biology* 7 (2): 424–426.

Alcorn J.B., 1997. "Indigenous resource management systems", pp. 8–13 in Borrini-Feyerabend, G. with D. Buchan (eds.), 1997. *Beyond Fences: Seeking Social Sustainability in Conservation*, vol II, IUCN (Gland) and Cambridge (UK).

Alden Wily L., 2011. *The Tragedy of Public Lands: The Fate of the Commons under Global Commercial Pressure*, CIRAD and ILC, Rome.

Alden Wily L., 2018. "Collective land ownership in the 21st century: Overview of global trends", *Land* 7 (2): 68.

Alden Wily L. and S. Mbaya, 2001. *Land, People, and Forests in Eastern and Southern Africa at the Beginning of the 21st Century*, IUCN, Nairobi.

Alifriqui M., 2016. «Aires conservées autochtones et communautaires au Maroc : les *agdals*", ICCA Consortium, https://www.iccaconsortium.org/2016/02/29/aires-conservees-autochtones-et-communautaires-au-maroc-les-agdals/ accessed 2024.

Aligica P.D. and V. Tarko, 2011. "Polycentricity: From Polanyi to Ostrom and beyond", *Governance* 25 (2): 237–262.

Allen C.M. and S.R. Edwards, 1995. "The sustainable-use debate: Observations from IUCN", *Oryx* 29 (2): 92–98.

Allen J.C., 2007. "Morphing rural community development models: The nexus between the past and the future", *Community Investments*, Federal Reserve Bank of San Francisco 19 (1): 16–20.

Allen T.F.H. and T.W. Hoekstra, 2015. *Toward a Unified Ecology*, Columbia University Press, New York (NY, USA).

Alpert P., 1996. "Integrated conservation and development projects", *BioScience* 46 (11): 845–855.

Altieri M.A., 1983. *Agroecology: The Scientific Basis of Alternative Agriculture*, University of California, Berkeley (California, USA).

Alves-Pinto H.N., C.L.O. Cordeiro, J. Geldmann, H.D. Jonas, M. Palumbo Gaiarsa, A. Balmford, J.E.M. Watson, A. Ewa Latawiec and B. Strassburg, 2022. "The role of different governance regimes in reducing native vegetation conversion and promoting regrowth in the Brazilian Amazon", *Biological Conservation* 267: 109473.

Amend S. and T. Amend, 1995. *National Parks without People? The South American Experience*, IUCN, Quito.

Amnesty International, 2023. *Amnesty International Report* 2022/23: The State of the World Human Rights, Amnesty International, London.

Amory Lovins, N.B., L. Hunter Lovins and L. Ross, 1980. "Nuclear power and nuclear bombs", *Foreign Affairs* 58 (5): 1137–1177.

Andersen I. and E. Enkerlin-Hoeflich, 2015. "The World Parks Congress 2014: Inspiring solutions for parks, people and planet", *Parks* 21 (1): 7–12.

Anderson G., 2018. *The Realness of Things Past*, Oxford University Press, New York (NY, USA).

Anderson G., 2023. "Plural histories", contribution to a Great Transition Initiative Forum, https://www.greattransition.org/images/Big-History-Anderson.pdf accessed 2024.

Andersson K.P. and E. Ostrom, 2008. "Analyzing decentralized resource regimes from a polycentric perspective", *Policy Sciences* 41: 71–93.

Andrias K. and B. Sachs, 2021. "Constructing countervailing power: Law and organizing in an era of political inequality", *Yale Law Journal* 130 (3): 546–635.

Angelsen A., 1995. "Shifting cultivation and 'deforestation': A study from Indonesia", *World Development* 23 (10): 1713–1729.

Aragón Andrade O., 2013. "El derecho en insurrección. El uso contra-hegemónico del derecho en el movimiento Purépecha de Cherán", *Estudios y Pesquisas sobre as Américas* 7 (2): 37–69.

Aragón Andrade O., 2020. "Intercultural translation and the ecology of legal knowledges in the experience of Cherán, Mexico: Elements for a new critical and militant legal practice", *Latin American and Caribbean Ethnic Studies* 15 (1): 86–103.

Armelagos G., A. Goodman and K. Jacobs, 1991. "The origins of agriculture: Population growth during a period of declining health", *Population and Environment* 13 (1): 9–22.

Armiero M. and W. Von Hardenberg, 2013. "Green rhetoric in blackshirts: Italian fascism and the environment". *Environment and History* 19 (3): 283–311.

Armitage D., 2008. "Governance and the commons in a multi-level world", *International Journal of the Commons* 2: 7-32.

Armitage D., R. Plummer, F. Berkes, R.I. Arthur, A.T. Charles, I.J. Davidson-Hunt and E.K. Wollenberg, 2009. "Adaptive co-management for social–ecological complexity", *Frontiers in Ecology and the Environment* 7 (2): 95–102.

Arnold G. 2010. *The A to Z of the Non-aligned Movement and the Third World*, Scarecrow Press, Lanham (Maryland, USA).

Arrighi G., 1994. *The Long Twentieth Century*, Verso, London.

ASATRIZY and J.C. Riascos, 2008. "Territorio de la Asociación de Autoridades Tradicionales Indígenas de la zona de Yapú -ASATRIZY: Umu-Kaja Yepa", Report and ICCA database, accessed 2023 https://www.iccaconsortium.org/wp-content/uploads/2015/08/grassroot-colombia-umu-kaya-yepa-2008-es.pdf

Asia Indigenous Peoples Pact *et al.*, 2022. *Reconciling Conservation and Global Biodiversity Goals with Community Land Rights in Asia*, RRI Pubs., Washington DC.

Aubert M., R. Lebe and A.A. Oktaviana, 2019. "Earliest hunting scene in prehistoric art", *Nature* 576: 442–445.

Auclair L., 2012. "Un patrimoine socio écologique à l'épreuve des transformations du monde rural" in Auclair L. and M. Alifriqui (eds.), 2012. *Agdal –Patrimoine socio-écologique de l'Atlas marocain*, ICRCAM-IRD, Rabat.

Auclair L. and M. Alifriqui (eds.), 2012. *Agdal –Patrimoine socio-écologique de l'Atlas marocain*, ICRCAM-IRD, Rabat.

Autonomous Territorial Government of The Wampís Nation, 2015. *Statute*, Irutkamu Soledad, https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/01/STATUTE-OF-THE-AUTONOMOUS-TERRITORIAL-GOVERNMENT-OF-THE-WAMPIS-NATION-ENGLISH-ABRIDGED-1.pdf accessed 2024.

Baird I.G., 2013. "Shifting contexts and performances: The Brao-Kavet and their sacred mountains in Northeast Cambodia", *Asian Highlands Perspectives* 28: 1–23.

Bais H.P., P. Sang-Wook, L. Tiffany, R.M. Callaway and J.M. Vivanco, 2004. "How plants communicate using the underground information superhighway", *Trends in Plant Science* 9 (1): 26–32.

Ball N., 1975. "The myth of natural disasters", *The Ecologist* 5 (10): 368–371.

Ballerini M., N. Cabibbo, R. Candelier, A. Cavagna, E. Cisbani, I. Giardina, V. Lecomte, A. Orlandi, G. Parisi, A. Procaccini, M. Viale and V. Zdravkovic, 2008. "Interaction ruling animal collective behavior depends on topological rather than metric distance: Evidence from a field study", *PNAS* 105: 1232.

Banton M., 2007. "Max Weber on 'ethnic communities': A critique", *Nations and Nationalism* 13 (1): 19–35.

Banuri T., 1995, Comments to the discussion following Horowitz (1995), reference listed below.

Banuri T., 1987. "Modernization and its discontents", paper for a WIDER Conference, Helsinki, accessed 2023 https://www.wider.unu.edu/sites/default/files/WP33.pdf accessed 2024.

Baragwanath K. and E. Bayi, 2020. "Collective property rights reduce deforestation in the Brazilian Amazon", *Proceedings of the National Academy of Sciences* 117 (34): 20495–20502.

Barau A.S., L.C. Stringer and A.U. Adamu, 2016. "Environmental ethics and future oriented transformation to sustainability in Sub-Saharan Africa", *Journal of Cleaner Production* 135: 1539–1547.

Barker G. and M. Janowski (eds.), 2011. *Why Cultivate? Anthropological and Archaeological Approaches to Foraging–farming Transitions in Southeast Asia*, McDonald Institute for Archaeological Research, Cambridge (UK).

Barkin D., 2000. "Overcoming the neoliberal paradigm: Sustainable popular development", *Journal of Developing Societies* XVI (1): 163–180.

Barkin D., 2023. "Communities in resistance: Forging the communitarian revolutionary subject", in Veltmeyer H. and A. Ezquerro-Cañete (eds.), 2023. *Extractivism and Resistances in Latin America: Alternative Postcapitalist Pathways*, Routledge, London.

Barkin D. and B. Lemus, 2016. "Third World alternatives for building post-capitalist worlds", *Review of Radical Political Economics* 48 (4): 569–576.

Barkin D. and A. Sánchez, 2020. "The communitarian revolutionary subject: New forms of social transformation", *Third World Quarterly*, 41 (8): 1421–1441.

Barks C. (ed.), 1995. *The Essential Rumi*, Harpers, San Francisco (California, USA).

Baron-Cohen S., 2011. *The Science of Evil: On Empathy and the Origins of Cruelty*, Basic Books, New York (NY, USA).

Barrett C., C. Gibson, B. Hoffman and M. McCubbins, 2006. "The complex links between governance and biodiversity", *Conservation Biology* 20: 1358–1366.

Barrow E. and M. Murphree, 2001. "Community conservation: From concept to practice", pp. 24–37 in Hulme D. and M. Murphree (eds.), 2001. *African Wildlife and Livelihoods: The Promise and Performance of Community Conservation*, James Currey, London.

Barthod C. and H. Ollagnon, 1991. "Vers une gestion patrimoniale de la protection et de la qualité biologique des forêts», *Forests, Trees and People Newsletter* 3: 2–35.

Barton D.N., E. Primmer, G. Rusch, I. Ring, R. Santos, A. Chacon and I. Porras, 2013. "*Payments for Ecosystem Services as a Policy Mix",* accessed online 2022.

Barton R.A., 2000. "Primate brain evolution: Cognitive demands of foraging or of social life?" in Boinski S. and P.A. Garber (eds.), 2000. *On the Move: How and Why Animals Travel in Groups*, Chicago University Press, Chicago (USA).

Bartra A.L.M., 2013. "Los haceres de la sociedad en torno al medio ambiente. Capulálpam de Méndez, Sierra Juárez, Oaxaca, México", *Sociedad y Ambiente* 1 (3): 72–88.

Barua M., S.A. Bhagwat and S. Jadhav, 2013. "The hidden dimensions of human–wildlife conflict: Health impacts, opportunity and transaction costs", *Biological Conservation* 157: 309–316.

Bassi M., 1988a. "Sull'organizzazione sociale tradizionale dei Borana: contributo al dibattito". *Africa: Rivista trimestrale di studi e documentazione dell'Istituto Italiano per l'Africa e l'Oriente* 43 (4): 523–542.

Bassi M., 1988b. "On the Borana calendrical system: A preliminary field report", *Current Anthropology* 29 (4): 619–624.

Bassi M., 2002. "The making of unsustainable livelihoods: An ongoing tragedy in the Ethiopian drylands", IUCN CEESP *Policy Matters* 10: 7–12.

Bateson G., 1972. *Steps to an Ecology of Mind*, Ballantine Books, New York (NY, USA).

Bath P., A. Guzmán-Valladares, V. Luján-Gallegos and K. Mathias, 2020. *Conservation Trust Funds 2020: Global Vision, Local Action*, Conservation Finance Alliance, New York (NY, USA).

Bawa K.S., R. Seidler and P.H. Raven, 2004. "Reconciling conservation paradigms", *Conservation Biology* 18: 859–860.

Bednarik R.G., 2020. *The Domestication of Humans*, Routledge, Abingdon (UK).

Bednarik R.G., 2021. "About the origins of the human ability to create constructs of reality", *Axiomathes*, accessed 2023 https://link.springer.com/content/pdf/10.1007/s10516-021-09537-8.pdf

Bennett J.B. and P. Dearden, 2014. "From measuring outcomes to providing inputs: Governance, management, and local development for more effective marine protected areas", *Marine Policy* 50: 96–110.

Bennett M.S., 2021. "What behavioral abilities emerged at key milestones in human brain evolution? 13 hypotheses on the 600-million-year phylogenetic history of human intelligence", *Frontiers in Psychology*, *12*.

Bennett N., R. Roth, S. Klain, K. Chan, P. Christie, D. Clark, G. Cullman, D. Curran, T. Durbin, G. Epstein, A. Greenberg, M. Nelson, J. Sandlos, R. Stedman, T. Teel, R. Thomas, D. Veríssimo and C. Wyborn, 2017. "Conservation social science: Understanding and integrating human dimensions to improve conservation", *Biological Conservation* 205: 93–108.

Berger P.L., 1976. *Pyramids of Sacrifice*, Anchor Books, New York (NY, USA). [Quotes from pp. 184 and 255].

Berger P.L. and T. Luckmann, 1966. *The Social Construction of Reality*, Penguin, New York (NY, USA).

Berkes F., 2009a. "Community conserved areas: Policy issues in historic and contemporary context", *Conservation Letters* 2: 20–25.

Berkes F., 2009b. "Evolution of co-management: Role of knowledge generation, bridging organizations and social learning", *Journal of Environmental Management* 90 (5): 1692–1702.

Berkes F., 2010. "Devolution of environment and resources governance: Trends and future", *Environmental Conservation* 37 (4): 489–500.

Berkes F., 2012. *Sacred Ecology*. Routledge, New York (NY, USA).

Berkes F., 2021. *Toward A New Social Contract: Community-based Resource Management and Small-scale Fisheries*, TBTI Publ.

Berkes F. and C. Farkas, 1978. "Eastern James Bay Cree Indians: Changing patterns of wild food use and nutrition", *Ecology of Food and Nutrition* 7: 155–172.

Berkes F. and M.T. Farvar, 1989. "Introduction and overview", pp. 1–17 in Berkes F. (ed.), 1989. *Common Property Resources. Ecology and Community-Based Sustainable Development*, Belhaven Press, London.

Berkes F. and C. Folke (eds.), 1998. *Linking Social and Ecological Systems. Management Practices and Social Mechanisms for Building Resilience*, Cambridge University Press, Cambridge (UK).

Berkes F., J. Colding and C. Folke, 2000. "Rediscovery of traditional ecological knowledge as adaptive management", *Ecological Applications* 10 (5): 1251–1262.

Berkes F., J. Colding and C. Folke (eds.), 2003. Navigating Social-Ecological Systems, Cambridge University Press, Cambridge (UK).

Berkes F., D. Feeny, B.J. McCay and J.M. Acheson, 1989. "The benefits of the commons", *Nature* 340: 91–93.

Berkes F., C. Folke and M. Gadgil, 1994. "Traditional ecological knowledge, biodiversity, resilience and sustainability", pp. 281–299 in Perrings C.A., K.G. Mäler, C. Folke, C.S. Holling and B.O. Jansson (eds.), 1994. *Biodiversity Conservation. Ecology, Economy & Environment,* Springer, Dordrecht (The Netherlands).

Berlain A., 2021. *Terre et Liberté*, La Lenteur Ed., Saint Michel de Vax (France). [Quote from p. 170]

Bermejo R., 2014. *Handbook for a Sustainable Economy,* Springer, Dordrecht (The Netherlands)

Bernal S., 2012. "The role of sex and reproduction in the evolution of morality and the law" in Sousa, F. and G. Munevar, 2012. *Sex, Reproduction and Darwinism*, Routledge, Oxon (UK).

Berthélemy J. and J. Thuilliez, 2013. "Health and development: A circular causality", *Revue d'économie du développement* 21: 119–147.

Bettinger R., 2016. "Prehistoric hunter–gatherer population growth", *Proceedings of the National Academy of Sciences* 113 (4): 812–814.

Bird-David N., 1990. "The giving environment: Another perspective on the economic system of gatherer-hunters", *Current Anthropology* 31 (2): 189–196.

Bieler A., 2021. *Fighting for water: Resisting privatization in Europe*, Zed/Bloomsbury, London.

Biermann F. and I. Boas, 2010. "Preparing for a warmer world: Towards a global governance system to protect climate refugees", *Global Environmental Politics* 10: 60–88.

Biesele M. 1994. "Human rights and democratisation in Namibia: Some grassroots political perspectives", Paper prepared for the Annual meeting of the African Studies Association, Toronto (Ontario, Canada).

Biesele M and R.K. Hitchcock, 2011. *The Ju/'hoan San of Nyae Nyae and Namibian Independence: Development, Democracy, and Indigenous Voices in Southern Africa*, Berghahn Books, New York (NY, USA).

Binbin V.L. and S. Pimm, 2020. "How China expanded its protected areas to conserve biodiversity", *Current Biology* 30: 331–360

Blench R., 2001. *'You can't go home again'- Pastoralism in the new millennium*, ODI Report, London.

Bliege Bird R., C. McGuire, D.W. Bird, M.H. Price, D. Zeanah and D.G. Nimmo, 2020. "Fire mosaics and habitat choice in nomadic foragers", *Proceedings of the National Academy of Sciences* 117 (23): 12904–12914.

Blum J., 1971. "The European village as community: Origins and functions", *Agricultural History* 45 (3): 157–178.

Bly R., 1980. *News of the Universe*, Sierra Club, San Francisco (California, USA).

Bodley J.H., 1975. *Victims of Progress*, Cummings, Menlo Park (California, USA) [there exist 6 revised versions of this volume].

Boege E., 2008. *El Patrimonio Biocultural de los Pueblos Indígenas de México*, Instituto Nacional de Antropología e Historia, Comisión Nacional para el Desarrollo de los Pueblos Indígenas, Mexico City.

Boivin N.L., M.A. Zeder, D.Q. Fuller, A. Crowther, G. Larson, J.M. Erlandson, T. Denham and M. Petraglia, 2016. "Human shaping of global species distributions", *Proceedings of the National Academy of Sciences* 113 (23): 6388–6396.

Bookchin M. (under Lewis Herber pseudonym), 1962. *Our Synthetic Environment*, Knopf, New York (NY, USA).

Bookchin M., 1980. *Towards an Ecological Society*, accessed 2023 https://theanarchistlibrary.org/library/murray-bookchin-toward-an-ecological-society

Bookchin M., 1993. "What is social ecology?" in Zimmerman M.E. (ed.), 1993. *Environmental Philosophy: From Animal Rights to Radical Ecology*, Englewood Cliffs, Prentice Hall (New Jersey, USA).

Bookchin M., 1995. *Re-enchanting Humanity: A Defense of the Human Spirit against Antihumanism, Misanthropy, Mysticism, and Primitivism*, Bloomsbury, London.

Bookchin M., 2006. *Social Ecology and Communalism* (essays collected by E. Eiglad), AK Press, Edinburgh, (Scotland, UK)

Bookchin M., 2015. *The Next Revolution: Popular Assemblies and the Promise of Direct Democracy*, Essays edited by Bookchin D. and T. Blair, Verso, London.

Booker F. and P. Franks, 2019. *Governance Assessment for Conserved and Protected Areas (GAPA),* Methodology manual for GAPA facilitators, IIED, London.

Borrini G., 1985. "Health and development: A marriage of heaven and hell?", pp. 3–54 in Jackson B. and A. Ugalde (eds.), 1985. *The Impact of Development and Modern Technologies in Third World Health*, Studies in Third World Societies series, College of William and Mary, Williamsburg (Virginia, USA).

Borrini G. (ed.), 1991. *Lessons Learned in Community-based Environmental Management –Proceedings of the Primary Environmental Care Workshop, Siena (Italy) 29 January–2 February 1990*, ICHM, National Institute of Health, Rome.

Borrini-Feyerabend G., 1996. *Collaborative Management of Protected Areas: Tailoring the Approach to the Context*, IUCN, Gland (Switzerland).

Borrini-Feyerabend G., 2003. "Governance of protected areas: Innovation in the air…", IUCN CEESP *Policy Matters* 12: 92–101.

Borrini-Feyerabend G. and M.T. Farvar, 2001. *Participatory Evaluation of the Participatory Management of the Galápagos Marine Reserve (Ecuador)*, Mission report for WWF and IUCN CEESP, available upon request.

Borrini-Feyerabend G. and M.T. Farvar, 2011. *Gouvernance Locale des Ressources Naturelles et Développement Durable   Vers une Stratégie Nationale à Madagascar*, Mission report for Tany Meva Foundation, available upon request.

Borrini-Feyerabend G. and O. Hamerlynck, 2011. *Réserve de Biosphère Transfrontière du Delta du Sénégal – Proposition de Gouvernance Partagée*, Mission report for IUCN CEESP and PRCM, available upon request.

Borrini-Feyerabend G. and R. Hill, 2015. "Governance for the conservation of nature", in Worboys, G.L., M. Lockwood, A. Kothari, S. Feary and I. Pulsford (eds.), 2015. *Protected Area Governance and Management*, ANU Press, Canberra, accessed 2023 https://www.iccaconsortium.org/wp-content/uploads/2015/08/Governance-for-the-conservation-of-nature.pdf

Borrini-Feyerabend G. and J. Ironside, 2013. "Communities and biodiversity in Cambodia – options for policies and action whose time has come", *Cambodian Journal of Natural History* 2: 95–108.

Borrini-Feyerabend G. and B. Lassen, 2008. *Community Conserved Areas: A Review of Status and Needs after Durban 2003 and CBD COP 7 2004 – Preliminary Synthesis*, accessed 2023 https://www.iccaconsortium.org/wp-content/uploads/2016/05/regional_cca_reviews_synthesis-2008.pdf

Borrini-Feyerabend G. and T. Sandwith (eds.), 2003. *Conservation Partnerships in Africa*, *Parks* 13 (1), accessed 2023 https://parksjournal.com/wp-content/uploads/2017/07/parks_13_1.pdf

Borrini-Feyerabend, G. with D. Buchan (eds.), 1997. *Beyond Fences: Seeking Social Sustainability in Conservation*, vol I and II, IUCN (Gland) and Cambridge (UK).

Borrini-Feyerabend G. with B. Lassen, S. Stevens, G. Martin, J.C. Riascos de la Peña, E.F. Ráez-Luna and M. T. Farvar, 2010 (reprinted 2012). *Bio-cultural diversity conserved by Indigenous peoples and local communities – examples and analysis*, IUCN CEESP and CENESTA, Tehran, accessed 2023 https://www.iccaconsortium.org/wp-content/uploads/2015/08/publication-ceesp-briefing-note-10-companion-en.pdf

Borrini-Feyerabend G., T. Banuri, M.T. Farvar, K. Miller and A. Phillips, 2002. "Indigenous and local communities and protected areas: Rethinking the relationship", *Parks* 12 (2): 5–15, accessed 2023 https://parksjournal.com/wp-content/uploads/2017/07/parks12_2.pdf

Borrini-Feyerabend G., P. Bueno, T. Hay-Edie, B. Lang, A. Rastogi and T. Sandwith, 2014. *A Primer on Governance for Conserved and Protected Areas*, Stream on Enhancing Diversity and Quality of Governance, IUCN World Parks Congress 2014, IUCN, Gland (Switzerland).

Borrini-Feyerabend G., C. Chatelain and P. Tous, 2009. *Kawawana en Marche!*, Rapport pour l'Association des Pêcheurs de la Communauté Rurale de Mangagoulack, CENESTA, le PNUD/FEM/SGP et la FIBA, available from the authors.

Borrini-Feyerabend G., N. Dudley, T. Jaeger, B. Lassen, N. Pathak Broome, A. Phillips and T. Sandwith, 2013. *Governance of Protected Areas: From Understanding to Action*, Best Practice Protected Area Guidelines Series No. 20, IUCN and WCPA, Gland (Switzerland).

Borrini-Feyerabend G., A. Kothari and G. Oviedo, 2004a. *Indigenous and Local Communities and Protected Areas*, Best Practice Protected Area Guidelines Series No. 11, IUCN and WCPA, Gland (Switzerland) and Cambridge (UK).

Borrini-Feyerabend G., M. Pimbert, M.T. Farvar, A. Kothari and Y. Renard, 2004b. *Sharing Power. Learning by doing in co-management of natural resources throughout the world*, IIED, IUCN CEESP and Cenesta, Tehran, accessed 2023 https://www.iccaconsortium.org/wp-content/uploads/2010/12/sharing_power-ENG-GraziaB-F.pdf

Boyd D., 2001, *Reflections on the impact of modernity in evolving a multi-faceted individual identity*, accessed online 2023.

Bowen J., 2000. "Should we have a universal concept of 'Indigenous peoples' rights'? Ethnicity and essentialism in the 21st century." *Anthropology Today* 16 (4): 12–16.

Bowles S. and C. Jung-Kyoo, 2013. "Coevolution of farming and private property", *Proceedings of the National Academy of Sciences*, 110 (22): 8830–8835.

Bowman D.M.J.S. *et al.*, 2009. "Fire in the Earth System", *Science* 481–484, accessed 2023 http://voltreepower.com/pdfs/Fire-in-Earth-System-Science-2009Apr24.pdf

Boyce J., 2001, "From natural resources to natural assets", *New Solutions: A Journal of Environmental and Occupational Health Policy* 1 (3): 267–288.

Brand U. *et al.*, 2021. "From planetary to societal boundaries: An argument for collectively defined self-limitation", *Sustainability: Science, Practice and Policy* 17 (1): 265–292.

Brannen C. and D. Sheehan-Connor, 2016. "Evaluation of the impact of Village Savings and Loan Associations using a novel survey instrument", *Development Southern Africa* 33 (4): 502–517.

Brechin S.R., P.R. Wilhusen, C.L. Fortwangler and P.C. West, 2002. "Beyond the square wheel: Toward a more comprehensive understanding of biodiversity conservation as social and political process", *Society and Natural Resources* 15: 41–64.

Brechin S.R., P.R. Wilhusen, C.L. Fortwangler and P.C. West (eds.), 2003a. *Contested Nature. Promoting International Biodiversity with Social Justice in the Twenty-first Century*, State University of New York Press, New York (NY, USA).

Brechin S.R., P.R. Wilhusen, C.L. Fortwangler and P.C. West, 2003b. "The road less travelled: Towards nature protection with social justice", pp. 251–270 in Brechin *et al.*, 2003a.

Brett A., 2015. "'The miserable remnant of this ill-used people': Colonial genocide and the Moriori of New Zealand's Chatham Islands", *Journal of Genocide Research* 17(2): 133–152.

Bridgewater P. and I.D. Rotherham, 2019. "A critical perspective on the concept of biocultural diversity and its emerging role in nature and heritage conservation", *People and Nature* 1: 291–304.

Brockington D., 2002. *Fortress Conservation: The Preservation of the Mkomazi Game Reserve, Tanzania*, Indiana University Press, Bloomington (Indiana, USA).

Brockington D., 2003. "Injustice and conservation: Is 'local support' necessary for sustainable protected areas?", IUCN CEESP *Policy Matters*, 12: 22–30.

Brockington D. and J. Igoe, 2006. "Eviction for conservation: A global overview", *Conservation & Society* 4 (3): 424–470.

Brockington D., R. Duffy and J. Igoe, 2010. *Nature Unbound: Conservation, Capitalism and the Future of Protected Areas*, Earthscan, London.

Bromley D.W., 1992. "The commons, common property, and environmental policy", *Environmental and Resource Economics* 2: 1–17.

Bromley D.W. and M. Cernea, 1989. "The management of common property natural resources: Some conceptual and operational fallacies", World Bank Discussion Paper no. 57, Washington DC.

Brondízio E.S., Y. Aumeeruddy-Thomas, P. Bates, J. Carino, A. Fernández-Llamazares, M.F. Ferrari, K. Galvin, V. Reyes-García, P. McElwee, Z. Molnár, A. Samakov, U. Babu Shrestha, 2021. "Locally based, regionally manifested, and globally relevant: Indigenous and local knowledge, values, and practices for nature", *Annual Review of Environment and Resources* 46 (1): 481–509.

Brondízio E.S., E. Ostrom and O.R. Young, 2009. "Connectivity and the governance of multilevel social-ecological systems: The role of social capital", *Annual Review of Environmental Resources* 34: 253–278.

Brookfield H. and C. Padoch, 1994. "Appreciating agrodiversity: A look at the dynamism and diversity of indigenous farming practices", *Environment* 36 (5): 37–43.

Brosius P., A. Lowenhaupt Tsing and C. Zerner, 2005. *Communities and Conservation: Histories and Politics of Community-based Natural Resource Management*, Altamira Press, Walnut Creek (California, USA).

Brown D., 1985, "People-centered development and participatory research", *Harvard Educational Review* 55 (1): 69–75.

Brown S., 2023. "Report sums up Bolsonaro's destruction legacy and Amazon's next critical steps", *Mongabay*, accessed 2024 https://news.mongabay.com/2023/04/report-sums-up-bolsonaros-destruction-legacy-and-amazons-next-critical-steps/

Brown T., 1984. "The concept of value in resource allocation", *Land Economics* 60 (3): 231–246.

Brown J. and A. Kothari (eds.), 2002. *Local Communities and Protected Areas*, special issue of *Parks* 12 (2).

Brown J.L. and B.A. Mitchell, 1998. "Stewardship: A working definition", *Environments* 26 (1): 8–17.

Brumm A., A. Oktaviana, B. Burhan, B. Hakim, R. Lebe, J. Zhao, P.H. Sulistyarto, M. Ririmasse, S. Adhityatama, I. Sumantri and M. Aubert, 2021. "Oldest cave art found in Sulawesi", *Science Advances* 7 (3).

Bruner A.G., R.E. Gullison, R.E. Rice and G.A. da Fonseca, 2001. "Effectiveness of parks in protecting tropical biodiversity", *Science* 291 (5501): 125–128.

Bruni L., 2020. "Oikonomia. Meditazioni sul capitalismo e il sacro", podcast lectures of Rai Radio Three accessed 2023 https://www.raiplaysound.it/radio3

Bruni L., D. De Rosa and G. Ferri, 2019. "Cooperatives and happiness. Cross-country evidence on the role of relational capital", *Applied Economics*, 51 (30): 3325–3343.

Bruno Manser Fonds, 2024. *The Great Carpathian Land Grab: How oligarchs are using Ukraine's war economy to get hold of one of Europe's last great wilderness areas*, https://bmf.ch/upload/Kampagnen/Waldkarpaten/The_Great_Carpathian_Land_Grab.pdf accessed 2024.

Bugnicourt J., 1987. "'Cultures' and 'environments'", pp. 95–104 in Jacobs and Munro (eds.), 1987.

Burbach R. and P. Flynn, 1980. *Agribusiness in the Americas*, Monthly Review Press, New York (NY, USA).

Burger J., M. Greenberg and K. Lowrie (eds.), 2020. *Environmental Justice and Social Injustice: Ethnic, Racial, Economic, and Other Marginalized People and Communities*, Risk Analysis Virtual Issue, accessed online 2023.

Büscher B., R. Fletcher, D. Brockington, C. Sandbrook, W. Adams, L. Campbell and K. Shanker, 2017. "Half-Earth or Whole Earth? Radical ideas for conservation, and their implications", *Oryx* 51 (3): 407–410.

Büscher B. and R. Fletcher, 2020. *The Conservation Revolution: Radical Ideas for Saving Nature beyond the Anthropocene*, Verso Books, London.

Cairns M., 2007. "Preface", pp. 1–4 in Cairns M. (ed.), 2007. *Voices from the Forest. Integrating Indigenous Knowledge into Sustainable Upland Farming*, Resources for the Future Press, Washington DC.

Cairns M. (ed.), 2015. *Shifting Cultivation and Environmental Change*, Routledge, New York (NY, USA).

Cairns M., 2017. "Indigenous Fallow Management. Property rights and other dimensions of official misunderstanding", CABI Resources, accessed online 2023.

Caldwell J., 1986. "Routes to low mortality in poor countries", *Population and Development Review* 12 (2): 171–220.

Calverio P., 2019. *Resistir al neoliberalismo: Comunidades y autonomías,* Siglo XXI, Mexico City.

Camacho C. and D. Barkin, 2022. "Revolutionary alternatives call for networks of communities seeking their autonomy and more", unpublished manuscript.

Camacho I., C. del Campo and G. Martin, 2007. *Community Conserved Areas in Northern Mesoamerica: A review of status & needs*, GDF for the ICCA Consortium, manuscript accessed 2023 https://www.iccaconsortium.org/wp-content/uploads/2015/08/regional-review-mesoamerica-en.pdf

Caprara G.V. and J. Silvester, 2018. "The personality attributes of political elites", pp. 467–487 in Best H. and J. Higley, 2018. *The Palgrave Handbook of Political Elites*, Palgrave Macmillan, London.

Cardoso F.H. and E. Faletto, 1979. *Dependency and Development in Latin America*, University of California Press, Berkeley (California, USA).

Cariño J., 1997. "Indigenous peoples address the UN General Assembly Special Session 23–27 June 1997, pp. 66–69 in Posey, 1999.

Carlisle L., 2022. *Healing Grounds*, Island Press, Washington DC.

Carlitz R., 2022. *Research paper comparing military and human security spending: Key findings and methodological notes*, UN Women, New York (NY, USA), accessed 2024.

Carson R., 1962. *Silent Spring*, Houghton Mifflin, Boston (Massachusetts, USA).

Carson R., 1965. *The Sense of Wonder*, Harper and Row, New York (NY, USA).

Cary J., 1993. "The nature of symbolic beliefs and environmental behavior in a rural setting", *Environment and Behavior* 25: 555–576.

Casado S. y EUROPARC España, 2009. *Un Siglo de Parques Nacionales*, Organismo Autónomo de Parques Nacionales, Madrid.

Castrejón M., O. Defeo, G. Reck and A. Charles, 2014. "Fishery science in Galápagos: From a resource-focused to a social–ecological systems approach" in Denkinger J. and L. Vinueza (eds.), 2014. *The Galápagos Marine Reserve: A dynamic social-ecological system*, Springer, New York (NY, USA).

Castro E. and H. Montero, 2019, "Resguardo y parque nacional natural Yaigojé Apaporis: manejo intercultural para la protección del territorio", paper presented at the Third Congress of Protected Areas in America Latina and the Caribbean, Lima, October 2019.

CBD, 2004. Decision VII.28 *Protected Areas*, Kuala Lumpur, https://www.cbd.int/decision/cop/?id=7765

CBD, 2010. Decision 10/2 *Strategic Plan for Biodiversity 2011–2020*, Nagoya (Japan), https://www.cbd.int/decision/cop/?id=12268 accessed 2024.

CBD, 2018a. *Conserved and protected areas governance in the Convention on Biological Diversity: A review of key concepts, experiences, and sources of guidance*, SBSTTA 22/INF/8, Montreal (Canada), https://www.cbd.int/doc/c/75d4/07a8/95d2c59b0963a9845fd40d3d/sbstta-22-inf-08-en.pdf accessed 2024.

CBD, 2018b. Decision 14/8 *Protected areas and other effective area-based conservation measures*, Sharm el Sheick (Egypt), https://www.cbd.int/doc/decisions/cop-14/cop-14-dec-08-en.pdf accessed 2024.

CBD, 2022. *Kunming-Montreal Global Biodiversity Framework*, CBD/COP/15/4 https://www.cbd.int/article/cop15-final-text-kunming-montreal-gbf-221222 accessed 2024.

Cernea M., 1985. *Putting Peoples First: Sociological Variables in Rural Development*, The World Bank, Washington DC.

Cernea M., 2006. "Population displacement inside protected areas: Definition of concepts in conservation policies", IUCN CEESP *Policy Matters* 14: 8–26.

Césaire A., 1950. *Discourse on Colonialism*. Monthly Review Press, Ney York (NY, USA)

Challenger R., C.W. Clegg, M. Robinson and M. Leigh, 2009. *Understanding Crowd Behaviours: Supporting Evidence*, Emergency Planning College, University of Leeds, York (UK).

Chambers R. 1992. "Rural appraisal: Rapid, relaxed and participatory", *IDS Discussion paper*, accessed online 2023.

Chancel L. and T. Piketty, 2021. "Global income inequality, 1820–2020: The persistence and mutation of extreme inequality", *Journal of the European Economic Association* 19 (6): 3025–3062.

Chapin M., 2004. "A challenge to conservationists", *World Watch Magazine* Nov/Dec: 17–31.

Charnley S. and M.R. Poe, 2007. "Community forestry in theory and practice: Where are we now?", *Annual Review of Anthropology* 36 (1): 301–336.

Chatelain C. and S. Trecourt, 2021. Kawawana territoire de vie – capitalisation de dix ans d'expérience et planification des dix ans à venir, unpublished report for the ICCA Consortium available upon request.

Chatty D. and M. Colchester (eds.), 2002. *Conservation and Mobile Indigenous Peoples: Displacement, Forced Settlement and Sustainable Development*, Berghahn Books, Oxford (UK).

Chatwin B., 1987. *The Songlines*, Picador, Jonathan Cape Eds., London. [Quote from p. 21]

Chiaravalloti, R.M., 2016. *Local Communities and Conservation in the Pantanal Wetland, Brazil*, PhD Thesis, University College London, accessed online 2023.

Chiaravalloti R.M., 2019. "The displacement of insufficiently 'traditional' communities: Local fisheries in the Pantanal", *Conservation & Society* 17 (2): 173–183.

Chibememe G., 2010. Briefing Paper for CBD COP 10 on protected areas. IIFB contribution to the Secretariat of the CBD; accessed online 2021, available upon request.

Chicago Field Museum, 2012. *Peru: Cerro de Kampankis*, Rapid Biological and Social Inventory Report 24, https://www.rapidinventories.fieldmuseum.org/ri-24 accessed 2024.

Child B. (ed.), 2013. *Parks in Transition: Biodiversity, Rural Development and the Bottom Line*, Earthscan, London.

Child B., 2019. *Sustainable Governance of Wildlife and Community-Based Natural Resource Management*, Routledge, London.

Child B. and R. Cooney, 2019. *Local Commons for Global Benefits: Indigenous and community-based management of wild species, forests, and drylands*. Report to the Scientific and Technical Advisory Panel to the Global Environment Facility, Washington DC.

Chirkov V.I., R. M., Ryan and K. M. Sheldon (eds.), 2011. *Cross-cultural advancements in positive psychology: Vol. 1. Human autonomy in cross-cultural context: Perspectives on the psychology of agency, freedom, and well-being,* Springer, New York (NY, USA).

Chomsky N., 1998. *The Common Good. Interviews by David Barsamian*, Odonian Press, Tucson (Arizona, USA).

Chomsky N., 2014. *Masters of Mankind: Essays and Lectures 1969–2013*, Haymarket Books, Chicago (Illinois, USA).

Chowdhury M., M. Koike and N. Muhammed, 2009. "Embracing collaborative protected area management for conservation: An analysis of the development of the forest policy of Bangladesh*", The International Forestry Review* 11 (3): 359–374.

Christiansen C.O. and S.L.B. Jensen (eds.), 2019. "Histories of Global Inequality – Introduction", https://link.springer.com/content/pdf/10.1007/978-3-030-19163-4_1.pdf?pdf=inline%20link accessed 2024.

CIDH (COMISIÓN INTERAMERICANA DE DERECHOS HUMANOS), 2013. *Pueblos Indígenas en Aislamiento Voluntario y Contacto Inicial en Las Américas: Recomendaciones para el Pleno Respeto a Sus Derechos Humanos*, OEA/Ser.L/V/II. 47/13 https://www.oas.org/es/cidh/indigenas/docs/pdf/Informe-Pueblos-Indigenas-Aislamiento-Voluntario.pdf accessed 2024.

Ciriacy-Wantrup S.V. and R.C. Bishop, 1975. "Common property as a concept in natural resources policy", *Natural Resources Journal* 15 (4): 713–727.

Clark J., 1998. *Municipal Dreams. Social Ecological Critique of Bookchin's Politics*, https://theanarchistlibrary.org/library/john-clark-municipal-dreams-social-ecological-critique-of-bookchin-s-politics accessed 2024.

Clastres P., 1974. *La Societé contre l'Etat*, Editions de Minuit, Paris [1987. *Society against the State: essays in political anthropology*, Zone Books, Princeton, New Jersey, USA].

Cleaver F.D. and J. de Koning, 2015. "Furthering critical institutionalism", *International Journal of the Commons* 9 (1): 1–18.

Clifford S., 1993. *Local Distinctiveness: Place, Particularity and Identity*, Common Ground, London.

Cobo R., L. Paz Paredes and A. Bartra, 2018. *Somos Tosepan!*, Unión de Cooperativas Tosepan y Circo Maya, Rosa-Luxemburg-Stiftung, Mexico City.

Colchester M., 2003. *Salvaging Nature: Indigenous peoples, protected areas and biodiversity conservation*, World Rainforest Movement and Forest Peoples Programme, *Moreton*-in-Marsh (UK).

Cole D., 2020. *Water, Land and a Voice: The Nyae Nyae Development Foundation of Namibia: 36 years of support to the Ju/'hoan San living in Nyae Nyae*, Nyae Nyae Development Foundation of Namibia, Windhoek.

Colfer C.J.P., 2005. *The Equitable Forest: Diversity, Community, and Resource Management*, Resources for the Future, Washington DC.

Commoner B., 1971. *The Closing Circle*, Knopf, New York (NY, USA).

Commoner B., 1972a. "On the meaning of ecological failures in international development", pp. xxi–xxix in Farvar and Milton, 1972. [Quote from p. xxiv]

Commoner B., 1972b. "The environmental costs of economic growth", pp. 339–363 in Ridker R.G. (ed.), 1972. *Populations, Resources and the Environment*, Research Report no. 3 of the UC Commission on Population Growth and the American Future, Washington DC, Google e-pubs., accessed online 2022.

COMPAS, 2007. *Learning Endogenous Development: Building on Bio-cultural Diversity*, Intermediate Technology Pubs., Bourton (UK).

Conklin H.C., 1957. *Hanunoo Agriculture. A report on the system of shifting cultivation in the Philippines*, Forest Development Paper no.12, FAO, Rome.

Conklin H.C., 1961. "The study of shifting cultivation", *Current Anthropology* 2 (1): 27–61.

Conlu M.T. (ed.), 2022. *Celebrating Territories of Life in Southeast Asia,* Non-Timber Forest Products – Exchange Programme Asia, accessed 2023 https://www.iccaconsortium.org/wp-content/uploads/2023/01/celebrating-territories-of-life-in-southeast-asia.pdf

Connor L.R., 2011. *A New Paradigm: Brazilian Catholic Eco-Justice Activism in the Neoliberal Age*, Environmental Analysis Program Mellon Student Summer Research Reports, Paper 3, accessed online 2021.

Coolsaet B. (ed.), 2020. *Environmental Justice: Key Issues*, Routledge, New York (NY, USA).

Coolsaet B. and P.Y. Néron, 2020." Recognition and environmental justice", pp. 52–63 in Coolsaet, 2020.

Cooney R. 2007. "Sustainable use: Concepts, ambiguities, challenges", manuscript prepared for the IUCN Species Survival Commission's Sustainable Use Specialist Group, accessed online 2021.

Cooney R., C. Freese, H. Dublin, D. Roe, D. Mallon, M. Knight, R. Emslie, M. Pani, V. Booth, S. Mahoney and C. Buyanaa, 2017. "The baby and the bathwater: Trophy hunting, conservation and rural livelihoods", *Unasylva* 249 (68/1): 3–16.

Cooney R., D. Roe, H. Dublin and F. Booker, 2018. *Wild life, Wild Livelihoods: Involving Communities in Sustainable Wildlife Management and Combatting the Illegal Wildlife Trade*. UNEP, Nairobi.

Cooperativa de Ahorro y Credito Jardin Azuayo, 2019. *Somos Nuestras Memoria – Historia de la Cooperative Jardin Azuayo 1996–2014*, Cuenca (Ecuador), accessed online 2023.

Corntassel J., 2008. "Toward sustainable self-determination: Rethinking the contemporary indigenous rights discourse", *Alternatives* 3: 105–132.

Corntassel J., 2012. "Re-envisioning resurgence: Indigenous pathways to decolonization and sustainable self-determination", *Decolonization: Indigeneity, Education & Society* 1 (1): 86–101.

Corntassel J., 2021a. "Life beyond the State: Regenerating indigenous international relations and everyday challenges to settler colonialism", *Anarchist Developments in Cultural Studies* 1: 71–97.

Corntassel J., 2021b. *ICCA Consortium Virtual Workshop 9 August 2021*, accessed 2023. https://www.iccaconsortium.org/index.php/2021/12/15/recap-solidarity-exchange-indigenous-decolonization-sustainable-self-determination/

Correa C., 2001. *Intellectual Property: Issues and options surrounding the protection of traditional knowledge. A discussion paper*, Quaker United Nations Office, Geneva (Switzerland).

Corrigan C. and H. Bingham, Y. Shi, E. Lewis, A. Chauvenet and N. Kingston, 2018. "Quantifying the contribution to biodiversity conservation of protected areas governed by Indigenous peoples and local communities", *Biological Conservation* 227: 403–412.

Corson C., 2010. "Shifting environmental governance in a neoliberal world: US AID for conservation", *Antipode* 42: 576–602.

Coulthard G.S., 2014. *Red Skin White Masks. Rejecting the Colonial Politics of Recognition*, University of Minnesota Press, Minneapolis (Minnesota, USA).

Cramb R.A., C.J.P. Colfer, W. Dressler, P. Laungaramsri, L.Q. Trung, E. Mulyoutami, N.L. Peluso and R.L. Wadley, 2009. "Swidden transformations and rural livelihoods in Southeast Asia", *Human Ecology* 3 (37): 323–346.

Crona I., T. Van Holt, M. Petersson, T.M. Daw and E. Buchary, 2015. "Using social-ecological syndromes to understand impacts of international seafood trade on small-scale fisheries", *Global Environmental Change* 35: 162–175.

Cronan Rose E., 1991. "The good mother: From Gaia to Gilead", *Frontiers: A Journal of Women Studies* 12 (1): 77–97.

Cummings V., 2014. "Hunting and gathering in a farmers' world" in Cummings *et al.*, 2014.

Cummings V., P. Jordan and M. Zvelebil (eds.), 2014. *The Oxford Handbook of the Archaeology and Anthropology of Hunter-Gatherers*, Oxford University Press, Oxford (UK).

Dag Hammarskjöld Foundation, 1975. *What now? Another development*, Dag Hammarskjöld Report, Uppsala (Sweden).

Dahl J., 2009. *IWGIA: A History*, IWGIA, Copenhagen.

Dasgupta P., 1995. "Population, Poverty and the Local Environment", *Scientific American* 272 (2): 40–45.

Dasgupta P., 2021. *The Economics of Biodiversity: The Dasgupta Review*. Treasury of UK Government, London.

Dasgupta P. and K.G. Mahler, 1994. *Poverty, Institutions, and the Environmental-Resource Base*, World Bank Environment Paper 9, World Bank, Washington DC.

Dasgupta S., 2024. "Who protects nature better: The state or communities? It's complicated.", *Mongabay* accessed 2024 https://news.mongabay.com/2024/01/who-protects-nature-better-the-state-or-communities-its-complicated/

Dasmann R.F., 1974. "Conservation, counterculture, and separate realities", *Environmental Conservation*, 1 (2): 133–137.

Davenport L., 2020. *Interview at the Post Carbon Institute*, accessed 2023 https://www.postcarbon.org/great-unraveling/great-unraveling-emotional-resilience/

Davidheiser M. and A. Luna, 2008. "From complementarity to conflict: A historical analysis of Farmer-Fulbe relations in West Africa", *African Journal on Conflict Resolution* 8: 1–19.

Davis S., 1977. "*Victims* of the *Miracle: Development and the Indians of Brazil*", Cambridge University Press, *Cambridge (UK)*.

Davis S. (ed.), 1993. Indigenous Views of Land and the Environment, World Bank Discussion Paper 188, World Bank, Washington DC.

Davis W., 2023. "The term 'Indigenous', in its current use, might be doing us all a disservice", Opinion published by Globe and Mail of Canada on 25 March.

Dawson N.M., B. Coolsaet, E.J. Sterling, R. Loveridge, N.D. Gross-Camp, S. Wongbusarakum, K.K. Sangha, L.M. Scherl, H. Phuong Phan, N. Zafra-Calvo, W.G. Lavey, P. Byakagaba, C.J. Idrobo, A. Chenet, N.J. Bennett, S. Mansourian, and F.J. Rosado-May. 2021. "The role of Indigenous peoples and local communities in effective and equitable conservation", *Ecology and Society* 26 (3): 19.

Department of Sociology, 2022. *Implementation of Forest Rights Act in 5th Scheduled Areas: Case Study of Budaguda Gram Panchayat, Rayagada, Odisha*, University of Hyderabad (Hyderabad, Telangana, India), accessed online 2023.

Descartes R., 1824. *Discours de la méthode*, tome I, Levrault, Paris.

Descola P. and G. Palsson (eds.), 1996. *Nature and Society: Anthropological perspectives*, Routledge, London.

Devall B., 1980. "The deep ecology movement", *Natural Resources Journal* 20 (2): 299–322.

de la Cadena M. and M. Blaser, 2018. *A World of Many Worlds*, Duke University Press, Durham (Carolina, USA).

de Melo L., D. Alves, P.F. Macedo Lopes, M.G. Pennino, A.R. Carvalho and U.R. Sumaila, 2016. "Size matters: Fishing less and yielding more in smaller-scale fisheries", *ICES Journal of Marine Science* 73 (6): 1494–1502.

De Pourcq K., E. Thomas, B. Arts, A. Vranckx and T. Léon-Sicard, 2015. "Conflict in protected areas: Who says co-management does not work?", *PLOS ONE* 10 (12).

De Roberto F., 1977 (reprint). *I Viceré*, Einaudi, Turin (Italy).

De Waal, F., 2019. *Mama's Last Hug: Animal emotions and what they tell us about ourselves*, Norton, New York (NY, USA).

Diamond J.M., 2011. *Collapse: How Societies Choose to Fail or Survive*, Penguin, London.

Dick-Sagoe C., 2020. "Decentralization for improving the provision of public services in developing countries: A critical review", *Cogent Economics & Finance* 8: 1.

Diegues A.C., 1998. "The myth of untamed nature in the Brazilian rainforest", NUPAUB, Sao Paolo (Brazil) https://nupaub.fflch.usp.br/sites/nupaub.fflch.usp.br/files/inline-files/myth_compressed.pdf accessed 2024.

Dieng N. and S. Ndiaye. 2012. *Recognition and Support of ICCAs in Senegal*, in Kothari *et al.*, 2012, https://www.cbd.int/pa/doc/ts64-case-studies/senegal-en.pdf accessed 2024.

DiGiano M., A. Racelis, G. Barnes and J. Barsimantov, 2008. "The varying effects of neo-liberal land policy on communal property in rural Mexico", paper presented at the Twelfth Biennial Conference of the International Association for the Study of Commons, Cheltenham (UK).

Dik B., "Work as meaning: Individual and organizational benefits of engaging in meaningful work", *Oxford Handbooks Online*, 2009.

Ding H., P. Veit, E. Gray, K. Reytar, J.C. Altamirano and A. Blackman, 2016. *Climate Benefits, Tenure Costs*, WRI, Washington DC.

Dinham B. and C. Hines, 1983. *Agribusiness in Africa*, Earth Resources Research, London.

Djiga H. A., 2009. "La gouvernance locale à l'épreuve des migrations dues aux changements climatiques : cas des rapports entre conseils villageois de développement et chefs traditionnels au Burkina Faso dans la gestion des conflits sociaux", *VertigO*, https://id.erudit.org/iderudit/044565ar accessed 2024.

di Lernia S., M.A. Tafuri, M. Gallinaro, F. Alhaique, M. Balasse, L. Cavorsi, P.D. Fullagar, A.M. Mercuri, A. Monaco, A. Perego and A. Zerboni, 2013. "Inside the *African Cattle Complex*: Animal burials in the Holocene Central Sahara", *PLOS ONE* 8(2): e56879.

Dove M., 1983. "Theories of swidden agriculture and the political economy of ignorance", *Agroforestry Systems* 1: 85–99.

Dowie M., 2011. *Conservation Refugees*, Penguin Random House, Cambridge (Massachusetts, USA).

Downing A.S., A. Bhowmik, D. Collste, S.E. Cornell, J. Donges, I. Fetzer, T. Häyhä, J. Hinton, S. Lade and W.M. Mooij, 2019. "Matching scope, purpose and uses of planetary boundaries science", *Environmental Research Letters* 14: 073005.

Dransart P., 2018. *Pastoralism in the Andes*, Oxford Bibliographies, accessed online 2023.

Dressler W. and J. Pulhin, 2010. "The shifting ground of swidden agriculture on Palawan Island, The Philippines", *Agriculture and Human Values* 27: 445–459

Dror E., 2001. *Capacity to Govern: a Report to the Club of Rome*, Frank Cass Pub., London, 2001.

Dudley N. (ed.), 2008. *Guidelines for Applying Protected Area Management Categories*, IUCN, Gland (Switzerland).

Dudley N., 2011. *Authenticity in Nature*, Routledge, London.

Dudley N. and S. Stolton, 2003. *Running Pure: The importance of forest protected areas to drinking water*, Research report for the World Bank and WWF Alliance for Forest Conservation and Sustainable Use, Gland (Switzerland) and Washington DC.

Dudley N. and S. Stolton, 2010. *Arguments for Protection*, Routledge, London.

Dudley N., C. Buyck, N. Furuta, C. Pedrot, F. Renaud and K. Sudmeier-Rieux, 2015. *Protected Areas as Tools for Disaster Risk Reduction. A handbook for practitioners*, MOEJ and IUCN Tokyo and Gland (Switzerland).

Dudley N., L. Higgins-Zogib and S. Mansourian, 2005. *Beyond Belief: Linking faiths and protected areas to support biodiversity conservation*, WWF, Equilibrium and ARC, Gland (Switzerland).

Duffy R., 2001. "Peace parks: The paradox of globalisation", *Geopolitics* 6 (2): 1–26.

Duffy R., 2016. "War, by conservation", *Geoforum* 69: 238–248.

Dumas D., M. Mietton, O. Hamerlynck, F. Pesneaud, A. Kane, A. Coly, S. Duvail and M.L.O. Baba, 2010. "Large dams and uncertainties. The case of the Senegal River (West Africa)", *Society & Natural Resources* 23 (11): 1108–1122.

Dunsworth H.M., 2010. "Origin of the genus *Homo*", *Evolution Education and Outreach* 3: 353–366.

Dupré J., 2002. "The lure of the simplistic", *Philosophy of Science* 69: 284–293.

Duvail S., A.B. Mwakalinga, A. Eijkelenburg, O. Hamerlynck, K. Kindinda and A. Majule, 2014. "Jointly thinking the post-dam future: Exchange of local and scientific knowledge on the lakes of the Lower Rufiji, Tanzania", *Hydrological Sciences Journal* 59(3–4): 713–730.

Eastburn Boswell J. 1984. "*Expositio* and *Oblatio*: The abandonment of children and the ancient and medieval family", *The American Historical Review* 89 (1): 10–33.

Edelenbos J., I. Meerkerk and C. Leeuwen, 2015. "Vitality of complex water governance systems: Condition and evolution", *Journal of Environmental Policy and Planning* 17 (2): 237–261.

Edge S. and M.L. McAllister, 2009. "Place-based local governance and sustainable communities: Lessons from Canadian biosphere reserves", *Journal of Environmental Planning and Management* 52 (3): 279–295.

Edjeta B., 2006. "Power, environment, development and powerlessness: Karrayu pastoralists facing Metahara Plantation Scheme and the Awash National Park", IUCN CEESP *Policy Matters* 14: 190–206.

Eghenter C., 1999. "Migrants' practical reasonings: The social, political, and environmental determinants of long-distance migrations among the Kayan and Kenyah of the interior of Borneo", *Sojourn: Journal of Social Issues in Southeast Asia* 14 (1): 1–33, https://www.jstor.org/stable/41057011?seq=1

Eghenter C., 2000. "What is *tana' ulen* good for? Considerations on indigenous forest management, conservation, and research in the interior of Indonesian Borneo", *Human Ecology: An Interdisciplinary Journal* 28 (3): 331–357.

Eghenter C., 2003. "Imagined models vs historical practices: *tana' ulen* and community-based management of resources in the interior of Indonesian Borneo", pp. 198–214 in Persoon G., D. van Est and P. Sajise (eds.), 2003. *Co-management of Natural Resources in Asia: A Comparative Perspective*. NIAS/ Curzon Press, Copenhagen.

Ehrlich P.R. and A.H. Ehrlich, 1970. *Population, Resources, Environment*, Freeman, San Francisco (California, USA).

Ehrlich P.R. and J.P. Holdren, 1971. "Impact of population growth: Complacency concerning this component of man's predicament is unjustified and counterproductive", *Science* 171 (3977): 1212–1217.

Elias S., A.M. Chan-Dzul and G. Borrini-Feyerabend, 2016. *Reconocer y Apoyar los TICCA en Mesoamérica – ¿por què y como?*, ICCA Consortium Policy Brief 3, CENESTA, Tehran.

Ellemers N., 2018. "Morality and social identity", pp. 147–158 in van Zomeren M. and J.F. Dovidio (eds.), 2018. *The Oxford Handbook of the Human Essence*, Oxford Library of Psychology online.

Elliott K.C and D.B Resnik, 2014. "Science, policy, and the transparency of values." *Environmental Health Perspectives* 122 (7): 647–650.

Ellis E.C., N. Gauthier, K. Klein Goldewijk, R. Bliege Bird, N. Boivin, S. Díaz, D.Q. Fuller, J.L. Gill, J.O. Kaplan, N. Kingston, H. Locke, C.N.H. McMichael, D. Ranco, T.C. Rick, M.R. Shaw, L. Stephens, JC. Svenning and J.E.M. Watson, 2021. "People have shaped most of terrestrial nature for at least 12,000 years", *Proceedings of the National Academy of Sciences* (PNAS) 118 (17).

Ellis J.E. and D.M. Swift, 1988. "Stability of African pastoral ecosystems: Alternate paradigms and implications for development", *Rangeland Ecology & Management/Journal of Range Management Archives*, 41 (6): 450–459.

El Mahi A., 2001. "The traditional pastoral groups of Dhofar, Oman: A parallel for ancient cultural ecology." *Proceedings of the Seminar for Arabian Studies* 31: 131–143.

Environmental Education Centre, 2017, 'Oran' Sustainable Livelihood & Biodiversity Conservation System in Rajasthan, accessed online 2023.

Eoin L. 2016. "Ethnoecology: Losing traditional knowledge". *Nature Plants* 2, 16125.

Escamilla R.J.P., 2016. *La parangua – Institución instituyente en la autonomía de Cherán*, Tesis de Maestría en Filosofía y Ciencias Sociales, Instituto Tecnológico y de Estudios Superiores de Occidente, San Pedro Tlaquepaque, Jalisco (Mexico).

Escobar A., 1997a. "Anthropology and development", *International Social Science Journal* 49 (154): 497–515.

Escobar A. 1997b. "The making and unmaking of the third world through development" in Rahnema and Bowtree (eds.), 1997. *The Post-development Reader*, Zed Books, London.

Escobar A., 1998. "Whose knowledge, whose nature? Biodiversity, conservation, and the political ecology of social movements", *Journal of Political Ecology* 5 (1): 53–82.

Escobar A., 2020. *Pluriversal Politics*, Duke University Press, Durham and London. [Quote from p. xxii]

Estifania E., P. de Vera, F. Lucero-Diola, P.P. Silang, F.C. Eleazar and N. Molinaye (eds.), 2012. *Nature Conservation in the Footsteps of Our Ancestors*, UP NCPAG, PAWB and GEF UNDP, Manila (Philippines).

Etchart L., 2017. "The role of Indigenous peoples in combating climate change", *Palgrave Communications* 3: 17085.

European Environmental Agency, 2012. *Protected Areas in Europe: An Overview*, European Environmental Agency, Copenhagen.

Eversole R., 2011. "Community agency and community engagement: Re-theorising participation in governance", *Journal of Public Policy 31* (1): 51–71.

Expert Mechanism on the Rights of Indigenous Peoples, 2018. *Free, prior and informed consent: A human rights-based approach*, Report to the UN General Assembly https://undocs.org/A/HRC/39/62 accessed 2024.

Fa J.E., J.E.M. Watson, I. Leiper, P. Potapov, T.D. Evans, N.D. Burgess, Z. Molnár, Á. Fernández-Llamazares, T. Duncan, S. Wang, B.J. Austin, H. Jonas, C.J. Robinson, P. Malmer, K.K. Zander, M.V. Jackson, E. Ellis, E.S. Brondízio and S.T. Garnett, 2020. "Importance of Indigenous peoples' lands for the conservation of intact forest landscapes", *Frontiers in Ecology and the Environment 18* (3): 135–140.

Fairhead J., M. Leach and I. Scoones, 2012. "Green Grabbing: A new appropriation of nature?", *The Journal of Peasant Studies* 39 (2): 237–261.

Fairlie, S. 2009. "A short history of enclosures in Britain", *The Land* 9: 16–31.

Faizi S., 2023. "Self-withering: Biodiversity Convention's new global framework raises basic questions", *Down to Earth* 14 November.

Fan, M., W. Li, C. Zhang and L. Li, 2014. "Impacts of nomad sedentarization on social and ecological systems at multiple scales in Xinjiang Uyghur Autonomous Region, China", *Ambio* 43: 673–686.

Fanon F., 1968. *The Wretched of the Earth*, Grove Press, New York (NY, USA).

FAO, 2022. *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security*, FAO, Rome.

FAO and FILAC, 2021. *Forest Governance by Indigenous and Tribal People. An Opportunity for Climate Action in Latin America and the Caribbean*, FAO, Santiago of Chile https://doi.org/10.4060/cb2953en accessed 2024.

Farine D.R., 2022. "Collective action in birds", *Current Biology 32* (20): R1140–R1144.

Farman, A. 2021. "Coca farming is destroying Peru's Amazon. Is it time for a radical solution?", *Open Democracy*, accessed 2023 https://www.opendemocracy.net/en/democraciaabierta/coca-farming-is-destroying-perus-amazon-is-it-time-for-a-radical-solution/ accessed 2024.

Farvar M.T., 2003. "Mobile pastoralism in West Asia: Myths, challenges and a whole set of loaded questions", IUCN CEESP *Policy Matters* 12: 31–41.

Farvar M.T. and J.P. Milton (eds.), 1972. *The Careless Technology. Ecology and International Development*, Conservation Foundation and Centre for the Biology of Natural Systems, Doubleday Natural History Press, New York (NY, USA).

Farvar M.T., G. Borrini-Feyerabend, J. Campese, T. Jaeger, H. Jonas and S. Stevens, 2018. *Whose 'Inclusive Conservation'?*, Policy Brief of the ICCA Consortium no. 5, The ICCA Consortium and Cenesta, Tehran.

Fay M.P., 1981. *A National Park Regional Integration Strategy with special reference to Riding Mountain National Park*, MA Thesis, University of Manitoba, Winnipeg (Manitoba, Canada).

Fearnside P., 2001. "Environmental impact of Brazil's Tucuruí dam: Unlearned lessons for hydroelectric development in Amazonia", *Environmental Management* 27: 377–396.

Feeny D., F. Berkes, B.J. McCay and J.M. Acheson, 1990. "The tragedy of the commons: Twenty-two years later", *Human Ecology* 18: 1–19.

Feit H., 1973. "The ethno-ecology of the Waswanipi Cree: Or how hunters can manage their resources", pp. 115–125 in Cox B. (ed.), 1973. *Cultural Ecology: Readings on the Canadian Indians and Eskimos*, McClelland and Stewart Limited, Toronto (Ontario, Canada).

Fernández-Llamazares Á. and M. Cabeza, 2018. "Rediscovering the potential of indigenous storytelling for conservation practice", *Conservation Letters* 11: e12398.

Ferro M., 1994. *Colonization.* Routledge, London.

Feyerabend P.K., 1987. *Farewell to Reason*, Verso, London.

Feyerabend P.K., 1999. *The Conquest of Abundance*, Chicago University Press, Chicago (Illinois, USA).

Feyerabend P.K., 2016. *Philosophy of Nature*, Polity Press, Cambridge (UK).

Fieldhouse D.K., 1981. *Colonialism 1870–1945: An Introduction*, Weidenfeld and Nicolson, London.

Fleck L, 1935. *Genesis and Development of a Scientific Fact*, original publication in German, translated and published in English in 1981 by the University of Chicago Press.

Fletcher M.S., R. Hamilton, W. Dressler and L. Palmer, 2021. "Indigenous knowledge and the shackles of wilderness", PNAS 118 (40): e2022218118.

Foggin J.M., D. Brombal and A. Razmkhah, 2021. "Thinking like a mountain: Exploring the potential of relational approaches for transformative nature conservation", *Sustainability* 13: 12884.

Folke C., J. Colding and F. Berkes, 2003. "Synthesis: Building resilience and adaptive capacity in social-ecological systems", pp. 352–387 in Berkes *et al.*, 2003.

Folke C., T. Hahn, P. Olsson and J. Norberg, 2005. "Adaptive governance of social-ecological systems", *Annual Review of Environmental Resources* 15: 441–473.

Folke C., L. Pritchard, F. Berkes, J. Colding and U. Svedin, 2007. "The problem of fit between ecosystems and institutions: Ten years later", *Ecology and Society* 12 (1): 30.

Foran J., 1993. *Fragile Resistance: Social Transformation in Iran from 1500 to the Revolution*, Westview Press, Boulder (Colorado, USA).

Forest Peoples Programme, 2020. *Local Biodiversity Outlooks 2*, Forest Peoples Programme, Moreton-in-Marsh (UK).

Forrest S., 1999. "Tenure systems in the Arctic", pp. 57–61 in Oglethorpe, 1999.

Fortmann L., 2005. "What we need is a community Bambi: The perils and possibilities of powerful symbols", pp. 195–205 in Brosius *et al.,* 2005.

Foster J.B., 1999. *The Vulnerable Planet: A short economic history of the environment*, New York University Press, New York (NY, USA).

Foster J.B., 2002. *Ecology Against Capitalism,* Monthly Review Press, New York (NY, USA).

Frachetti M., 2012. "Multiregional emergence of mobile pastoralism and nonuniform institutional complexity across Eurasia", *Current Anthropology* 53 (1): 2–38.

Francis D., 1997. *National Dreams: Myths, Memory and Canadian History*, Arsenal Pulp Press, Vancouver (British Columbia, Canada).

Franke R.W. and B.H. Chasin, 1980. *Seeds of Famine*, Landmark Studies of Universe Books, New York (NY, USA).

Franks P. and F. Booker, 2018. *Governance Assessment for Conserved and protected Areas (GAPA): Early experience of a multi-stakeholder methodology for enhancing equity and effectiveness*, IIED Working Paper, IIED, London.

Franks P., F. Booker and D. Roe, 2018. *Understanding and assessing equity in protected area conservation. A matter of governance, rights, social impacts and human wellbeing,* IIED Issue Paper, IIED, London.

Friberg, M., B. Hettne and G. Tamm, 1978. "The contextual dimension in development thinking", University of Gothenburg paper for the GPID/UNU meeting, manuscript.

Friedlander A.M., J.M. Shackeroff and J.N. Kittinger, 2013. "Customary marine resource knowledge and use in contemporary Hawai'i", *Pacific Science* 67 (3): 441–460.

Fripp E., 2014. *Payments for Ecosystem Services (PES): A practical guide to assessing the feasibility of PES projects*, CIFOR Bogor (Indonesia).

Fuchs D., M. Sahakian, T. Gumbert, A. Di Giulio, M. Maniates, S. Lorek and A. Graf, 2021. *Consumption Corridors. Living a Good Life within Sustainable Limits*, Routledge, London.

Fuente-Carrasco M.E., D. Barkin and R. Clark-Tapia, 2019. "Governance from below and environmental justice: Community water management from the perspective of social metabolism", *Ecological Economics* 160: 52–61.

Fuglesang A., 1982. *About Understanding*, Dag Hammarskjöld Foundation, Uppsala (Sweden).

Fukuyama F., 1995. *Trust: The Social Virtues and the Creation of Prosperity*, Free Press, New York (NY, USA).

Gabora L. and D. Aerts, 2009. "A model of the emergence and evolution of integrated worldviews", *Journal of Mathematical Psychology* 53 (5): 434–451.

Gadgil M., F. Berkes and C. Folke, 1993. **"**Indigenous knowledge for biodiversity conservation", *Ambio* 22 (2/3): 151–156.

Gadgil M., F. Berkes and C. Folke, 2021. "Indigenous knowledge: From local to global", *Ambio* 50: 967–969.

Gadgil M., P. Olsson, F. Berkes and C. Folke, 2003. "Exploring the role of local ecological knowledge in ecosystem management: Three case studies", pp. 189–209 in *Berkes et al., 2003*.

Galaz V., P. Olsson, T. Hahn, C. Folke and U. Svedin, 2008. "The problem of fit between ecosystems and governance systems: Insights and emerging challenges", pp. 147–186 in Young O., L.A. King and H. Schroeder (eds.) *The Institutional Dimensions of Global Environmental Change: Principal Findings and Future Directions,* MIT Press, Boston (Massachusetts, USA).

Galbraith J.K., 1958. *The Affluent Society*, Houghton-Mifflin, Boston (Massachusetts, USA).

Galvin M. and T. Haller (eds.), 2008. *People, Protected Areas and Global Change*, University of Bern, Bern.

Garnett S.T., N.D. Burgess, J.E. Fa, Á. Fernández-Llamazares, Z. Molnár, C.J. Robinson, J.E.M. Watson, K.K. Zander, B. Austin, E.S. Brondízio, N. French Collier, T. Duncan, E. Ellis, H. Geyle, M.V. Jackson, H. Jonas, P. Malmer, B. McGowan, A. Sivongxay and I. Leiper, 2018. "A spatial overview of the global importance of indigenous lands for conservation", *Nature Sustainability* 1 (7): 369–374.

Gasparello G., 2021. "Communal responses to structural violence and dispossession in Cherán, Mexico". *Latin American Perspectives* 48(1): 42–62.

Gause E., 2014. "A critique: Jared Diamond's collapse put in perspective", *Papers from the Institute of Archaeology* 24 (1), University College, London.

Gavin M.C., J. McCarter, F. Berkes, A.T.P. Mead, E.J. Sterling, R. Tang and N.J. Turner, 2018. "Effective biodiversity conservation requires dynamic, pluralistic, partnership-based approaches", *Sustainability 10*: 1846.

Gaworecki M., 2018. "Mexico's *ejidos* are finding greater sustainability by involving youth and women", *Mongabay*, https://news.mongabay.com/2018/06/mexicos-ejidos-are-finding-greater-sustainability-by-involving-youth-and-women/ accessed 2024.

Geertz C., 1973. *The interpretation of cultures*, Basic Books, New York (NY, USA).

GEF (Global Environment Facility), 2021. *FY22 Administrative Budget and Business Plan for the Least Developed Countries Fund and the Special Climate Change Fund*, GEF/LDCF.SCCF.30/06 accessed online 2023.

Geisler C., 2003. "A new kind of trouble: Evictions in Eden", *International Social Science Journal* 55: 69–78.

Genç M. and A. Koyuncu, 2011. "A part of Yürük lifestyle: Tents", *Journal of World of Turks* 3 (2): 113–124.

George C. and M.G. Reed, 2017. "Operationalising just sustainability: Towards a model for place-based governance", *Local Environment* 22(9): 1105–1123.

George S., 1977. *How the Other Half Dies*, Allanhed, Osmun and Co., Montclair (New Jersey, USA).

George S., 2015. "Progress and its discontents", The Ralph Miliband Lecture series, London School of Economics, accessed online 2023.

Gerring J., B. Apfeld, T. Wig and A.F. Tollefsen, 2022. *The Deep Roots of Modern Democracy: Geography and the Diffusion of Political Institutions*, Cambridge University Press, Cambridge (UK).

Ghimire K.B. and M. Pimbert, 1997. *Social Change and Conservation*, UNRID Pubs, Earthscan, London.

Gilmour D. and B. Fisher, 1997. "A project or a process?", pp. 103–106 in Borrini-Feyerabend, G. with D. Buchan (eds.), 1997. *Beyond Fences: Seeking Social Sustainability in Conservation*, vol II, IUCN (Gland) and Cambridge (UK).

Giménez G., 1999. "Territorios, cultura e identidades – la región socio-cultural", *Estudios sobre las Culturas Contemporáneas*, II–V (9): 25–57.

Glaeser B. (ed.), 1987. *The Green Revolution Revisited: Critique and Alternatives*, Routledge, London.

Global Witness, 2021. *Last Line of Defense*, accessed 2023 https://www.globalwitness.org/en/ accessed 2024.

Gobierno Territorial Autónomo de la Nación Wampís, 2015. *Estatuto*. https://nacionwampis.com/wp-content/uploads/2018/08/gtanw-2015-estatuto-del-gobierno-territorial-aut%c3%93nomo-de-la-naci%c3%93n-wampis.pdf accessed 2024.

Goldenberg S.M., J.A. Shoveller, M. Koehoorn and A.S. Ostry, 2010. "And they call this progress? Consequences for young people of living and working in resource-extraction communities", *Critical Public Health* 20 (2): 157–168.

Gonzales Duarte C., 2021. "Butterflies, organized crime, and 'sad trees': A critique of the Monarch Butterfly Biosphere Reserve Program in a context of rural violence", *World Development* 142: 105420.

Gordon C. (ed.), 1980. *Power/Knowledge Selected Interviews and Other Writings 1972–1977 Michel Foucault*, Pantheon Books, New York (NY, USA).

Gorricho J., 2018. *Protected Area Governance: Key to advancing conservation in the midst of armed conflict. The cases of Alto Fragua Indiwasi National Park and La Planada Nature Reserve in Colombia*, PhD Thesis, Albert-Ludwigs-Universität Freiburg (Germany).

Gorricho J. and M. Schultze-Kraft, 2021. "Wartime protected area governance: The case of Colombia's Alto Fragua Indiwasi National Park", *Third World Quarterly* 42 (6): 1365–1383.

Goudie A., 1981. *The Human Impact on the Natural Environment*, Basil Blackwell, Oxford (UK).

Gould S.J., 1989. *Wonderful Life*, W.W. Norton, New York (NY, USA).

Govan H., A. Tawake, K. Tabunakawai, A. Jenkins, A. Lasgorceix, E. Techera, H. Tafea, J. Kinch, J. Feehely, P. Ifopo, R. Hills, S. Alefaio, S. Meo, S. Troniak, S. Malimali, S. George, T. Tauaefa and T. Obed, 2009a. *Community Conserved Areas: A review of status & needs in Melanesia and Polynesia*, ICCA regional review for CENESTA /TILCEPA /TGER /IUCN/ GEF-SGP https://www.sprep.org/att/IRC/eCOPIES/Pacific_Region/422.pdf accessed 2024.

Govan H. *et al.*, 2009b. Status and potential of locally-managed marine areas in the South Pacific: Meeting nature conservation and sustainable livelihood targets through wide-spread implementation of LMMAs., SPREP, WWF, WorldFish-Reefbase and CRISP https://www.sprep.org/att/publication/000646_LMMA_report.pdf accessed 2024.

Gowdy, J., 2020. "Our hunter-gatherer future: Climate change, agriculture and uncivilization", *Futures* www.sciencedirect.com/science/article/pii/S0016328719303507 accessed 2024.

Gowlett J.A.J. and R.W. Wrangham, 2013. "Earliest fire in Africa: Towards the convergence of archaeological evidence and the cooking hypothesis", *Azania: Archaeological Research in Africa* 48 (1): 5–30.

Grace Thomas K. and O. Touré (eds.), 2013. *Il était une fois Kawawana* , APCRM, Dakar, accessed 2023 https://www.iccaconsortium.org/wp-content/uploads/2015/08/stories-senegal-kawawana-book-2013-fr.pdf accessed 2024.

Graeber D., 2014. "What's the point if we can't have fun?", *The Baffler* no. 24 https://thebaffler.com/salvos/whats-the-point-if-we-cant-have-fun accessed 2024.

Graeber D. and D. Wengrow, 2021. *The Dawn of Everything: A New History of Humanity,* Penguin, London.

Graham J., B. Amos and T. Plumptre, 2003. *Governance Principles for Protected Areas in the 21st Century*. Report for the Fifth World Parks Congress Durban, South Africa, Institute on Governance, Parks Canada and the Canadian International Development Agency, Ottawa.

Graham R. (ed.), 2009. *Anarchism: A Documentary History of Libertarian Ideas*, vol. 2, Black Rose Books, Toronto (Ontario, Canada).

Gran G., 1983. *Development by People*, Praeger, New York (NY, USA).

Grant R., 2021. "The lost history of Yellowstone", *The Smithsonian Magazine* https://www.smithsonianmag.com/history/lost-history-yellowstone-180976518/ accessed 2024.

Gray A., 1999. "Indigenous peoples, their environments and territories", pp. 61–66 in Posey, 1999.

Greer A. 2012. "Commons and enclosure in the colonization of North America", *The American Historical Review* 117 (2): 365–386.

Gros S., 2014. "The bittersweet taste of rice: Sloping land conversion and the shifting livelihoods of the Drung in Northwest Yunnan (China)", *Himalaya* 34 (2) article 11.

Guerin M., 2001. "Essartage et riziculture humide. Complémentarité des écosystèmes agraires a Stung Treng au début du XX siècle", *Aseanie* 8: 35–56.

Gupta A.K., 2004. "Origin of agriculture and domestication of plants and animals linked to early Holocene climate amelioration", *Current Science* 87 (1): 54–59.

Gupta D., M. Sinha and A. Chhatre, 2022. "India's Forest Rights Act and indigenous claims to community forest resources: A case study of Lavari, Maharashtra", *World Development Perspectives* 27.

Gustave R. and A.W. Hidayat, 2008. *Sumberklampok Community Conserved Area: A declaration of community rights*, Report for IUCN CEESP, https://www.iccaconsortium.org/wp-content/uploads/2015/08/grassroot-indonesia-bali-sumberklampok-2008-en.pdf accessed 2024.

Hagman P., 2013. "The end of asceticism", *Political Theology* 14 (2): 174–187.

Haines A. and H. Frumkin, 2021. *Planetary Health: Safeguarding Human Health and the Environment in the Anthropocene*, Cambridge University Press, Cambridge (UK).

Hale C.R., 2006. "Activist research v. cultural critique: Indigenous land rights and the contradictions of politically engaged anthropology", *Cultural Anthropology* 21 (1): 96–120.

Haller T., G. Acciaioli and S. Rist, 2016. "Constitutionality: Conditions for crafting local ownership of institution-building processes", *Society & Natural Resources* 29 (1): 68–87.

Haller T., J.M. Belsky and S. Rist, 2018. "The constitutionality approach: Conditions, opportunities, and challenges for bottom-up institution building", *Human Ecology* 46: 1–2.

Haller T., F. Käser and M. Ngutu, 2020. "Does commons grabbing lead to resilience grabbing? The anti-politics machine of neo-liberal agrarian development and local responses", *Land* 9: 220.

Haller T. and S. Merten, 2018. "Crafting our own rules: Constitutionality as a bottom-up approach for the development of by-laws in Zambia", *Human Ecology* 46: 3–13.

Hamsun K., 1890. *Hunger*, English translation from the Norwegian original published in 2006, Canongate Books, Edinburgh (Scotland).

Harcourt A.H. and F.B.M. De Waal, 1992. *Coalition and Alliances in Humans and Other Animals*, Oxford University Press, Oxford (UK).

Hardin G., 1968. "The tragedy of the commons", *Science 162* (3859): 1243–1248.

Harper K. and S.R. Rajan, 2004. *International Environmental Justice: Building the Natural Assets of the World's Poor*, Working Paper 87, Political Economy Research Institute, Amherst (Mass, USA).

Harries-Jones P., 2010. "Cultural Perspectives and Sustainability" in Bell D. and A.C. Yuk-kuen (Eds.), Introduction to sustainable development, Encyclopaedia of Life Support *Systems*, UNESCO-EOLSS vol. 1

Harrison R.P., 2008. *Gardens: An Essay on the Human Condition*, Chicago University Press, Chicago (Illinois, USA).

Hartig T., R. Mitchell, S. de Vries and H. Frumkin, 2014. "Nature and health", *Annual Review of Public Health* 35: 207–228.

Haug G.H., D. Gunther, L.C. Peterson, D.M. Sigman, K.A. Hughen and B. Aeschlimann, 2003. "Climate and the collapse of Maya civilization", *Science* 299 (5613): 1731–1735.

Haverkort B., K. van't Hooft and W. Hiemstra, 2003. *Ancient Roots, New Shoots: Endogenous Development in Practice*, Zed Books, London.

Hay-Edie T., 2003. "The cultural values of protected areas", pp. 91–102 in Harmon, D. and A. Putney, 2003. *The Full Value of Parks: From Economics to the Intangible*, Rohman and Littlefield, Lanham (Maryland, USA).

Hedges C., 2022a. *The Greatest Evil is War*, Seven Stories Press, New York (NY, USA).

Hedges C., 2022b. Interview by Hamish McKenzie, https://read.substack.com/p/the-active-voice-6-chris-hedges#details accessed 2024.

Hedges C., 2023. *Woke Imperialism*. https://chrishedges.substack.com/p/woke-imperialism?utm_source=publication-search accessed 2024.

Hellström I., 2021. "Did the LBA Thera Eruption Cause the Decline of the Minoan Civilization?", https://ianhellstrom.org/eruption.pdf accessed 2024.

Henrich J., R., Boyd, S. Bowles, C. Camerer, E. Fehr, H. Gintis, R. McElreath, M. Alvard, A. Barr, J. Ensminger, N. Smith Henrich, K. Hill, F. Gil-White, M. Gurven, F.W. Marlowe, J.Q. Patton and D. Tracer, 2005. "'Economic man' in cross-cultural perspective: Behavioral experiments in 15 small-scale societies", *Behavioral and Brain Sciences* 28 (6): 795–815.

Herman E.S. and N. Chomsky, 1988. *Manufacturing Consent: The Political Economy of the Mass Media*, Pantheon Books (NY, USA).

Hernández C., H. Perales and D. Jaffee, 2022. "Without food there is no resistance": The impact of the Zapatista conflict on agrobiodiversity and seed sovereignty in Chiapas, Mexico", *Geoforum* 128: 236–250.

Herzenni A. 2008. *Aires Forestières Communautaires Conservées dans le Haut Atlas Central, Maroc*, CEESP Report, https://www.iccaconsortium.org/wp-content/uploads/2015/08/regional-review-morocco-2008-fr.pdf

Heyes S. and P. Jacobs, 2008. "Losing place: Diminishing traditional knowledge of the Arctic Coastal Landscape", pp. 135–154 in Vanclay F., J. Malpas, M. Higgins and A. Blackshaw (eds.), 2008. *Making Sense of Place: Exploring concepts and expressions of place through different senses and lenses*, National Museum of Australia Press, Camberra.

Heylings P. and M. Bravo, 2001. "Survival of the fittest? Challenges facing the co-management model for the Galápagos Marine Reserve", *CM News* 5: 10–13.

Heylings P. and M. Bravo, 2007. "Evaluating governance: A process for understanding how co-management is functioning, and why, in the Galápagos Marine Reserve", *Ocean & Coastal Management* 50: 174–208.

Hill R. and J. Duncan, 2017. "Global-local governance for generating transformative pathways towards sustainable food provision and nature conservation", pp. 295–329 in Gordon I.J., H.T. Prins and G.R. Squire (eds.), 2017. *Food Production and Nature Conservation*, Routledge, New York (NY, USA).

Hill R. *et al.*, 2019, "Biocultural approaches to pollinator conservation", *Nature Sustainability* 2: 214–222.

Hilty J., G.L. Worboys, A. Keeley, S. Woodley, B. Lausche, H. Locke, M. Carr, I. Pulsford, J. Pittock, J.W. White, D.M. Theobald, J. Levine, M. Reuling, J.E.M. Watson, R. Ament and G.M. Tabor, 2020. *Guidelines for Conserving Connectivity through Ecological Networks and Corridors*, Best Practice Protected Area Guidelines Series No. 30, IUCN and WCPA, Gland (Switzerland).

Hitchcock R.K., 1992. *Communities and Consensus: An evaluation of the activities of the Nyae Nyae Farmers Cooperative and the Nyae Nyae Development Foundation in Northeastern Namibia*, Ford Foundation, Windhoek.

Hoagland A., 1997. "Totem poles and plank houses: Reconstructing native culture in Southeast Alaska", *Perspectives in Vernacular Architecture* 6: 174–185.

Hobart M., 1993. "Introduction: The growth of ignorance?" in Hobart M. (ed.), 1993. *An Anthropological Critique of Development*, Routledge, London.

Hocking M., J. Hardcastle, S. Woodley, T. Sandwith, J. Wilson, M. Bammert, S. Valenzuela, B. Chataigner, T. Lefebvre, F. Leverington, N. Lopoukhine, K. MacKinnon and J. Miranda Londoño, 2019. "The IUCN Green List of Protected and Conserved Areas: Setting the standard for effective area-based conservation", *Parks* 25 (2): 57–66.

Hockings M., S. Stolton and N. Dudley, 2000. *Evaluating Effectiveness: A Framework for Assessing the Management of Protected Areas*, IUCN Best Practice in Protected Areas Series No. 6, Gland (Switzerland) and Cambridge (UK).

Hoffmann D.K., C.D. Standish, M. García-Diez, P.B. Pettitt, J.A. Milton, J. Zilhão, J.J. Alcolea-González, P. Cantalejo-Duarte, H. Collado, R. de Balbín, M. Lorblanchet, J. Ramos-Muñoz, G.-Ch. Weniger and A.W.G. Pike, 2018. "U-Th dating of carbonate crusts reveals Neanderthal origin of Iberian cave art", *Science* 359 (6378): 912–915.

Holdgate M., 1999. *The Green Web: A Union for World Conservation*, IUCN and Earthscan, London.

Holdgate M., undated. "The Chilean fiords and their lost peoples", manuscript available from the author.

Holmberg A., 2021. *ICCA Consortium Virtual Workshop 9 August 2021*, accessed 2023 https://www.iccaconsortium.org/index.php/2021/12/15/recap-solidarity-exchange-indigenous-decolonization-sustainable-self-determination/

Holmes G., 2012. "Biodiversity for billionaires: Capitalism, conservation and the role of philanthropy in saving/selling nature", *Development and Change* 43: 185–203.

Holsworth R.D., 1979. "Recycling Hobbes: The limits to political ecology", *The Massachusetts Review* 20 (1): 9–40.

Hong C., 2021. "Over 5,000 days of resistance: an interview with anti-base activist Choi Sung-hee on the Gangjeong and Jeju struggle for peace", *The Abusable Past*, Forum 5.7 https://abusablepast.org/category/forums/white-terror-red-island/

Hooks G. and C.L. Smith, 2011. "The treadmill of destruction goes global: Anticipating the environmental impact of militarism in the 21st Century", in Gouliamos K. and C. Kassimeris (eds.), 2011. *The Marketing of War in the Age of Neo-Militarism*, Routledge, New York (NY, USA).

Hoover C., S. Ostertag, C. Hornby, C. Parker, K. Hansen-Craik, L.L. Loseto and T. Pearce, 2016. "The importance of hunting for future Inuit food security", *Solutions* 7 (4): 40–51.

Horlings I. (ed.), 2010. *Vital Coalitions, Vital Regions*, Wageningen Academic Pub., Wageningen (The Netherlands).

Horowitz M.M., 1990. "Donors and deserts: The political ecology of destructive development in the Sahel", *African Environment*, ENDA, Dakar.

Horowitz M.M., 1995. "Dams, cows and vulnerable people: Anthropological contributions to sustainable development", *The Pakistan Development Review* 34 (4): 481–508.

Howkins A., J. Orsi and M. Fiege, 2016. *National Parks Beyond the Nation: Global Perspectives on "America's Best Idea"*, University of Oklahoma Press, Norman (Oklahoma, USA).

Hughes R. and F. Flintan, 2001. *Integrating Conservation and Development Experience: A Review and Bibliography of the ICDP Literature*, International Institute of Environment and Development, London.

Hulin M., 2008. *La Mystique Sauvage*, Quadrige Ed., Paris.

Hull V. and J. Liu, 2018. "Telecoupling: A new frontier for global sustainability", *Ecology and Society* 23 (4): 41.

Hunziker R. and T. Hofstetter, 2020. "Swiss Regional Nature Parks: Sustainable rural and mountain development through transformative learning?", *Mountain Research and Development* 40 (4).

Hussein S., 1999. "Tenure in the context of sustainable use of natural resources in Asia", pp. 21–27 in Oglethorpe, 1999.

Huxley T.H., 1888. "The struggle for existence in human society", *The Nineteenth Century*, London.

ICCA Consortium, 2018. Submission to the CBD Secretariat in response to the notification requesting views on the preparation, scope and content of the post-2020 global biodiversity framework, accessed 2023 https://www.iccaconsortium.org/wp-content/uploads/2019/02/submission-on-post-2020-biodiversity-framework-ICCA-Consortium-to-upload.pdf accessed 2024.

ICCA Consortium, 2021. *Territories of life Report* https://report.territoriesoflife.org/ accessed 2024.

Igoe J., 2007. "Human rights, conservation and privatization of sovereignty in Africa: A discussion of recent changes in Tanzania, IUCN CEESP *Policy Matters* 15: 241–254.

Igoe J. and D. Brockington, 2007. "Neoliberal conservation: A brief introduction", *Conservation and Society* 5 (4): 432–449.

Illich I., 1983. "Vernacular Gender", *Alternatives* 8 (3): 381.

ILO (International Labor Organization), 1989. *Indigenous and Tribal Peoples Convention no. 169* https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C169 accessed 2024.

Indigenous Circle of Experts, 2018. *We Rise Together* https://publications.gc.ca/collections/collection_2018/pc/R62-548-2018-eng.pdf accessed 2024.

Infield, M., 2024. *Beautiful Beasts, Beautiful Lands. The Fall and Rise of an African National Park*, Whittles Pub., Dunbeat (UK).

Inspection Panel, 2016. *Indigenous Peoples*. The World Bank, Washington DC.

Inter-American Court of Human Rights, 2001. Case of the Mayagna (Sumo) Awas Tingni Community v. Nicaragua, Judgment of August 31. https://www.corteidh.or.cr/docs/casos/articulos/seriec_79_ing.pdf accessed 2024.

International Society of Ethnobiology, 2006. *International Society of Ethnobiology Code of Ethics* (with 2008 additions), accessed 2023 http://ethnobiology.net/code-of-ethics/ accessed 2024.

Iordăchescu G., 2018. "Making the 'European Yellowstone': unintended consequences or unrealistic intentions?", Environment & Society Portal, *Arcadia* 10, accessed 2023 https://arcadia.ub.uni-muenchen.de/arcadia/article/view/165/152 accessed 2024.

Iordăchescu G., A. Varga, M. Vasile and I. Sinziana Opincaru, 2021, "The Christmas Village in Romania", in ICCA Consortium, 2021. *Territories of Life Report*. https://report.territoriesoflife.org/territories/homordkaracsonyfalva-kozbirtokossag-romania/ accessed 2024.

IPBES, 2019. *Global Assessment Report on Biodiversity and Ecosystem Services*, IPBES Secretariat, Bonn. https://ipbes.net/global-assessment accessed 2024.

IPBES, 2022. *Thematic Assessment Report on the Sustainable Use of Wild Species*, IPBES Secretariat, Bonn. https://ipbes.net/sustainable-use-assessment accessed 2024.

IPCC, 2021a. *Climate Change 2021: The Physical Science Basis*, Cambridge University Press, Cambridge (UK). https://www.ipcc.ch/report/ar6/wg1/ accessed 2024.

IPCC, 2021b. "Climate change widespread, rapid, and intensifying", Press Release https://www.ipcc.ch/2021/08/09/ar6-wg1-20210809-pr/ accessed 2024.

IPCC, 2022. https://www.ipcc.ch/report/sixth-assessment-report-cycle/ accessed 2024.

Ireton C. and J. Posetti, 2018. *Journalism,'Fake News' & Disinformation*, UNESCO Pubs., accessed online 2023.

Ironside J. and I.G. Baird, 2003. *Wilderness or Cultural Landscape: Settlement, Agriculture, and Land and Resource Tenure in Virachey National Park, Northeast Cambodia*. Biodiversity and Protected Areas Management Project, Ministry of Environment/World Bank, Ban Lung, Ratanakiri (Cambodia).

Ironside J., G. Paterson and A. Thomas, 2017. "Swidden agriculture under threat – the case of Ratanakiri, Northeast Cambodia: Opportunities and constraints from the national policy environment" in Cairns, M. (ed.) *2017. Shifting Cultivation Policies: Balancing Environmental and Social Sustainability*, CAB Int., Oxfordshire (UK).

IUCN, 1975. *Proceedings of the Twelfth General Assembly, Kinshasa (Zaire) 8–18 September 1975*, https://portals.iucn.org/library/sites/library/files/documents/NS-SP-044.pdf accessed 2024.

IUCN, 2005. *Benefits Beyond Boundaries. Proceedings of the Vth IUCN World Parks Congress.* IUCN, Gland (Switzerland) and Cambridge (UK), https://portals.iucn.org/library/sites/library/files/documents/2005-007.pdf accessed 2024.

IUCN CEESP, 2003. "Community Empowerment for Conservation", *Policy Matters* 12 https://portals.iucn.org/library/sites/library/files/documents/Policy-Matters-Issue-12.pdf accessed 2024.

IUCN CEESP, 2004. *History, Culture and Conservation*, *Policy Matters* 13 https://portals.iucn.org/library/sites/library/files/documents/Policy-Matters-Issue-13.pdf accessed 2024.

IUCN CEESP, 2006. *Poverty, Wealth and Conservation*, *Policy Matters* 14, accessed 2023 https://portals.iucn.org/library/sites/library/files/documents/Policy-Matters-Issue-14.pdf accessed 2024.

IUCN Protected Areas Programme, 2004. "2003 Durban World Parks Congress", *Parks*, 14 (2). See also: IUCN (2005).

IUCN, UNEP and WWF, 1980. *World Conservation Strategy: Living Resource Conservation for Sustainable Development*, IUCN, Gland (Switzerland).

IUCN, UNEP and WWF, 1991. *Caring for the Earth: A Strategy for Sustainable Living*, IUCN, Gland (Switzerland) https://portals.iucn.org/library/node/6439 accessed 2024.

IUCN WCPA, 2010a. *50 Years of Working for Protected Areas. A brief history of IUCN World Commission on Protected Areas*, IUCN, Gland (Switzerland).

IUCN WCPA, 2010b. *Next Steps: Convention on Biological Diversity Programme of Work on Protected Areas*, IUCN, Gland (Switzerland).

IUCN WCPA, 2015. "Developing capacity for a protected planet", *Parks* 21 (1).

IUCN WCPA Task Force on OECMs, 2019. *Recognising and reporting other effective area-based conservation measures*, IUCN, Gland (Switzerland).

IUCN and WCPA, 2017. *IUCN Green List of Conserved and Protected Areas: Standard, Version 1.1.* IUCN, Gland (Switzerland), https://iucngreenlist.org/standard/global-standard/ accessed 2024.

Ives P., 1968. *Language and Hegemony in Gramsci*, Pluto Press, Sidmouth (UK).

IWGIA, 1918. "The Wampís Nation – the first indigenous autonomous government in Peru", accessed 2023 https://www.iwgia.org/en/peru/3265-wampis-nation-peru

Jackson W., W. Berry and B. Colman (eds.), 1984. *Meeting the Expectations of the Land*, North Point Press, Berkeley (California, USA).

Jacobs P. and D.A. Munro (eds.), 1987. *Conservation with Equity: Strategies for Sustainable Development*, IUCN, Gland (Switzerland) and Cambridge (UK).

Jago J., J. Day, J. Fernandes, L. Thompson, J. Hall and K. Sampson, 2004. "Bringing the Great Barrier Reef Marine Park zoning into the 21st Century: An overview of the Representative Areas Program", Great Barrier Reef Marine Park Authority, accessed online 2023.

James A. and N. Pathak Broome, 2023. "A Fine Balance? Value-relations, post-capitalism, and forest conservation: A case from India", *Conservation and Society* 21 (3): 188–199.

James S.R., 1989. "Hominid use of fire in the lower and middle Pleistocene: A review of the evidence", *Current Anthropology* 30 (1): 1–26.

Jana S. and N.S. Paudel, 2010. *Rediscovering Indigenous Peoples' and Community Conserved Areas in Nepal*, Forest Action Nepal, Kathmandu.

Jenkins, H., 1999. "Workshop on the influence of tenure and access rights on the sustainability of natural resource uses", pp. 71–75 in Oglethorpe, 1999.

Jimoh A.K., 2017. "*Ubuntu, ibuanyindanda*: Harnessing African philosophy of personhood for peaceful co-existence in Nigeria", *Ewanlen* 1 (1): 40–49.

Johnson C., 2006. *Nemesis: The Last Days of the American Republic*, Macmillan, New York (NY, USA).

Johnson W.A. and T. Earle, 2000 (second edition), *The Evolution of Human Society*, Stanford University Press, Stanford, California (USA).

Jonas, H., E. Lee, H.C. Jonas, C. Matallana, K.S. Wright, F. Nelson and E. Enns, 2017. "Will 'other effective area-based conservation measures' increase recognition and support for ICCAs?", *Parks* 23: 63–78.

Jonas H., K. MacKinnon, N. Dudley, M. Hockings, S. Jessen, D. Laffoley, D. MacKinnon, C. Matallana-Tobón, T. Sandwith, J. Waithaka and S. Woodley, 2018. "Other effective area-based conservation measures: From Aichi Target 11 to the post-2020 Biodiversity Framework", *Parks* 24.

Jonas H.D. *et al.*, 2021. "Equitable and effective area-based conservation: Towards the conserved areas paradigm", *Parks* 27(1): 71–84.

Jones B.T.B., 1996. *Institutional relationships, capacity and sustainability: Lessons learned from a community-based conservation project, eastern Tsumkwe District, Namibia, 1991–96.* Research Discussion Paper No.11, Directorate of Environmental Affairs, Ministry of Environment and Tourism, Windhoek.

Jones N.A., S. Shaw, H. Ross, K. Witt and B. Pinner, 2016. "The study of human values in understanding and managing social-ecological systems", *Ecology and Society* 21 (1): 15.

Johnstone C., 2023a. "Most propaganda looks nothing like this", *Substack Newsletter* 28 May, https://www.caitlinjohnst.one/p/most-propaganda-looks-nothing-like?utm_source=profile&utm_medium=reader2 accessed 2024.

Johnstone C., 2023b. "Escaping the prison of mainstream culture", *Substack Newsletter* 24 May, https://www.caitlinjohnst.one/p/escaping-the-prison-of-mainstream?utm_source=profile&utm_medium=reader2 accessed 2024.

Jordan A., 2000. "The politics of multilevel environmental governance: Subsidiarity and environmental policy in the European Union", *Environment and Planning* 32 (7): 1307–1324.

Jordania J., 2015. "A new interdisciplinary approach to the study of the origins of traditional polyphony", http://www.josephjordania.com/files/8-Jelena-article-2015-in-Serbia.pdf accessed 2020.

Kalland A., 1999. "*Mare closum* as a management tool in fishing societies", pp. 119–128 in Oglethorpe, 1999.

Kannuri N.K. and S. Jadhav, 2021. "Cultivating distress: Cotton, caste and farmer suicides in India", *Anthropology & Medicine* 28 (4): 558–575.

Karen Indigenous Peoples of Kamoethway, undated. *We will Manage our Natural Resources*, TRIP NET & RKIPN, Tanintharyi (Myanmar).

Karr J.R., E.R. Larson and E.W. Chu, 2022. "Ecological integrity is both real and valuable", *Conservation Science and Practice* 4 (2): e583.

Kashwan P., R.V. Duffy, F. Massé, A.P. Asiyanbi and E. Marijnen, 2021. "From racialized neocolonial global conservation to an inclusive and regenerative conservation", *Environment: Science and Policy for Sustainable Development* 63 (4): 4–19.

Kavas K.R. and I. Bakır, 2015. "A spatial analysis of the plateau settlements and semi-nomadic life in the Taurus Mountains of Turkey", ATINER'S Conference Paper Series, accessed online 2023.

Kelleher J., 2021. *The Dragon Flying in the Clouds*, IUCN Global Protected Areas Programme https://digital.iucn.org/protected-areas/the-dragon-flying-in-the-clouds/ accessed 2024.

Kelly R.L., 2013. *The Lifeways of Hunter-Gatherers: The Foraging Spectrum*, Cambridge University Press, Cambridge (UK).

Khor L., 1979. *Development without Aid*, Shochen Books, New York (NY, USA).

Kill J. 2014. *Economic Valuation of Nature: The Price to Pay for Conservation?*, Rosa Luxemburg Stiftung, Brussels, accessed online 2023.

Kimball S., 1982. "Community and hominid emergence", *Anthropology & Education Quarterly* 13 (2): 125–131.

Knight R. 2020. *Ceremony and ritual are not important for conservation, they are conservation*, Manuscript thesis submitted to the University of Kent.

Koc A., W.H. Schacht and H.I. Erkovan, 2016. "The history and current direction of rangeland management in Turkey", *Rangelands* 37 (1): 39–46.

Kohari A., 2022. "Pakistan submerged", *The New York Review of Books* (Nov. 24, 2022): 21–23.

Kok M.T.J., R. Alkemade, M. Bakkenes, M. van Eerdt, J. Janse, M. Mandryk, T. Kram, T. Lazarova, J. Meijer, M. van Oorschot, H. Westhoek, R. van der Zagt, M. van der Berg, S. van der Esch, A.G.Prins, and D.P. van Vuuren, 2018. "Pathways for agriculture and forestry to contribute to terrestrial biodiversity conservation: A global scenario-study", *Biological Conservation* 221: 137–150.

Koleilat L., 2019. "Spaces of dissent: Everyday resistance in Gangjeong Village, Jeju Island", *Cross-Currents: East Asian History and Culture Review* 33: 247–252.

Köllner T., 2020. *Religion and Politics in Contemporary Russia: Beyond the Binary of Power and Authority*, Routledge, UK.

Korten D., 1984. *Strategic Organization for People-Centered Development*, Asian Institute of Management, Jakarta, accessed online 2023.

Korten D., 2021. *Ecological Civilization: From Emergency to Emergence,* https://davidkorten.org/wp-content/uploads/2021/11/Korten-EcoCiv-11032021.pdf accessed 2024.

Kothari A. (ed.), 2006. *Community Conserved Areas*, special issue of *Parks*, 16 (1).

Kothari A., 2014. *ICCAs and Aichi Targets*, Policy Brief of the ICCA Consortium 1, co-produced with CBD Alliance, Kalpavriksh and CENESTA and the IUCN Global Protected Areas Programme, Teheran.

Kothari A., 2021. "Colonial conservation in new avatars", *Wall Street International*, accessed online 2023.

Kothari A., 2022. "The flower of transformation blooms in Kurdistan", *Meer* accessed online 2023.

Kothari A., C. Corrigan, H. Jonas, A. Neumann and H. Shrumm (eds.), 2012. *Recognising and Supporting Territories and Areas Conserved by Indigenous Peoples and Local Communities: Global Overview and National Case Studies*, Secretariat of the Convention on Biological Diversity, ICCA Consortium, Kalpavriksh and Natural Justice, Technical Series no. 64, Montreal (Canada).

Kothari A., N. Pathak, R.V. Anuradha and B. Taneja, 1998. *Communities and Conservation: Natural Resource Management in South and Central India*, Sage, New Delhi.

Kothari A., N. Pathak and F. Vania, 2000. *Where Communities Care*, Kalpavriksh and IIED, Pune (Maharashtra, India).

Kothari A., S. Suri and N. Singh, 1995. "Conservation in India: A new direction", *Economic and Political Weekly* 30: 2755–2766.

Krakoff S., 2018. "Public Lands, conservation, and the possibility of justice", *Harvard Civil Rights-Civil Liberties Law Review*, 53.

Krantz G.S., 1980. "Sapienization and speech", *Current Anthropology* 21 (6): 773–792.

Krause J. and H.D. Ruxton, 2002. *Living in Groups*, Oxford University Press, New York (NY, USA).

Kropotkin P., 1902 (reprinted 1955). *Mutual Aid. A Factor of Evolution*, Extending Horizons Books, Boston (Massachusetts, USA). [Quote from the reprinted version of 1955, p. 236]

Kruid S., M.N. Macedo, S.R. Gorelik, W. Walker, P. Moutinho, P.M. Brando, A. Castanho, A. Alencar, A. Baccini and M.T. Coe, 2021. "Beyond deforestation: Carbon emissions from land grabbing and forest degradation in the Brazilian Amazon", *Frontiers in Forests and Global Change* 4: 105.

Kuefler B.W.A., 2010. *Continuity and Change: Moose Cree Relationships with Geese St. John's*, MA Thesis, University of Newfoundland (Canada), https://research.library.mun.ca/9066/1/Kuefler_Brent.pdf accessed 2024.

Kuhn R., 2010. "Routes to low mortality in poor countries revisited", *Population and Development Review* 36 (4): 655–692.

Kula G. 1999. "Influence of tenure and access rights on the sustainability of natural resource use", pp. 43–48 in Oglethorpe, 1999.

Kyle A.A., M. Zurba, J. Bhattacharyya, D.E. Chan, K. Brown, J. Housty and F. Moola, 2019. "Supporting resurgent Indigenous-led governance: A nascent mechanism for just and effective conservation", *Biological Conservation* 240.

Lakoff G., 2010. "Why it matters how we frame the environment", *Environmental Communication* 4 (1): 70–81.

Landrigan P.J., R. Fuller, N.J.R. Acosta *et al.*, 2018. "The Lancet Commission on Pollution and Health", *The Lancet* 391: 462–512.

Landry M., 2010. "How brown were the conservationists? Naturism, conservation, and national socialism, 1900–1945", *Contemporary European History* 19(1): 83–93.

Langer A., 1996, *Il viaggiatore leggero. Scritti 1961–1995*, Sellerio, Palermo (Italy).

Lanius P. and L. Johnson, 2020. *Debunking Sustainable Use Report 2020*, Nature Needs More, https://natureneedsmore.org/wp-content/uploads/2020/06/Debunking-Sustainable-Use-Report.pdf accessed 2024.

Larsen C.S., 2009. "Emergence and evolution of agriculture" in Pond W.G., L.N. Buford and D.L. Brown (eds.), 2009. *Adequate Food for All: Culture, Science, and Technology of Food in the 21st Century*, CRC Press, Boca Raton, Florida (USA).

Latour B., 2004. *Politics of Nature: How to Bring the Sciences into Democracy,* Harvard University Press, Cambridge (Massachusetts, USA).

Latour B., 2011. "Politics of nature: East and West perspectives", *Ethics & Global Politics* 4 (1): 71–80.

Latour B., 2018. *Down to Earth: Politics in the New Climatic Regime*, Polity Press, Cambridge (UK).

Laureano P., 1993 (reprinted 2018). *Giardini di Pietra*. Bollati Boringhieri, Torino (Italy). [Quote from p. 183]

Laureano P., 2013. *Water Conservation Techniques in Traditional Human Settlements*, Copal Pubs., Ghaziabad (Uttar Pradesh, India).

Laureano P., 2018. *Labirinto d'acque 2018*, http://www.labirintodacque.it/en/profile/pietro-laureano/

Lausche B., 2011. *Guidelines for Protected Areas Legislation*, IUCN, Gland (Switzerland).

Lautensach A., 2021. "Cultural learning as a means to survive the Anthropocene", Pedagogy of Transition, on-line discussion of the Great Transition Initiative, https://greattransition.org/ accessed 2024.

Le Page C. and D. Bazile, N. Becu, P. Bommel, F. Bousquet, M. Etienne, R. Mathevet, V. Souchère, G. Trébuil and J. Weber, 2013. "Agent-based modelling and simulation applied to environmental management", in Edmonds B. and R. Meyer (eds.), 2013. *Simulating Social Complexity*, Springer, Berlin (Germany).

Leach M., R. Mearns and I. Scoones, 1999. "Environmental Entitlements: Dynamics and Institutions in Community-Based Natural Resource Management", *World Development* 27 (2): 225–247.

Lecomte B.J., 1986. *Project Aid: Limitations and Alternatives*, OECD Development Centre Studies, OECD, Paris.

Leroux-Dhuys J.F., 1999. *Les Abbayes Cisterciennes. Histoire et Architecture*, Cologne (Germany).

Lewontin R.C., 1982. "Agricultural research and the penetration of capital", *Science for the People* 14 (1): 12–17, accessed online 2024.

Li T.M., 1996. "Images of community: Discourse and strategy in property relations", *Development and Change* 27 (3): 501–527.

Li T.M., 2000. "Articulating indigenous identity in Indonesia: Resource politics and the tribal slot", *Comparative Studies in Society and History* 42 (1): 149–179.

Li T.M., 2005. "Engaging simplifications: Community-based natural resource management, market processes and State agendas in Upland Southeast Asia", pp. 427–458 in Brosius *et al.*, 2005.

Liffman P.M., 2011. *Huichol territory and the Mexican nation: Indigenous ritual, land conflict, and sovereignty claims*, University of Arizona Press, Tucson (Arizona, USA).

Light A. 1989. "Bookchin as/and Social Ecology" in Light A. (ed.), 1989. *Social Ecology after Bookchin*, Guilford Press, New York (NY, USA).

Lin C. and M. Lockwood, 2014. "Assessing sense of place in natural settings: A mixed-method approach", *Journal of Environmental Planning and Management* 57 (10): 1441–1464.

Lindsay J.M., 1998. "Creating a legal framework for community-based management: Principles and dilemmas", Digital Library of the Commons, accessed online 2023.

Lipton M., 1977. *Why poor people stay poor: A study of urban bias in world development*, Australian National University Press, Camberra.

Little P.D., 2016. *Pastoralism*. Oxford Bibliographies online, accessed 2020.

Liu J., 2017. "Integration across a metacoupled world", *Ecology and Society* 22 (4): 29.

Liu J., V. Hull, M. Batistella, R. DeFries, T. Dietz, F. Fu, T.W. Hertel, R.C. Izaurralde, E.F. Lambin, S. Li, L. A. Martinelli, W.J. McConnell, E.F. Moran, R. Naylor, Z. Ouyang, K.R. Polenske, A. Reenberg, G. de Miranda Rocha, C.S. Simmons, P.H. Verburg, P.M. Vitousek, F. Zhang, and C. Zhu, 2013. "Framing sustainability in a telecoupled world", *Ecology and Society* 18 (2): 26.

Loh P. and B.W. Shear, 2022. "Fight and build: solidarity economy as ontological politics", *Sustainability Science* 17 (4): 1207–1221.

Löhr D., 2012. "The failure of land privatization: On the need for new development policies", https://wealthofthecommons.org/essay/failure-land-privatization-need-new-development-policies accessed 2024.

Lombardo U., J. Iriarte, L. Hilbert, J. Ruiz-Pérez, J.M. Capriles and H. Veit, 2020. "Early Holocene crop cultivation and landscape modification in Amazonia", *Nature* 581 (7807): 190–193.

Long S.A., 2004. *Livelihoods and CBNRM in Namibia: The findings of the WILD project*, Agris paper, FAO, accessed online 2021.

Lorenzi R. and S. Lorenzi, 2022. *Cortina 2020–2040: Storia di una Comunità al Tramonto?*, Light Hunter Publications, Cortina d'Ampezzo (Italy).

Lorenzi S. and G. Borrini-Feyerabend, 2011. *Community Conserved Areas: Legal Framework for the Natural Park of the Ampezzo Dolomites (Italy)*, Case study for Lausche B., 2011. *Guidelines for Protected Areas Legislation*, IUCN, Gland (Switzerland) https://www.iccaconsortium.org/wp-content/uploads/2009/09/Ampezzo-2010.pdf accessed 2024.

Lothian W.F., 1987. *A Brief History of Canada's National Parks*, Environment Canada, Gatineau (Quebec, Canada).

Lovelock J.E. and L. Margulis, 1974. "Atmospheric homeostasis by and for the biosphere: The Gaia hypothesis". *Tellus A 26 (1–2): 2–10*.

Lovera S., 2008. "The hottest REDD issues: Rights, equity, development, deforestation and governance by Indigenous peoples and local communities", discussion paper for Global Forest Coalition and CEESP, https://unfccc.int/resource/docs/2009/smsn/ngo/117.pdf accessed 2024.

Low B., E. Ostrom, C. Simon and J. Wilson. 2003. "Redundancy and diversity: Do they influence optimal management?", pp. 83–114 in Berkes et al., 2003.

Lowenhaupt Tsing A., 1993. In the Realm of the Diamond Queen, Princeton University Press, Princeton (New Jersey, USA).

Lozada S.G., 2021. *From Green Pastures to Scorched Earth: German Environmentalism and Ecology, c. 1800s–1945*, CUNY MS thesis manuscript https://academicworks.cuny.edu/cgi/viewcontent.cgi?article=1007&context=qc_etds accessed 2024.

Lu Holt F., 2005. "The catch-22 of conservation: Indigenous peoples, biologists, and cultural change", Human Ecology 33 (2): 199–215.

Lucio C. and D. Barkin, 2022. "Postcolonial and anti-systemic resistance by indigenous movements in Mexico", *Journal of World Systems Research 28 (2): 293–319.*

Lutzenberg J., 1980. *Fim do Futuro? Manifesto Ecologico Brasileiro*, Movimento, Porto Alegre (Rio Grande do Sul, Brazil).

Lynch O., 2005. "Concepts and strategies for promoting legal recognition of community-based property rights: Insights from the Philippines and other nations", pp. 391–426 in Brosius *et al.*, 2005.

Macauley D. 1988. "Evolution and revolution: The ecological anarchism of Kropotkin and Bookchin" in Light A. (ed.), 1988. *Social Ecology after Bookchin*, Gilford Press, NY.

MacLeod A. and M. Alford, 2019. "Expanding the propaganda model to the entertainment industry" in MacLeod, A. (ed.), 2019. *Propaganda in the Information Age: Still Manufacturing Consent*, Routledge, London.

MAE/DGCS (Ministero degli Affari Esteri/ Direzione Generale Cooperazione allo Sviluppo), 1989. "Primary Environmental Care: A strategic approach for community-based environmental management", room document for the Development Assistance Committee of the Organisation for Cooperation and Economic Development (OECD/DAC), Paris, November 15–16, 1989.

Maffi L., 1998. "Language: A resource for nature", UNESCO *Nature and Resources* 34 (4): 12–21.

Makombe K., 1993. *Sharing the land: Wildlife, people and development in Africa*, IUCN Regional Office of Southern Africa, Harare.

Malin S.A, S. Ryder and M. Galvão Lyra, 2019. "Environmental justice and natural resource extraction: Intersections of power, equity and access", *Environmental Sociology* 5 (2): 109–116.

Mallarach J.M. and T. Papayannis (eds.), 2007. *Protected Areas and Spirituality. Proceedings of the First Workshop of the Delos Initiative, Montserrat 2006*, IUCN, Gland (Switzerland) and Abadia de Montserrat, Montserrat (Spain).

Mallarach J.M. and T. Papayannis, 2011. "Monastic community conserved areas in Europe", paper prepared for the meeting 'Understanding community conservation in Europe', Gerace, Italy, https://www.iccaconsortium.org/wp-content/uploads/2015/07/event-inter-2011-gerace-17-mallarach.pdf accessed 2024.

Mallarach J.M., J. Juviñá and T. Papayannis, 2014. "Christian monastic communities living in harmony with the environment. An overview of positive trends and best practices", *Studia Monastica* 56 (2): 353–392.

Margalef R., 1968. *Perspectives in Ecological Theory*, University of Chicago Press, Chicago (USA).

Margulis L., 1981. *Symbiosis in Cell Evolution: Life and its Environment on the Early Earth*, NTRS Report. https://doi.org/10.1002/jobm.19820220615 accessed 2024.

Margulis L. and D. Sagan, 1995. *What is Life?*, Simon and Schuster, New York (NY, USA).

Marica I., 2018. "Controversial move: Govt. appoints state agency to manage protected natural areas in Romania", https://www.romania-insider.com/govt-manage-protected-natural-areas-romania accessed 2024.

Mariki S., 2016. "Commercialization of nature: Can market-based mechanisms deliver positive conservation and development outcomes?", *Open Journal of Social Sciences* 4: 61–69.

Marini Govigli V., A. Efthymiou and K. Stara, 2021. "From religion to conservation: Unfolding 300 years of collective action in a Greek sacred forest", *Forest Policy and Economics* 131.

Marshall F. and J.M. Capriles, 2014. "Animal domestication and pastoralism: Socio-environmental contexts" pp. 249–258 in Smith C. (ed.), 2014. *Encyclopedia of Global Archaeology.* Springer International.

Marshall F. and E. Hildebrand, 2002. "Cattle before crops: The beginnings of food production in Africa", *Journal of World Prehistory* 16: 99–143.

Marshall G., 2008. "Nesting, subsidiarity, and community-based environmental governance beyond the local level", *International Journal of the Commons* 2 (1): 75–97.

Martel C., G. Pennycook and D.G. Rand, 2020. "Reliance on emotion promotes belief in fake news", *Cognitive Research* 5 (47).

Martin A., B. Coolsaet, E. Corbera, N.M. Dawson, J.A. Fraser, I. Lehmann and I. Rodriguez, 2016. "Justice and conservation: The need to incorporate recognition", *Biological Conservation* 197: 254–261.

Martin-Ortega J. and K.A. Waylen, 2018. "PES what a mess? An analysis of the position of environmental professionals in the conceptual debate on payments for ecosystem services", *Ecological Economics* 154: 218–237.

Martinez-Alier J., 2002. *The Environmentalism of the Poor. A Study of Ecological Conflicts and Valuation*, Edward Elgar Pubs., Cheltenham (UK).

Martínez-Alier J., 2012. "Environmental justice and economic degrowth: An alliance between two movements", *Capitalism Nature Socialism* 23 (1): 51–73.

Martínez-Alier J. and R. Muradian, 2015. *Handbook of Ecological Economics*, Edward Elgar Pubs., Cheltenham (UK).

Mason J. and L. Kassam, 2021. "Agriculture planted the seeds of alienation from nature" pp. 31–51 in Mason J. and L. Kassam (eds.), 2021. *Rethinking Food and Agriculture*, Woodhead online pubs.

Matthews W.H. (ed.), 1976. *Outer Limits and Human Needs*, Dag Hammarskjöld Foundation, Uppsala (Sweden).

Matulis B.S., 2014. "The economic valuation of nature: A question of justice?", *Ecological Economics* 104: 155–157.

Maturana H.R. and F.J. Varela, 1980. *Autopoiesis and Cognition: The Realization of the Living*. Boston Studies in the Philosophy of Science 42, Reidel pubs, Dordrecht (The Netherlands).

Mauss M., 1950. *Essai sur le Don*, Presses Universitaires de France, Paris [English translation 2002. *The Gift*, Routledge, London.]

McCabe J.T., 1990. "Turkana pastoralism: A case against the Tragedy of the Commons", *Human Ecology* 18 (1): 81–103.

McCarter J., M.C. Gavin, S. Baereleo and M. Love, 2014. "The challenges of maintaining indigenous ecological knowledge", *Ecology and Society* 19 (3): 39.

McCay B.J. and J.M. Acheson, 1987. *The Question of the Commons: The Culture and Ecology of Communal Resources*, University of Arizona Press, Tucson (Arizona, USA).

McClure S., 2015. "The pastoral effect: Niche construction, domestic animals, and the spread of farming in Europe", *Current Anthropology 56* (6): 901–910.

McCormick J., 1986. "The origins of the World Conservation Strategy", *Environmental Review* 10 (3): 177–187.

McGinnis M.V., J. Woolley and J. Gamman, 1999. "Bioregional conflict resolution: Rebuilding community in watershed planning and organizing", *Environmental Management* 24: 1–12.

McKeown T., 1988. *The Origin of Human Disease*, Basil Blackwell, Oxford (UK).

McNeely J. and D. Pitt, 1985. *Culture and Conservation: The Human Dimension in Environmental Planning*, Croom Helm, London.

Meadows D.L., D. Meadows and J. Randers, 1972. *The Limits to Growth,* Universe Books, New York (NY, USA).

Megdiche-Kharrat F., X. Yun Zheng, M. Moussa, Z. Famin and A.N. Angelakis, 2020. "Historic hydraulic works: Paradigms of traditional good water governance, integrity and sustainability", *Water Supply* 20 (7): 2484–2498.

Mehta L., M. Leach, P. Newell, I. Scoones, K. Sivaramakrishnan and S. Way, 1999. *Exploring Understandings of Institutions and Uncertainty: New Directions in Natural Resource Management*, IDS Discussion Paper 372, IDS, Brighton (UK).

Mele D., 2006. "The principle of subsidiarity in organizations: A case study", *IESE Business School Working Paper* No. 566, accessed online 2023.

Mellor J., 1988. "The intertwining of environmental problems and poverty", *Environment* 30 (9): 8–13.

Melman S., 1970. *Pentagon Capitalism. The Political Economy of War*, McGraw-Hill Book Company, New York (NY, USA).

Menezes R.G. and R. Barbosa Jr., 2021. "Environmental governance under Bolsonaro: Dismantling institutions, curtailing participation, delegitimising opposition", *Zeitschrift für Vergleichende Politikwissenschaft* 15: 229–247.

Merchant C., 1980. *The Death of Nature: Women, Ecology, and the Scientific Revolution*, Harper & Row, San Francisco (California, USA).

Merino L. and A.E. Martínez, 2014. *A vuelo de pájaro. Las condiciones de las comunidades con bosques templados en México*, Comisión Nacional para el Conocimiento y Uso de la Biodiversidad Tlalpan, Mexico City.

Merlo M., R. Morandini, A. Gabbrielli and I. Novaco, 1989. *Collective Forest Land Tenure and Rural Development in Italy: Selected Case Studies*, FAO FO:MISC/ 89/10, Rome.

Meroka P. and T. Haller, 2008. "Government wildlife, unfulfilled promises and business: Lessons from participatory conservation in the Selous Game Reserve, Tanzania", pp. 177–219 in Galvin and Haller, 2008.

Metcalf S., 1999. "Natural resources tenure in the context of sustainable use", pp. 31–39 in Oglethorpe, 1999.

Meyer R., 2016. "Obama's environmental legacy, in two buttes", *The Atlantic*, 16 December.

Meyers D., J. Bohorquez, T. Cumming, L. Emerton, O. v.d. Heuvel, M. Riva and R. Victurine, 2020. *Conservation Finance: A Framework*, Conservation Finance Alliance, accessed online 2023. https://www.conservationfinancealliance.org/cfa-white-paper

Millennium Ecosystem Assessment Program, 2005. *Ecosystems and Human Well-Being: Biodiversity Synthesis*, World Resources Institute, Washington DC.

Miller J.G., 1978. *Living Systems*, McGraw-Hill, New York (NY, USA).

Milton K., 2010. "Emotion (or Life, the Universe, Everything)", *Australian Journal of Anthropology* 16: 198–211.

Mingay G.E., *2014. Parliamentary Enclosure in England, Routledge, London.*

Miniconi R. and S. Guyot, 2010, "Conflicts and cooperation in the mountainous Mapuche territory (Argentina)", *Journal of Alpine Research*, 98–1.

Ministry of Agriculture Forestry and Fisheries of Cambodia, 2006. Prakas No. 162 on the management of Ou Tung community protected area in Kok Lak commune, Veun Sai district, Ratanak Kiri province in Virachey National Park, https://data.opendevelopmentmekong.net/laws_record/prakas-no-162-on-management-of-ou-tung-community-in-natural-protected-area-kok-lak-commune-veun-sai accessed 2024.

Mink S., 1993. *Poverty, Population and the Environment*, World Bank Discussion Paper 189, The World Bank, Washington DC.

Mitchell B.A., S. Stolton, J. Bezaury-Creel, H.C. Bingham, T.L. Cumming, N. Dudley, J.A. Fitzsimons, D. Malleret-King, K.H. Redford and P. Solano, 2018. *Guidelines for privately protected areas*, Best Practice Protected Area Guidelines Series No. 29, IUCN and WCPA, Gland (Switzerland).

Mithen S., 2005. *The Singing Neanderthals*, Weidenfeld & Nicolson, Orion Books, London.

Mittal A. and E. Frazer, 2018. *Losing the Serengeti: The Maasai land that was to run forever*, Oakland Institute, Oakland (California, USA).

Molm L.D., 2010, "The structure of reciprocity", *Social Psychology Quarterly* 73 (2): 119–131.

Molnár Z. and F. Berkes, 2016. "Role of traditional ecological knowledge in linking cultural and natural capital in cultural landscapes" in Paracchini M.L., P.C. Zingari and C. Blasi (eds.), *Reconnecting Natural and Cultural Capital*, EU pubs.

Moore D., J. Dore and D. Gyawali, 2010. "The World Commission on Dams + 10: Revisiting the large dam controversy", *Water Alternatives* 3 (2): 3–13.

Moore T., 2021. "Ethnocide and ethnogenesis in Madre de Dios, Peru: the FENAMAD Experience", pp. 297–322 in Chirif A. (ed.), 2021. *Towards the Conquest of Self-determination*, IWGIA, Lima.

Morgan L.H., 1877. *Ancient Society*, reprinted 1964 Harvard University Press, Cambridge (Massachusetts, USA).

Morris B., 1993. "Reflections on deep ecology", in Morris B., C. Wilbert, G. Purchase, M. Bookchin, R. Hart and R. Aitchtey, 1993. *Deep Ecology & Anarchism: A Polemic*, Freedom Press, London.

Mousseau F., A. Currier, E. Fraser and J. Green, 2020. *Driving Dispossession: the global push to 'unlock the economic potential of land'*, Oakland Institute, Oakland (California, USA).

Muecke S., 2004. *Ancient and Modern: Time, Culture and Indigenous Philosophy*, University of New South Wales, Sydney (Australia).

Mulongoy K.J. and S.B. Gidda, 2008. *The Value of Nature: Ecological, Economic, Cultural and Social Benefits of Protected Areas*, Secretariat of the Convention on Biological Diversity, Montreal (Canada).

Murali R., A. Bijoor, T. Thinley, K. Gurmet, K. Chunit, R. Tobge, T. Thuktan, K. Suryawanshi, H. Nagendra and C. Mishra, 2022. "Indigenous governance structures for maintaining an ecosystem service in an agropastoral community in the Indian Trans Himalaya", *Ecosystems and People* 18 (1): 303–314.

Murombedzi J.C, 2003. "Pre-colonial and colonial conservation practices in Southern Africa and their legacy today", https://www.iccaconsortium.org/wp-content/uploads/2015/08/example-pre-colonial-and-colonial-conservation-southern-africa-murombedzi-2003-en.pdf accessed 2024.

Murphree M., 1991. "Communities as resource management institutions", IIED *Gatekeeper Series* no. 36.

Murphree M., 1997. "Congruent objectives, competing interests and strategic compromise: Concepts and processes in the evolution of Zimbabwe's CAMPFIRE programme", Working paper no. 2 https://hummedia.manchester.ac.uk/institutes/gdi/publications/workingpapers/archive/cc/cc_wp02.pdf accessed 2024

Murphree M. 2000. "Community conservation: Old ways, new myths and enduring challenges", paper presented at a Conference on African Wildlife Management in the new African Millennium, Mweka, College of African Wildlife Management, 13–15 December.

Murphree M., 2004a. "Managing the sustainable use of wildlife", pp. 27–31 in Borrini-Feyerabend *et al.*, 2004b.

Murphree M., 2004b. "Communal approaches to natural resource management in Africa: From whence and to where?", *Journal of International Wildlife Law and Policy* 7 (3–4): 203–216.

Murphy B., 2011. "Environmental justice: Putting the poor first", *Pambazuka News*, 3 Nov, accessed 2023 https://www.ritimo.org/Environmental-justice-Putting-the-poor-first accessed 2024.

Myrdal G., 1968. *Asian Drama: An Inquiry into the Poverty of Nations*, Pantheon Books, New York (NY, USA).

Naess A., 1973. "The shallow and the deep, long-range ecology movement. A summary", *Inquiry* 16: 95–100.

Nagel J., 1994. "Constructing ethnicity: Creating and recreating ethnic identity and culture", *Social Problems* 41 (1): 152–176.

Nash R.F., 1967. *Wilderness and the American Mind*, Yale University Press, New Haven (Connecticut, USA).

Nayak P.K. (ed.), 2021. *Making Commons Dynamic*, Routledge, London.

Nelson A., 2022. *Beyond Money: A Postcapitalist Strategy*, Pluto Press, London.

Nelson F. (ed.), 2010. *Community Rights, Conservation and Contested Land: The Politics of Natural Resources Governance in Africa*, Earthscan, London.

Nepstad D., S. Schwartzman, B. Bamberger, M. Santilli, D. Ray, P. Schlesinger, P. Lefebvre, A. Alencar, E. Prinz, G. Fiske and A. Rolla, 2006. "Inhibition of Amazon deforestation and fire by parks and indigenous lands", *Conservation Biology* 20: 65–73.

Neumann R.P., 1996. "Nature-State-Territory: Toward a critical theorization of conservation enclosures", in Peet R. and M. Watts, 1996a. *Liberation Ecologies*, Routledge, London.

Newmark W.D. and J.L. Hough, 2000. "Conserving wildlife in Africa: Integrated conservation and development projects and beyond", *BioScience* 50 (7): 585–592.

Niebuhr R., 1932. *Moral Man and Immoral Society: a Study in Ethics and Politics*, Charles Scribner Sons, New York (NY, USA).

N'Goran E.K., S. Diabate, J. Utzinger and B. Sellin, 1997. "Changes in human schistosomiasis levels after the construction of two large hydroelectric dams in central Cote d'Ivoire", *Bulletin of the World Health Organization* 75 (6): 541–545.

Nguyen D., 2008. *Van Long Nature Reserve*, Report for IUCN CEESP https://www.iccaconsortium.org/index.php/2008/05/31/vietnam-van-long-nature-reserve/ accessed 2024

Nguyen H.A., Y. Vanson and D. Hubbel, 2015. *Report of the Evaluation of the Collaborative Management Learning Network (CMLN) Program (2012–2014) Cambodia, Lao PDR, Vietnam*, The Learning Institute, Phnom Penh.

Niederberger T., 2020. *Autonomy in the Amazon: The Emergence of the 'Gobierno Territorial Autónomo de la Nación Wampís' in Northern Peru*, PhD Dissertation, Institute of Social Anthropology, University of Bern, Switzerland.

Nieland J.U., 2008. "Politainment", in Donsbach (ed.), 2008. *The International Encyclopedia of Communication*, Wiley online.

Nigh R. and S.A. Diemont, 2013. "The Maya milpa: Fire and the legacy of living soil", *Frontiers in Ecology and the Environment* 11: 45–54.

Noam Z., 2007. "Eco-authoritarian conservation and ethnic conflict in Burma", IUCN CEESP *Policy Matters* 15: 272–287.

Nordhaus H., 2021. "Biden expected to reverse Trump's order to shrink Utah national monuments", *National Geographic* 14 January.

Noroozi J., G. Zare, M. Sherafati, M. Mahmoodi, D. Moser, Z. Asgarpour and G.M. Schneeweiss, 2019. "Patterns of endemism in Turkey, the meeting point of three global biodiversity hotspots, based on three diverse families of vascular plants", *Frontiers in Ecology and Evolution* 7: 159.

Norris P. and B.Y. Harney, 2014. "Songlines and navigation in Wardaman and other Australian Aboriginal Cultures, *Journal of Astronomical History and Heritage* 17 (2): 1–15.

North D.C., 1990. *Institutions, Institutional Change and Economic Performance*, Cambridge University Press, Cambridge (UK).

Notess L., P. Veit, I. Monterroso, Andiko, E. Sulle, A.M. Larson, A. Gindroz, J. Quaedvlieg and A. Williams, 2018. *The Scramble for Land*, WRI, Washington DC.

Notess L., P. Veit, I. Monterroso, Andiko, E. Sulle, A.M. Larson, A. Gindroz, J. Quaedvlieg and A. Williams, 2021. "Community land formalization and company land acquisition procedures: A review of 33 procedures in 15 countries", *Land Use Policy* 110: 104461.

Novellino D., 2007. "Rice-related knowledge, farming strategies and the transformation of swiddens amongst the Batak of Palawan Island (The Philippines)" in Cairns, M. (ed.), 2007. *Growing Forest of Voices*, RFF Press, Washington DC.

Novellino D., 2010. "Towards a 'common logic of procurement': Unraveling the foraging–farming interface on Palawan Island (The Philippines)" in Janowski M. and G. Barker (eds.), 2010. *Why Cultivate? Anthropological and Archaeological Perspectives on Foraging-Framing Transitions in Island Southeast Asia*, McDonald Institute, Cambridge (UK).

Nowak M.A. and K. Sigmund, 2005. "Evolution of indirect reciprocity", *Nature* 437: 1291–1298.

Nussbaum M., 2022. "What we owe our fellow animals", *The New York Review of Books*, February 22 issue.

O'Brien G., 2021. "Magic saying by the thousands", *The New York Review of Books*, November 4 issue.

Oakeshott M., 1996. *The Politics of Faith and the Politics of Scepticism*, Yale University Press, New Haven (Connecticut, USA).

Oakland Institute, 2020. *Nicaragua's Failed Revolution*, Oakland Institute Pubs, Oakland (California, USA).

OECD, 2016. *Biodiversity Offsets: Effective Design and Implementation*, OECD Publishing, Paris.

Oglethorpe J.A.E. (ed.), 1999. *Tenure and Sustainable Use*, IUCN, Gland (Switzerland) and Cambridge (UK).

Oldekop J.A., G. Holmes, W.E. Harris & K.L. Evans, 2016. "A global assessment of the social and conservation outcomes of protected areas", *Conservation Biology* 30: 133–141.

Oli K.P., G. Borrini-Feyerabend and B. Lassen, 2010. *Towards an Access and Benefit Sharing Framework Agreement of the Hindu Kush-Himalayan Region*, International Centre for Integrated Mountain Development (ICIMOD), Kathmandu, https://www.iccaconsortium.org/wp-content/uploads/2017/07/ABS-Himalayan-Region-2010.pdf accessed 2024.

Olivera Lozano G., 2005. "La reforma al artículo 27 constitucional y la incorporación de las tierras ejidales al mercado legal de suelo urbano en Mexico", *Scripta Nova* IX 194 (33).

Oliver-Smith A., 2001. "Displacement, resistance and the critique of development: From the grassroots to the global", Report prepared for the Refugee Studies Centre, University of Oxford, https://www.rsc.ox.ac.uk/files/files-1/wp9-displacement-resistance-critique-development-2002.pdf accessed 2024,

Olson B. and M. Brennan, 2017. "From community engagement to community emergence: The holistic program design approach", *International Journal of Research on Service-Learning and Community Engagement* 5 (1): 2374–9466.

Orihuela J.C., 2020. "Embedded countermovements: The forging of protected areas and native communities in the Peruvian Amazon", *New Political Economy* 25 (1): 140–155.

Ostrom E., 1990. *Governing the Commons: The Evolution of Institutions for Collective Action,* Cambridge University Press, Cambridge (UK).

Ostrom E., 1995. "Designing complexity to govern complexity", pp. 33–46 in Hanna S. and M. Munasinghe, 1995. *Property Rights and the Environment: Social and Ecological Issues*, Beijer International Institute of Ecological Economics and the World Bank, Washington DC.

Ostrom E., 2000. "Collective action and the evolution of social norms", *Journal of Economic Perspectives* 14 (3): 137–158.

Ostrom E., 2010. "Polycentric systems for coping with collective action and global environmental change", *Global Environmental Change* 20 (4): 550–557.

Oviedo G., L. Maffi and P.B. Larsen, 2000. I*ndigenous and Traditional Peoples of the World and Ecoregion Conservation*, WWF International and Terralingua, Gland (Switzerland).

Pahl-Wostl C., 2009. "A conceptual framework for analyzing adaptive capacity and multi-level learning processes in resource governance regimes", *Global Environmental Change* 19 (3): 354–365.

Pahl-Wostl C. and J. Patterson, 2021. "Commentary: Transformative change in governance systems: A conceptual framework for analysing adaptive capacity and multi-level learning processes in resource governance regimes", *Global Environmental Change* 71: 1–2.

Parrish D., D.P. Braun and R.S. Unnasch, 2003. "Are we conserving what we say we are? Measuring ecological integrity within protected areas", *BioScience* 53 (9): 851–860.

Pascual U., W.M. Adams, S. Díaz, S. Lele, G.M. Mace and E. Turnhout, 2021. "Biodiversity and the challenge of pluralism", *Nature Sustainability* 4: 567–572.

Pascual U., R. Gould and K.M.A. Chan (eds.), 2018. "Sustainability challenges: Relational values", *Current Opinion in Environmental Sustainability* 35.

Pascual *et al.*, 2022. "Summary for policymakers of the methodological assessment regarding the diverse conceptualization of multiple values of nature and its benefits, including biodiversity and ecosystem functions and services (assessment of the diverse values and valuation of nature)", IPBES/9/14/Add.2.

Pathak N. (ed.), 2009. *Community Conserved Areas in India*, Kalpavriksh, Pune (Maharashtra, India).

Pathak Broome N., S. Bajpai, M. Shende and M. Raut with G.K. Jamkatan, I. Katenge, Z. Salame, S. Halami, S. Deshmukh and S. Gogulwar, 2022. *The Forest Resource Rights, Gram Sabha Empowerment and Alternative Transformations in Korchi, Maharashtra*, Kalpavriksh with Maha Gramsabha Korchi and Amhi Amchya Arogyasathi, Pune (Maharastra, India).

Paudel N.S., H. Ojha, M.R. Banjade, R. Karki and S. Tamang (eds.), 2021. *Revitalising community forestry in the changing socioeconomic context of Nepal*, EnLiFT2 programme and ForestAction Nepal, Kathmandu.

Peet R. and M. Watts, 1996a. *Liberation Ecologies*, Routledge, London.

Peet R. and M. Watts, 1996b. "Liberating political ecology" in Peet R. and M. Watts, 2006a. *Liberation Ecologies*, Routledge, London.

Peled-Elhanan N., 2012. *Palestine and Palestine in Israeli School Books: Ideology and Propaganda in Education*, Tauris, London.

Peluso N.L., 1993. "Coercing conservation? The politics of State resource control", *Global Environmental Change* 3 (2): 199–217.

Peluso N.L., 2003. "Territorializing local struggles for resource control", pp. 231–252 in Greenough P. and A. Lowenhaupt Tsing (eds.), 2003. *Nature in the Global South*, Duke University Press, London.

Peoples H.C., P. Duda and F.W. Marlowe, 2016. "Hunter-gatherers and the origins of religion", *Human Nature* 27: 261–282.

Pérez R., 2021. "Alternative development in the Peruvian Amazon: Deforestation, drugs, and death", https://amazonwatch.org/news/2021/1118-alternative-development-in-the-peruvian-amazon-deforestation-drugs-and-death accessed 2024.

Phillips A., 2002. *Management Guidelines for IUCN Category V Protected Areas: Protected Landscapes/Seascapes*. Best Practice in Protected Areas Series No. 9, IUCN Gland (Switzerland) and Cambridge (UK).

Phillips A., 2003. "Turning ideas on their head: The new paradigm for protected areas", *George Wright Forum* 22 (2): 8–32.

Pierce D., 1992. "Economic valuation and the natural world", background paper for the World Development Report, https://documents1.worldbank.org/curated/en/721891468764692718/pdf/multi0page.pdf accessed 2024.

Pimbert M., 2022. "Transforming food and agriculture: Competing visions and major controversies", *Mondes en développement* 199–200 (3–4): 361–384.

Pimbert M. and G. Borrini-Feyerabend, 2019. *Nourishing Life: Territories of Life and Food Sovereignty*, Policy Brief of the ICCA Consortium no. 6., ICCA Consortium, Centre for Agroecology, Water and Resilience at Coventry University and CENESTA, Tehran.

Pimbert M. and B. Gujja, 1997. "Village voices challenging wetland management policies: experiences in participatory rural appraisal from India and Pakistan", *Nature and Resources* 33 (1): 34–42.

Pimbert M., and N. Moeller, J. Singh, & C. Anderson, 2021. *Agroecology*, Oxford Research Encyclopedia of Anthropology.

Pimentel D., L. Westra and R.F. Noss, 2002. *Ecological Integrity: Integrating Environment, Conservation, and Health*, University of Chicago Press, Chicago (Illinois, USA).

Pinto B., 2012, "La organización de las mariscadoras como agentes de transformación social", *EM Debate* 7.

Poffenberger M., 1990. *Keepers of the Forest*, Kumarian Press, West Hartford (Connecticut, USA).

Poffenberger M., 1997. "Local knowledge in conservation", pp. 41–43 in Borrini-Feyerabend, G. with D. Buchan (eds.), 1997. *Beyond Fences: Seeking Social Sustainability in Conservation*, vol II, IUCN (Gland) and Cambridge (UK).

Poffenberger M., 2006. "People in the forest: Community forestry experiences from Southeast Asia", *International Journal of Environment and Sustainable Development* 5 (1): 57–69.

Poffenberger M., R. Soriaga and P. Walpole, 2006. *Communities and Forest Stewardship: Regional transition in Southeast Asia*, Asia Forest Network, Tagbilan City (The Philippines).

POH KAO (des Tigres et des Hommes), 2018. "Integrating tiger conservation and coexistence in Sariska Tiger Reserve", Project monitoring report, https://1drv.ms/b/s!Appr1OAHbnZOhvJ5usE7jpszS-e_-w?e=c45n74 accessed 2024.

Poirier R. and D. Ostergren, 2002. "Evicting people from nature: Indigenous land rights and national parks in Australia, Russia, and the United States", *Natural Resources Journal* 42 (2): 331–351.

Polanyi K. 1944. *The Great Transformation*, Farrar & Rinehart, New York (NY, USA).

Polanyi M., 1967. *The Tacit Dimension*, Anchor Books, New York (NY, USA).

Pollock R.M., 2004. "Identifying principles for place-based governance in biosphere reserves", *Environments* 32 (3): 27–41.

Pope Francis, 2015. *Laudato Si': On care for our common home*, Encyclical Letter, Holy See, Rome.

Pope Francis, 2020. *Fratelli Tutti: On fraternity and social friendship,* Encyclical Letter, Holy See, Rome.

Porter-Bolland L., E. A. Ellis, M.R. Guariguata, I. Ruiz-Mallén, S. Negrete-Yankelevich and V. Reyes-García, 2012. "Community managed forests and forest protected areas: An assessment of their conservation effectiveness across the tropics", *Forest Ecological Management* 268: 6–17.

Posey D., 1985. "Indigenous management of tropical forest ecosystems: The case of the Kayapó indians of the Brazilian Amazon", *Agroforestry Systems* 3: 139–158.

Posey D. (ed.), 1999. *Cultural and Spiritual Values of Biodiversity*, UNEP and IT Pub., London.

Posner R.A. and E.B. Rasmusen, 1999. "Creating and enforcing norms, with special reference to sanctions." *International Review of Law and Economics* 19 (3): 369–382.

Prasad A. and H. Dhawan, 1982. *A Sanctuary for Birds Only?*, Kalpavriksh, Pune (Maharashtra, India).

Pretty J.N. and I. Gujit, 1992. "Primary environmental care: An alternative paradigm for development assistance", *Environment and Urbanization* 4 (1): 22–36.

Price M., 2019. "World's oldest hunting scene shows half-human, half-animal figures – and a sophisticated imagination", *Science* doi:10.1126/science.aba5340

Price T.D. and O. Bar-Yosef, 2011. "The origins of agriculture: New data, new ideas: An introduction to Supplement 4", *Current Anthropology* 52 (S4): 163–174, University of Chicago Press, Chicago (Illinois, USA).

Prigogine I. and I. Stenglers, 1997. *The End of Certainty*, The Free Press, New York (NY, USA).

Pulhin J.M., A.R. Fajardo, C.D. Predo, A.J. Sajise, C.C. De Luna and D.L.Z. Diona II, 2021. "Unbundling property rights among stakeholders of Bataan Natural Park: Implications to protected area governance in the Philippines", *Journal of Sustainable Forestry*, 41 (3–5): 347–369.

Purvis B., Y. Mao and D. Robinson, 2019. "Three pillars of sustainability: In search of conceptual origins". *Sustainability Science* 14**:** 681–695.

Pye-Smith C. and G. Borrini-Feyerabend with R. Sandbrook, 2021. *The Wealth of Communities*, Routledge, London.

Pyle R.M., 2003. "Nature matrix: Reconnecting people and nature", *Oryx* 37 (2): 206–214.

Pyne S.J., 2016. "Fire in the mind: Changing understandings of fire in Western civilization. *Philosophical Transactions of the Royal Society,* B371: 20150166.

Pyne S.J., 2020. "From Pleistocene to Pyrocene: Fire replaces ice", *Earth's Future* 8: e2020EF001722.

Rahman A.P., 2020, "Locals brace to fight for their Oran in Rajasthan", *Mongabay* https://india.mongabay.com/2020/07/locals-brace-to-fight-for-their-oran-in-rajasthan/ accessed 2024.

Rahnema M., 1983a. *From AID to AIDS. A look at the other side of development*, manuscript prepared for a seminar at the School of Education, Stanford University, Stanford (California, USA).

Rahnema M., 1983b. "The grassroots of the future", paper presented at a Roundtable on Technical Cooperation in the Development Process, UNDP, New York (NY, USA).

Rahnema M., 1992. "Poverty" pp. 158–176 in Sachs W. (ed.), 1992. *The Development Dictionary*, Zed Books, London.

Rahnema M., 1997. "Towards post-development: Searching for signposts, a new language and new paradigms", in Rahnema and Bowtree (eds.), 1997. *The Post Development Reader*, Zed Books, London.

Rainer H., 2013. "The political ecology and economy of protected areas and violence: A case study of the conflict of the Kivus in the Democratic Republic of Congo", PhD Thesis, London School of Economics and Political Science, London.

Rapacciuolo G., A.J. Rominger, N. Morueta-Holme and J.L. Blois, 2019. "Editorial: Ecological non-equilibrium in the Anthropocene", *Frontiers in Ecology and Evolution* 7: 428.

Rapp Learn J., 2018. "Ritual cemeteries – for cows and then humans – plot pastoralist expansion across Africa", *Smithsonian Magazine* 1 November, accessed online 2023.

Rappaport R.A., 1993. "The anthropology of trouble", *American Anthropologist* 95 (2): 295–303.

Rapport D. and M. Hildén, 2013. "An evolving role for ecological indicators: From documenting ecological conditions to monitoring drivers and policy responses", *Ecological Indicators* 28: 10–15.

Raskin P., T. Banuri, G. Gallopín, P. Gutman, A. Hammond, R. Kates and R. Swart, 2002. *Great Transition: The Promise and Lure of the Times Ahead*, Stockholm Environment Institute, Boston (Massachusetts, USA).

Ray C., 1999. "Endogenous development in the era of reflexive modernity", *Journal of Rural Studies* 15: 257–267.

Reader J., 1990, *Man on Earth*, Penguin Books, London.

Reck G., 2014. "Development of the Galápagos Marine Reserve" in Denkinger J. and L. Vinueza (eds.), 2014. *The Galápagos Marine Reserve: a dynamic social-ecological system*, Springer, New York (NY, USA).

Redford K.H., 1991. "The ecologically noble savage", *Cultural Survival Quarterly* 15 (1): 46.

Redford K.H. and W.M. Adams, 2009. "Payment for ecosystem services and the challenge of saving nature." *Conservation Biology* 23 (4): 785–787.

Redford K.H. and E. Fearn, 2007. *Protected Areas and Human Displacement: A Conservation Perspective*, WRI Working Paper 29.

Reed M.G., A.E. Henderson and S. Mendis-Millard, 2013. "Shaping local context and outcomes: The role of governing agencies in collaborative natural resource management", *Human Dimensions of Wildlife* 18 (4): 292–306.

Report of the Special Rapporteur on the rights of Indigenous peoples to the UN Assembly, 2022. "Protected areas and indigenous peoples' rights: The obligations of States and international organizations", UN/A/77/238.

Ribot J. 2002. *Democratic Decentralization of Natural Resources: Institutionalizing Popular Participation*, World Resources Institute, Washington DC.

Richerson P., R. Boyd and R. Bettinger, 2001. "Was agriculture impossible during the Pleistocene but mandatory during the Holocene? A climate change hypothesis", *American Antiquity* 66 (3): 387–411.

Richter B.D., S. Postel, C. Revenga, T. Scudder, B. Lehner, A. Churchill and M. Chow, 2010. "Lost in development's shadow: The downstream human consequences of dams", *Water Alternatives* 3 (2): 14–42.

Ridgeway J. 1970. *Politics of Ecology*, Dutton, New York (NY, USA).

Ridley M., 1997. *The Origins of Virtue: Human Instincts and the Evolution of Cooperation*, Viking, New York (NY, USA).

Ritchie H. and M. Roser, 2018. "Urbanization", https://ourworldindata.org/urbanization accessed 2024.

Robbins P., 2012. *Political Ecology: A Critical Introduction*, John Wiley and Sons, Hoboken (New Jersey, USA).

Robinson L.W., 2019. "Open property and complex mosaics: Variants in tenure regimes across pastoralist social-ecological systems", *International Journal of the Commons* 13 (1): 804–826.

Robinson R., 2018. *Voices from Bears Ears: Seeking Common Ground on Sacred Land*, The University of Arizona Press, Phoenix (Arizona, USA).

Robinson W., 2018. "Accumulation crisis and global police state", *Critical Sociology* 45: 1–14.

Rockström *et al.,* 2009. "A safe operating space for humanity", *Nature* 461 (7263): 472–475.

Roe D., J. Mayers, M. Grieg-Gran, A. Kothari, C. Fabricius and R. Hughes, 2000. *Evaluating Eden*, IIED, London.

Romo V., 2019, "Perú: guardias kichwa tras las rutas de la tala", *Mongabay*, https://es.mongabay.com/2019/11/peru-indigenas-kichwa-tala-tecnologia/ accessed 2024.

Rosenbloom J. and K. Hirokawa, 2019. "Foundations of insider environmental law", *Environmental Law* 49 (2): 631–657.

Ross H., C. Grant, C.J. Robinson, A. Izurieta, D. Smyth and P. Rist. 2009. "Co-management and Indigenous protected areas in Australia: Achievements and ways forward", *Australasian Journal of Environmental Management* 16(4): 242–252.

Rosset P., 2021. "Shifting cultivation from an agroecological perspective", paper presented at a workshop at Chiang Mai University, Chiang Mai (Thailand) on 24 March 2021.

Rostow W.W., 1960. *The Stages of Economic Growth*, Cambridge University Press, Cambridge (Massachusetts, USA).

Rotondi V. and P. Santori (eds.), 2023. *Rethinking Economics Starting from the Commons*, Springer International Publishing.

RRI (Rights and Resources Initiative), 2015. *Who Owns the World's Land? A global baseline of formally recognized indigenous and community land rights*, RRI, Washington DC.

RRI (Rights and Resources Initiative), 2020. *Rights-Based Conservation: The path to preserving Earth's biological and cultural diversity?*, accessed online 2023.

Sachs J.D., 2020. *The Ages of Globalization: Geography, Technology, and Institutions*, Columbia University Press, New York (NY, USA).

Sachs J.D., 2021. "Aristotle, eudaimonia, neuroscience and economics" pp. 29–45 in Bruni *et al.*, 2021. *A Modern Guide to the Economics of Happiness*, Edward Elgar Online Pubs.

Sachs J.D., 2023. "The economy of Francesco and the age of sustainable development" in Rotondi and Santori, 2023.

Sachs W. (ed.), 1992. *The Development Dictionary: A Guide to Knowledge as Power*, Zed Books, London.

Sachs W., 2020. "The Age of Development: An unsustainable promise", *Z33*, accessed online 2023.

Sachs W., 2023. "Environmental justice" in Wallenhorst N. and C. Wulf (eds.), 2023. *Handbook of the Anthropocene*, Springer Nature, Switzerland.

Sahlins M., 1968. "Notes on the original affluent society" pp. 85–89 in Lee R.B. and I. DeVore (eds.), *Man the Hunter*, Aldine, Chicago (Illinois, USA).

Sajeva G., G. Borrini-Feyerabend and T. Niederberger, 2019. *Meanings and more...*, ICCA Consortium Policy Brief no. 7, ICCA Consortium and CENESTA, Tehran.

Salas M., 2018. "Habituación e institucionalización del aprovechamiento y la conservación forestal comunitaria", *Estudios Demográficos Y Urbanos 33*, 1 (97): 9–42.

Salazar G., 2015. "The Cherán Indigenous community's remarkable road to self-rule in Mexico", *Our World*, United Nations University, accessed online 2023.

Salzman P.C., 1971. "National integration of the tribes in modern Iran", *Middle East Journal* 25 (3): 325–336.

Samakov A. and J.M. Foggin, 2022. *Territories of Life in West and Central Asia and the Caucasus: Diversity, present status, and threats*, https://report.territoriesoflife.org/wp-content/uploads/2023/02/West-and-Central-Asia-Report-2022-Spread-Preview.pdf accessed 2024.

Sanchez Parga J., M. Chiriboga, A. Galo Ramon, A. Guerrero, J. Durston and A. Crivelli, 1984. *Estrategias de Superviviencia en la Comunidad Andina*, Centro Andino de Acción Popular, Quito.

Sanders D. with R. Carver, 1985. *The Struggle for Health*, MacMillan, London.

Sandlos J., 2008. "Not wanted in the boundary: The expulsion of the Keeseekoowenin Ojibway Band from Riding Mountain National Park", *Canadian Historical Review* 89 (2): 189–221.

Sandwith T., C. Shine, L. Hamilton and D. Sheppard, 2001. *Transboundary Protected Areas for Peace and Co-operation*, Best Practice in Protected Areas Series No. 7, IUCN, Gland (Switzerland) and Cambridge (UK).

Savaş C. 2018. *Media, Ideology and Hegemony*, Brill, Leiden (The Netherlands).

Sawchuk E.A., S.T. Goldstein, K. Grillo and E. Hildebrand, 2018. "Cemeteries on a moving frontier: Mortuary practices and the spread of pastoralism from the Sahara into eastern Africa", https://www.academia.edu/40108122/Cemeteries_on_a_moving_frontier_Mortuary_practices_and_the_spread_of_pastoralism_from_the_Sahara_into_eastern_Africa accessed 2024.

Sawyer W. and P. Wagner, 2024. *Mass Incarceration: The Whole Pie 2024*, https://www.prisonpolicy.org/reports/pie2024.html accessed 2024.

SCBD (Secretariat of the Convention on Biological Diversity), 2004a. *Biodiversity Issues for consideration in the Planning, Establishment and Management of Protected Area Sites and Networks*, SCBD, Montreal (Canada).

SCBD (Secretariat of the Convention on Biological Diversity), 2004b. *Programme of Work on Protected Areas*, SCBD Montreal (Canada).

SCBD (Secretariat of the Convention on Biological Diversity), 2004c. *Akwé: Kon Voluntary Guidelines*, CBD Guidelines Series, Montreal (Canada).

SCBD (Secretariat of the Convention on Biological Diversity), 2010. *Global Biodiversity Outlook 3*, SCBD Montreal (Canada).

SCBD (Secretariat of the Convention on Biological Diversity), 2020. *Global Biodiversity Outlook 5*, SCBD, Montreal (Canada).

Schlindwein S.L., A.C. Feitosa de Vasconcelos, M. Bonatti, S. Sieber, A. Strapasson and M. Lana, 2021. "Agricultural land use dynamics in the Brazilian part of La Plata Basin: From driving forces to societal responses", *Land Use Policy* 107: 105519.

Schlosberg D., 2007. *Defining Environmental Justice: Theories, Movements, and Nature*, Oxford University Press, New York (NY, USA).

Schoch W.H., G. Bigga, U. Böhner, P. Richter and T. Terberger, 2015. "New insights on the wooden weapons from the Paleolithic site of Schöningen", *Journal of Human Evolution* 89: 214–225.

Schreckenberg K., G. Mace, and M. Poudyal (eds.), 2018. *Ecosystem Services and Poverty Alleviation: Trade-offs and Governance*, Routledge Studies in Ecosystem Services, London.

Schultes R.E., 1988. *Where the Gods Reign*, Synergetic Press, London.

Schumacher E.F., 1973. *Small is Beautiful*, Vintage, London.

Schweitzer A., 1923. *Civilization and Ethics,* Adams and Charles Black, London.

Scoones I., 2022. *Livestock, Climate and the Politics of Resources: A Primer*, Transnational Institute, Amsterdam.

Scott J.C., 1985. *Weapons of the Weak: Everyday Forms of Peasant Resistance*, Yale University Press, New Haven (Connecticut, USA).

Scott J.C., 1996. "State simplifications: Nature, space, and people", *Nomos* 38: 42–85.

Scott J.C., 1998. *Seeing like a State*, Yale University Press, New Haven (Connecticut, USA).

Seamon D., 2018. *Life Takes Place: Phenomenology, Lifeworlds, and Place Making*, Routledge, London.

Sehasseh E.M. *et al.*, 2021. "Early Middle Stone Age personal ornaments from Bizmoune Cave, Essaouira, Morocco", *Science Advances* 7 (39).

Sein Twa P., 2021. *ICCA Consortium Virtual Workshop 9 August 2021*, https://www.iccaconsortium.org/index.php/2021/12/15/recap-solidarity-exchange-indigenous-decolonization-sustainable-self-determination/ accessed 2024.

Seligson M. (ed.), 1984. *The Gap between Rich and Poor*, Westview Press, Boulder (Colorado, USA).

Sen A., 1992. *Inequality Reexamined*, Clarendon Press, Oxford (UK).

Sen A., 1999. *Development as Freedom*, Knopf, New York (NY, USA).

Shabad G. and R. Gunther, 1982. "Language, Nationalism, and Political Conflict in Spain", *Comparative Politics* 14 (4): 443–477.

Shackleton S., B. Campbell, E. Wollenberg and D. Edmunds, 2002. "Devolution and community-based natural resource management: Creating space for local people to participate and benefit?", *ODI Natural Resource Perspectives* 76: 1–6.

Shahiki H., N. Aminzadeh Goharrizi and A. Razmkhah, 2021. "Chahdegal: The continuous effort to conserve territories of life in Iran" in ICCA Consortium, 2021. *Territories of Life Report.*

Shaikh N., A. Rahman-Shepherd and O. Dar, 2018. "Schistosomiasis in the Senegal River basin", *The Lancet Planetary Health*, accessed online 2023.

Sheldrake M., 2020. *Entangled Life*, Random House, New York (NY, USA).

Shepher-Hughes N., 1983. "Vernacular sexism: An anthropological response to Ivan Illich", *Gender Issues* 3 (1): 8–37.

Shicai S., A. Wilkes, J. Qian, L. Yin, J. Ren and F. Zhang, 2010 "Agrobiodiversity and biocultural heritage in the Dulong Valley, China: Impacts of and responses to the sloping land conversion program." *Mountain Research and Development* 30 (3): 205–211.

Shilliam R., 2010. "Modernity and modernization", *Oxford Research Encyclopedia of International Studies*, accessed online 2023.

Shulman   D., 2022. "Cosmic oceans squeezed into atoms", *The New York Review of Books*, 6 October 2022.

Sikopo C., J. Kasaona and K. Nuulimba, 2014. "The greatest wildlife recovery story ever told", PowerPointpresentation delivered during the Governance Stream, Sydney IUCN World Parks Congress.

Silisyene M., 2018. *Environmental Education for Forest Resources Management in Loliondo Area, Northern Tanzania*, Ph.D. Thesis, University of Minnesota (Minnesota, USA).

Silvertown, J. 2024. *Selfish Genes to Social Beings: A Cooperative History of Life*, Oxford UP, Oxford (UK).

Simard F., D. Laffoley and J.M. Baxter (eds.), 2016. *Marine Protected Areas and Change: Adaptation and Mitigation Synergies, Opportunities and Challenges*, IUCN Gland (Switzerland).

Simkin R.D., K.C. Seto, R.I. McDonald and W. Jetz, 2022. "Biodiversity impacts and conservation implications of urban land expansion projected to 2050", *Proceedings of the National Academy of Sciences*, 119 (12).

Simmons I.G., 1989. *Changing the Face of the Earth*, Basil Blackwell, Oxford (UK).

Simon J.C., J.R. Marchesi, C. Mougel *et al.*, 2019. "Host-microbiota interactions: From holobiont theory to analysis", *Microbiome* 7: 5.

Singh A., 2016. *Orans: Indigenous Community Conserved Areas of Rajasthan, Lessons from Past, Future Perspective*s, Krapavis, Alwar (Rajasthan, India).

Singh M., 2023. "It's time to rethink the idea of the 'indigenous'", *The New Yorker* February Issue.

Smessaert J., A. Missemer and H. Levrel, 2020. "The commodification of nature, a review in social sciences", *Ecological Economics* 172: 106624.

Smith G., 2020. "La section de commune of Mourex, France", *Développement, Sociétés, Environnements*, Rapport de recherche no 2, Lausanne University, Lausanne (Switzerland).

Smith P., 1934. *The Enlightenment 1687–1776*, Crower-Collier Books, New York (NY, USA).

Soederberg S., 2004. *The Policy of the New International Financial Architecture*, Zed Books, London.

Sonneveld B., F. Thoto, D. Houessou and L. van Wesenbeeck, 2019. "The tragedy of the inland lakes", *International Journal of the Commons* 13 (1): 609–636.

Spash C., 2011. "Terrible Economics, Ecosystems and Banking", *Environmental Values* 20: 141–145.

Stahler-Sholk, R. "Zapatistas and New Ways of Doing Politics", *Oxford Research Encyclopedia of Politics,* accessed online 2023.

Stamm P., 2021. Interview with Swissinfo, https://www.swissinfo.ch/fre/culture/peter-stamm-je-suis-certain-de-mon-fait/47036692 accessed 2024.

Stanciu E. and A. Ionita, 2012, *Governance of Protected Areas in Eastern Europe*, ProPark and BfN, Braşov (Romania), https://d-nb.info/1273115015/34 accessed 2024.

Stearns P.N., 2007. *The Industrial Revolution in World History*, Westview Press, Boulder (Colorado, USA).

Steffen W., K. Richardson, J. Rockstrom *et al.*, 2015. "Planetary boundaries: Guiding human development on a changing planet", *Science* 347 (6223): 1259855.

Steinmann P., J. Keiser, R. Bos, M. Tanner and J. Utzinger, 2006. "Schistosomiasis and water resources development: Systematic review, meta-analysis, and estimates of people at risk", *Lancet Infectious Diseases* 6 (7): 411–425.

Stephen L., 1995. "The Zapatista Army of National Liberation and the National Democratic Convention", *Latin American Perspectives* 22(4): 88–99.

Stephens L. *et al.*, 2019, "Archaeological assessment reveals Earth's early transformation through land use", *Science* 365 (6456): 897–902.

Stevens S. (ed.), 1997. *Conservation through Cultural Survival: Indigenous Peoples and Protected Areas*, Island Press, Washington DC.

Stevens S. (ed.), 2014. *Indigenous Peoples, National Parks and Protected Areas: A New Paradigm Linking Conservation, Culture, and Rights*, University of Arizona Press, Tucson (Arizona, USA).

Stevens S., T Hay-Edie, C. Miranda, A. Ramos and N. Pathak Broome (eds.), 2024a. *Recognizing territories and areas conserved by Indigenous peoples and local communities (ICCAs) overlapped by protected areas*, IUCN WCPA Good Practice Guidelines No. 34, IUCN Gland (Switzerland).

Stevens S., T. Hay-Edie, C. Miranda Larrea, A. Ramos Castillo and N. Pathak Broome (eds.), 2024b. *Recognising and Respecting ICCAs-Territories of Life Overlapped by Protected Areas: A Companion Volume to the IUCN Good Practice Guidelines*, ICCA Consortium.

Stevens S., T. Jaeger and N. Pathak Broome, 2016a. *ICCAs and Overlapping Protected Areas: Fostering Conservation Synergies and Social Reconciliation*, Policy Brief of the ICCA Consortium No. 4, ICCA Consortium and Cenesta, Tehran.

Stevens S., N. Pathak Broome and T. Jaeger, 2016b. *Recognising and Respecting ICCAs Overlapped by Protected Areas: A Report for the ICCA Consortium*, accessed online 2023.

Stewart W.P., D.R. Williams and L.E. Kruger (eds.), 2013. *Place-Based Conservation. Perspectives from the Social Sciences*, Springer, New York (NY, USA).

Stewart-Williams S., 2015. "Morality: Evolution of". *International Encyclopedia of the Social & Behavioral Sciences*, 15: 811–818, Elsevier, Oxford (UK).

Sullivan, S., 2009. "Green capitalism and the cultural poverty of constructing nature as service provider", *Radical Anthropology* (3): 18–27.

Sullivan S. and K. Homewood, 2003. *On Non-Equilibrium and Nomadism: Knowledge, Diversity and Global Modernity in Drylands (and Beyond...)*, CSGR Working Paper No. 122/03.

Sutej Hugu, 2021. *ICCA Consortium Virtual Workshop 9 August 2021*, https://www.iccaconsortium.org/index.php/2021/12/15/recap-solidarity-exchange-indigenous-decolonization-sustainable-self-determination/ accessed 2024.

Svizzero S., 2017. "Persistent controversies about the Neolithic revolution", *Journal of History of Archeology and Anthropological Sciences* 1 (2): 53–61.

Sze J.S., L.R., Carrasco, D. Childs and D.P. Edwards, 2021. "Reduced deforestation and degradation in Indigenous Lands pan-tropically", *Nature Sustainability* 5 (2): 123–130.

Ta'a T., 2004. "The Gadaa system and some of its institutions among the Borana", https://www.ajol.info/index.php/ejossah/article/view/159459 accessed 2024.

Tengo M., R. Hill, P. Malmer, C.M. Raymond, M. Spierenburg, F. Danielsen, T. Elmqvist and C. Folke, 2017. "Weaving knowledge systems in IPBES, CBD and beyond: lessons learned for sustainability", *Current Opinion in Environmental Sustainability* (26–27): 17–25.

Terborgh J., 1999. *Requiem for Nature*, Island Press, Washington DC.

Terborgh J., 2004. "Reflections of a scientist on the Vth IUCN World Parks Congress", *Parks* 14 (2): 55–57.

The World Bank, 2004. *Involuntary Resettlement Sourcebook*, The World Bank, Washington DC.

Thevenin M., 2015. "La maison du Berger de Diyarbakır", Institut français d'études anatoliennes, https://books.openedition.org/ifeagd/1250?lang=en accessed 2024.

Thomas K., 1983. *Man and the Natural World: Changing Attitudes in England 1500–1800*, Penguin, London.

Thomson K., 1991. "Agenda 21: Building Blocks", Interim Report from the UNEP-UK National Committee, manuscript.

Tobler *et al.*, 2017. "Aboriginal mitogenomes reveal 50,000 years of regionalism in Australia", *Nature 544* (7649): 180.

Todaro M.P., 1985. *Economic Development in the Third World*, Longman, New York (NY, USA).

Tomasello M., 2009. *Why We Cooperate*, MIT Press, Cambridge (Massachusetts, USA).

Torfing J., 2022. "Metagovernance" in Ansell C. and J. Torfing (eds.), 2022. *Handbook on Theories of Governance*, Elgar online.

Trakansuphakon P. 2021. "Rotational agriculture from agroecological perspective. The case of Pgaz K' Nyau community in Northern Thailand", paper presented at a workshop at Chiang Mai University, Chiang Mai (Thailand) on 24 March 2021

Tran T.C., N.C. Ban and J. Bhattacharyya, 2020. "A review of successes, challenges, and lessons from Indigenous conserved and protected areas", *Biological Conservation* 241: 108271.

Tu Fu (translated in English by D. Hinton), 1989. *The Selected Poems of Tu Fu*, New Directions Books, New York (NY, USA).

Tupala A-K., S. Huttunen and P. Halme, 2022. "Social impacts of biodiversity offsetting: A review", *Biological Conservation*, 267 109431.

Turner R.A., 2006. "Communities, conservation, and tourism-based development: Can community-based nature tourism live up to its promise?", Center for African Studies, University of California, Berkeley (California, USA), accessed online 2023.

Turshen M., 1977. "The impact of colonialism on health and health services in Tanzania", *International Journal of Health Services* 1: 7–35.

ul Haq M., 1992. "Human development in a changing world", Occasional Paper 1, UNDP Human Development Report Office, New York (NY, USA).

United Nations, 1973. *Report of the United Nations Conference on the Human Environment, Stockholm, 1972*, UN A/CONF.48/14. Rev.1.

United Nations, 1992. *AGENDA 21*, Conference on Environment & Development, Rio de Janerio, Brazil, 3 to 14 June 1992, https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf accessed 2024.

United Nations, 2007. *United Nations Declaration on the Rights of Indigenous Peoples*, A/RES/61/295.

United Nations, 2018. *United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas*, A/RES/73/165.

United Nations Human Rights Council, 2021a, *Indigenous Peoples and the Right to Self-determination*, Report of the Expert Mechanism on the Rights of Indigenous Peoples, https://undocs.org/A/HRC/48/75 accessed 2024.

United Nations Human Rights Council, 2021b. Resolution 48/13. *The Human Right to a Safe, Clean, Healthy, and Sustainable Environment*, A/HRC/RES/48/13 https://undocs.org/A/HRC/RES/48/3 accessed 2024.

UNEP-WCMC and ICCA Consortium, 2021. "A global spatial analysis of the estimated extent of territories and areas conserved by Indigenous peoples and local communities", *Territories of Life Report*.

UNESCO, 1959. "Nomad and nomadism in the arid zone", *UNESCO International Social Science Journal* 11 (4), UNESCO Digital Library, accessed online 2023.

Urbina I., 2019. *The outlaw ocean: Crime and survival in the last untamed frontier*, Random House, New York (NY, USA).

Valadez J. M., 2018. *Deliberative Democracy, Political Legitimacy, and Self-Determination in Multicultural Societies*, Routledge, New York (NY, USA).

Van Laerhoven F. and E. Ostrom, 2007. "Traditions and trends in the study of the commons", *International Journal of the Commons* 1 (1): 3–28.

van Stekelenburg J., 2013. *Collective Identity*, pp. 219–225 in Snow, D.A., D. Della Porta, P.G. Klandermans and D. McAdam (eds.), The Wiley-Blackwell Encyclopedia of Social and Political Movements, accessed online 2023.

Various Authors, 2021. Ethnography of the Commons, *Quaderni Storici* 168 (3).

Vartija D., 2019. "Racism and Modernity", *International Journal for History, Culture and Modernity* 7: 1–15.

Vasile M., 2019. *Forests and Pasture Commons in Romania*, ICCA Consortium, accessed online 2023.

Vecco M., 2020. "*Genius loci* as a meta-concept", *Journal of Cultural Heritage* 41: 225–231.

Veena A., A. Singh and N. Bathla, 2021. "Adawal ki Devbani. An Oran sacred grove in Rajasthan, India", in ICCA Consortium, 2021.*Territories of Life Report*.

Veit P. and K. Reytar, 2017. "By the Numbers: Indigenous and Community Land Rights", World Resources Institute https://www.wri.org/insights/numbers-indigenous-and-community-land-rights accessed 2024.

Veracini L., 2022. *Colonialism. A Global History*, Routledge, London.

Vergunst P.J.B., 2002. "The potentials and limitations of self-reliance and self-sufficiency at the local level: Views from southern Sweden", *Local Environment* 7 (2): 149–161.

Verschuuren B., J.M. Mallarach, E. Bernbaum, J. Spoon, S. Brown, R. Borde, J. Brown, M. Calamia, N. Mitchell, M. Infield and E. Lee, 2021. *Cultural and Spiritual Significance of Nature. Guidance for conserved and protected area governance and management*, Best Practice Protected Area Guidelines Series No. 32, IUCN and WCPA, Gland (Switzerland).

Vickers W. T., 1994. "From opportunism to nascent conservation", *Human Nature* 5: 307–337.

Vierros M.K., A.L. Harrison, M.R. Sloat, G. Ortuno Crespo, J.W. Moore, D.C. Dunn, Y. Ota, A.M. Cisneros-Montemayor, G.L. Shillinger, T. Kehaulani Watson and H. Govan, 2020. "Considering Indigenous peoples and local communities in governance of the global ocean commons", *Marine Policy* 119: 104039.

Vijayan V.S., 1991. *Keoladeo National Park Ecology Study: Final Report,* Bombay Natural History Society, Mumbay (India).

Vine D., 2019. "No bases? Assessing the impact of social movements challenging US foreign military bases", *Current Anthropology* 60 (19): 158–172.

Viola E.J., 1988. "The ecologist movement in Brazil (1974–1986): from environmentalism to ecopolitics", *International Journal of Urban and Rural Research* 12 (2): 211–228.

Vorbach D. and J. Ensor, 2022. "Autonomous change processes in traditional institutions: Lessons from innovations in village governance in Vanuatu", *International Journal of the Commons* 16 (1): 173–188.

Wakild E., 2015. "Parks, people, and perspectives: Historicizing conservation in Latin America" in Wuerthner G., E. Crist and T. Butler (eds.), 2015. *Protecting the Wild*, Island Press, Washington DC.

Walker B., C.S. Holling, S.R. Carpenter and A. Kinzig, 2004. "Resilience, adaptability and transformability in social-ecological systems", *Ecology and Society* 9 (2): 5.

Wall Kimmerer R., 2020. *Braiding Sweetgrass*, Milkweed Edition, Minneapolis (Minnesota, USA).

Wamer K. 1991. *Shifting Cultivators*, FAO Report, Rome.

Wan J., 2023. "Revealed: Big conservation NGOs are majority governed by finance figures", *African Arguments* August 2023, https://africanarguments.org/2023/08/revealed-big-conservation-ngos-majority-governed-finance-africa-carbon-markets/?fbclid=IwAR1-7OG5a_yyWZnL2opvhgJYfRF4hZtYbXXZsraVnnKADvgn3OD-X3Gqog4 accessed 2024.

Warren D.M., 1996. "Indigenous knowledge, biodiversity conservation and development" in James V.U. (ed.), *Sustainable development in Third World countries: Applied and theoretical perspectives*, Praeger, Westport (Connecticut, USA).

Washbrook S. (ed.), 2020. *Rural Chiapas Ten Years after the Zapatista Uprising*, Routledge, New York (NY, USA).

Watts M., 1983a. *Silent violence. Food, Famine and Peasantry in Norther Nigeria, University of California Press, Oakland (California, USA).*

Watts M., 1983b. "The political economy of climatic hazards: A village perspective on drought and peasant economy in a semi-arid region of West Africa", *Cahiers d'Études Africaines (89–90) : 37–72.*

Watts M., 2009. "Oil, development, and the politics of the bottom billion", *Macalester International 24: 11.*

Webb G., 2002. "Conservation and sustainable use of wildlife: An evolving concept", *Pacific Conservation Biology 8: 12–26.*

Webb W., 2021. "Wall Street's takeover of nature advances with launch of new asset class", *Unlimited Hangout, 13 Oct.,* https://unlimitedhangout.com/2021/10/investigative-reports/wall-streets-takeover-of-nature-advances-with-launch-of-new-asset-class/ accessed 2024.

Weber M., 1905. The Protestant Ethic and the Spirit of Capitalism, originally published in German, First English translation 1930, Penguin Books.

Weis T., 2013. *The Ecological Hoofprint: The global burden of industrial livestock*, Zed Books, London.

Weisdorf J.L., 2005. "From foraging to farming: Explaining the Neolithic revolution", *Journal of Economic Surveys* 19 (4): 561–585.

West P.C. and S.R. Brechin, 1991. *Resident Peoples and National Parks*, University of Arizona Press, Tucson (Arizona, USA).

Western D., 1994. "Vision of the future: The new focus of conservation" pp. 548–556 in Western and Wright, 1994.

Western D. and M. Wright (eds.), 1994. *Natural Connections*, Island Press, Washington DC.

Western Ghats Ecology Expert Panel, 2011. *Report submitted to the Ministry of Environment and Forests, Government of India*, accessed 2023 https://ruralindiaonline.org/en/library/resource/report-of-the-western-ghats-ecology-expert-panel/

Weston B. and D. Bollier, 2013a. *Green Governance: Ecological Survival, Human Rights, and the Law of the Commons*, Cambridge University Press, Cambridge (UK).

Weston B. and D. Bollier, 2013b. "The commons as a model for ecological governance", pp. 123–154 in Weston and Bollier, 2013a.

White L. Jr., 1967. "The historical roots of our ecological crisis", *Science* 155 (3767): 1203–1207.

Whitten N.E. Jr., 1976. *Ecuadorian genocide and indigenous ethnogenesis*, IWGIA Document 23, Copenhagen.

WHO, 1978. *Alma Ata Declaration*, International Conference on Primary Health Care, Alma-Ata, USSR, 6–12 September 1978, https://cdn.who.int/media/docs/default-source/documents/almaata-declaration-en.pdf?sfvrsn=7b3c2167_2 accessed 2024.

WHO, 1992. *Our Planet, Our Health*, WHO Pub., Geneva (Switzerland).

Wiedmann T., M. Lenzen, L.T. Keyßer and J.K. Steinberger, 2020. "Scientists' warning on affluence", *Nature Communications* 11, 3107.

Wild R. and C. McLeod (eds.), 2008. *Sacred Natural Sites*, Best Practice Protected Area Guidelines Series No. 16, IUCN and WCPA, Gland (Switzerland).

Wilhusen P.R., 2003, "Exploring the political contours of conservation", pp. 41–57 in Brechin *et al.*, 2003a.

Wilhusen P.R., S.R. Brechin, C.L. Fortwangler and P.C. West, 2002. "Reinventing a square wheel: Critique of a resurgent 'protection paradigm' in international biodiversity conservation", *Society and Natural Resources* 15: 17–40.

Wilkes A. and S. Shicai, 2007. "Is biocultural knowledge a right? A tale of conflicting conservation, development, and biocultural priorities in Dulongjiang, China", IUCN CEESP *Policy Matters* 15: 76–83.

Winters P., B. Davis and L. Corral, 2002. "Assets, activities and income generation in rural Mexico: Factoring in social and public capital", *Agricultural Economics* 27 (2): 139–156.

Winter K. *et al.*, 2020. "Ecomimicry in Indigenous resource management: Optimizing ecosystem services to achieve resource abundance, with examples from Hawai'i", *Ecology and Society* 25 (2): 26.

Wolford W., 2003. "Producing community: The MST and land reform settlements in Brazil", *Journal of Agrarian Change* 3 (4): 500–520.

Won wa Musiti B. (ed.), 2003. *2nd Pan-African Symposium on the Sustainable Use of Natural Resources in Africa*, IUCN Gland (Switzerland) and Cambridge (UK).

Wood E.M., 2002. *The Origin of Capitalism: A longer view*, Verso London.

Worboys G., M. Lockwood, A. Kothari, S. Feary and I. Pulsford (eds.), 2015. *Protected Area Governance and Management*, IUCN, Anu Press, Camberra.

World Bank, 2016. *World Bank Environmental and Social Framework*, World Bank, Washington DC.

World Bank and Development Research Center of the State Council of the People's Republic of China, 2022. *Four Decades of Poverty Reduction in China: Drivers, Insights for the World, and the Way Ahead*, World Bank, Washington DC.

World Commission on Dams, 2000. *Dams and development. A new framework for decision-making. The Report of the World Commission on Dams*, Earthscan, London.

World Commission on Environment and Development, 1987. *Our Common Future*, Report of a Special Working Session (Brundtland Report) 17: 1-91.

World Economic Forum Agenda Weekly, 17 July 2019. "Here's why camel caravans are Kenya's answer to combating climate change", https://www.weforum.org/agenda/2019/07/kenyan-herders-are-swapping-cattle-for-camels-to-adapt-to-climate-change/ accessed 2024.

Wrangham R., 2018. "Two types of aggression in human evolution", *Proceedings of the National Academy of Sciences* 115 (2): 245–253.

WWF International, UNEP-WCMC, SGP/ICCA-GSI, LM, TNC, CI, WCS, EP, ILC-S, CM and IUCN, 2021. *The State of Indigenous Peoples' and Local Communities' Lands and Territories*, Gland (Switzerland).

Wyckoff-Baird B., 1995. *Nyae Nyae Farmers Cooperative: A Question of Representation,* LIFE Programme Discussion Paper, Windhoek.

Yamamoto T., 1995. "Development of a community-based fishery management system in Japan", *Marine Resource Economics* 10 (1): 21–34.

Yanagi T., 2013. *Japanese Commons in the Coastal Seas*, Springer, Tokyo.

Young O.R., 2008. "Institutions and environmental change: The scientific legacy of a decade of IDGEC research", pp. 3–45 in Young O., L.A. King and H. Schroeder (eds.), 2008. *The Institutional Dimensions of Global Environmental Change: Principal Findings and Future Directions,* MIT Press, Boston (Massachusetts, USA).

Xiao-Long M., C. Ryan and B. Ji-Gang, 2009. "Chinese national parks: Differences, resource use and tourism product portfolios", *Tourism Management* 30 (1): 21–30.

Xu W., Xiao, Y., Zhang, J., Yang, W., Zhang, L., Hull, V. and Z. Ouyang, 2017. "Strengthening protected areas for biodiversity and ecosystem services in China", *Proceedings of the National Academy of Sciences of the United States of America* 114 (7): 1601–1606.

Xun L., 1921. *Selected Stories of Lu Hsun*, English translation by Yang Hsien-yi and Gladys Yang, http://www.ibiblio.org/eldritch/hsun/hsun.htm#Home accessed 2024.

Zanjani, L.V., H. Govan, H.C. Jonas, T. Karfakis, D.M. Mwamidi, J. Stewart, G. Walters and P. Dominguez, 2023. "Territories of life as key to global environmental sustainability", *Current Opinion in Environmental Sustainability 63:* 101298.

Zapatista Front of National Liberation, 1996. *Fourth Declaration of the Lacandon Jungle*, https://schoolsforchiapas.org/wp-content/uploads/2014/03/Fourth-Declaration-of-the-Lacandona-Jungle-.pdf accessed 2024.

Zbinden J., 2008, *Pays d'Enhaut –Lieux Historiques Vivants*, Association Pays d'Enhaut, Rossinière (Switzerland).

Zentelis R. and D. Lindenmayer, 2015. "Bombing for biodiversity: Enhancing conservation values of military training areas", *Conservation Letters* 8: 299–305.

Zhou D.Q. and R.E. Grumbine, 2011 "National parks in China: Experiments with protecting nature and human livelihoods in Yunnan province, Peoples' Republic of China", *Biological Conservation* 144 (5): 1314–1321.

Zibechi R., 2014. "Mining and colonialism in Brazil's Giant Carajás Project", Americas Program online archive, https://www.americas.org/mining-and-colonialism-in-brazils-giant-carajas-project/ accessed 2024.

Zierler D., 2011.*The Invention of Ecocide: Agent Orange, Vietnam, and the Scientists Who Changed the Way We Think About the Environment*, University of Georgia Press, Atlanta (Georgia, USA).

Žižek S., 2002*. Welcome to the Desert of the Real!,* Verso, London.

Zogib L. (ed.), 2013. *A rapid assessment of cultural conservation practices in the Mediterranean*, Mediterranean Consortium for Nature and Culture, no publication location.

Zurba M., K.F. Beazley, E. English and J. Buchmann-Duck, 2019. "Indigenous conserved and protected areas (IPCAs), Aichi Target 11 and Canada's pathway to Target 1: Focusing conservation on reconciliation", *Land* 8: 10.

Zurba M., K. Maclean and E. Woodward, 2018. "Amplifying Indigenous community participation in place-based research through boundary work", *Progress in Human Geography* 43 (6): 1020–1043.

One who lets go of any thing and any thing is free
Of the pain of that thing and that thing

Hold to the hold of one who holds nothing— to hold nothing
Hold to that hold

<div align="right">Tiralluvar, 5th century CE</div>
(translation by T. Hitoshi Pruiksma quoted in Shulman, 2022)

ICCA Global Support Initiative (GSI)

The Global Support Initiative to Territories and Areas Conserved by Indigenous Peoples and local communities (ICCA-GSI) is a multi-partner programme funded by the German government and delivered by the UNDP-implemented GEF Small Grants Programme. Key partners include the Secretariat of the CBD, the ICCA Consortium, IUCN and the UNEP World Conservation Monitoring Centre. The primary focus of the GSI is the provision of small grants directly to civil society organisations, Indigenous Peoples and community-based organisations. Phase 1 of the GSI was implemented from 2014–2022 in alignment with the CBD Aichi Targets. Phase 2 (2023–2028) is aligned to support the implementation of four targets of the Kunming-Montreal Global Biodiversity Framework (GBF) in 50 countries.

ICCA Consortium

The ICCA Consortium grew out of the movement promoting equity in conservation in the decades around the turn of the millennium and was officially established in Switzerland in 2010 as an international non-profit association under the Swiss Civil Code. The global membership of the Consortium spans organisations and individuals from more than 80 countries united by a common purpose: promoting the appropriate recognition of, and support to, Indigenous Peoples' and community conserved territories and areas (ICCAs—territories of life) at local, national and international levels. The Manifesto for Territories of Life adopted in 2023 and Strategic Plan adopted in 2024 further specify the aims and action of the ICCA Consortium. As of 2024, the ICCA Consortium has well over 200 member organisations and well over 400 individual honorary members.

International Union for Conservation of Nature (IUCN)

Created in 1948, IUCN is the world's largest and most diverse environmental network, harnessing the knowledge, resources and reach of more than 1,400 Member organisations and 16,000 experts. IUCN is active around the world, from research and analysis to impactful projects and informing policy. For over seven decades, it has produced authoritative reports, standards, guidelines and tools, including sources of good practices, tools and international standards for conservation initiatives worldwide. IUCN's initiatives combine scientific learnings with traditional knowledge of local communities to reverse habitat loss, restore ecosystems and improve people's wellbeing.

GEF Small Grants Programme (SGP)

Established in 1992, the GEF Small Grants Programme embodies the essence of sustainable development as "thinking globally and acting locally". By providing financial and technical support to projects that conserve and restore the environment while enhancing people's wellbeing and livelihoods, SGP demonstrates community action that meets both human needs and environmental conservation. Implemented by the United Nations Development Programme, the SGP leverages the knowledge and traditions of Indigenous Peoples, local communities and civil society to tackle planetary challenges. Over the past decades, it has supported tens of thousands of projects in 136 countries— covering biodiversity conservation, climate change mitigation and adaptation, sustainable land management, protection of international waters, chemicals and waste management, and boosting access to clean and affordable energies.

Dr Grazia Borrini-Feyerabend has been working on governance for the conservation of nature since the late 1980s. As co-originator of the 'primary environmental care' approach of Rio's Agenda 21, as Head of Social Policy for IUCN and Vice Chair of two of its Commissions, as member of advisory and governing bodies for protected and conserved areas, she consistently elevated community rights and responsibilities in conserving nature. In 2008, she co-founded the ICCA Consortium, for which she served as Secretary of Council, Global Coordinator and Strategy Advisor until 2019. Grazia's years of research in solar physics (University of Florence and Stanford University, 1975-1983) and teaching in public health (University of California at Berkeley, National Institute of Health of Italy, 1985-1992) helped her to develop a keen interest in interdisciplinary initiatives. She has worked in over sixty countries, authored more than thirty volumes of 'collective thinking' and organised international gatherings that fostered progressive steps in the policy and practice of conservation of nature— including the Streams on Governance at the IUCN World Parks Congresses in Durban (2003) and Sydney (2014), where she received the Fred Packard International Parks Merit Award. Currently, Grazia is President of the Paul K. Feyerabend Foundation and member of the Council of Elders of the ICCA Consortium.

Tilman Jaeger is a forester and conservationist with a keen interest in governance of land and natural resources. He started his professional career more than twenty years ago with UNESCO, initially out of Paris, France, and later in Latin America. Since then, he has been responsible for a major GIZ conservation initiative in Mongolia (2005-2008), was part of IUCN's core team supporting protected area and World Heritage policy and action globally (2009-2012) and was advisor to IUCN's global World Heritage efforts (2012-2023). From 2012, he has been an independent conservation advisor in over fifty countries. Tilman is an Honorary member of the ICCA Consortium.

Territories of life are the most important answers that humanity has for confronting our global environmental and social crisis. They also oblige us to marvel at the variety of cultures and belief systems that still thrive, despite centuries of repression. Borrini-Feyerabend's book takes us on a journey across 'grounded utopias', real-world experiences of peoples who cherish their traditions and heritage and can help us all to strengthen our communities.

David Barkin, economist, author of From Protest to Proposal: 50 years imagining and building the future

This monumental work is both timely and insightful. As she promises, the author does take us on a journey, with 'vitality interludes' along the way that refresh and reinvigorate the reader's desire to find out more. Given the author's experience, it is no surprise much of the book has a focus on governance, and this phrase "governance functions by *taking and implementing decisions and rules* about the territory and *getting those adhered to and respected in society*" sums up governance needs perfectly. […] All who will read this work carefully may rethink their views about surviving sustainably into the twenty-first century. Ignore it at your own risk!

Peter Bridgewater, science-policy expert, former Secretary General of the Ramsar Convention

Contemporary conservation is in the throes of a revolution, expanding its meaning and building inclusive constituencies. Grazia Borrini-Feyerabend is well placed to tell the story, as she has been one of its visionary leaders, calling early attention to the territories governed, managed, and conserved by Indigenous peoples and local communities. These aptly called 'territories of life' offer a beacon of hope in our biocultural diversity crisis and Grazia wisely advises their custodians to strengthen themselves.

Fikret Berkes, Natural Resources Institute, University of Manitoba, author of Sacred Ecology

Conservation is not an economic practice, but one of love and care for country. Grazia Borrini-Feyerabend is fearless in promoting the emotional core of belonging to place. In this rich volume that gives voice to Indigenous peoples, governance vitality is the heart of conservation. It takes its cue from the communities, places and people who have been stewards and custodians for millennia.

Emma Lee and tebrakunna country, co-authors of Indigenous Women's Voices

Can conservation institutions be endowed with the vitality essential for the continuity of life? A most accomplished thinker in the field believes so, offering a fresh view of conservation praxis for collective healing. This incredibly rich volume— breaker of new ground on governance of protected and conserved areas, overdue summary of the fortunes of 'community conservation', compendium of salient cases, practical support for practitioners and policy makers— delivers an inspiring vision of grassroots vitalism sustained by the Indigenous and other place-based communities that defend life throughout the world. The notions of governance vitality, custodianship, and territories of life offer a framework of decolonization and resurgence in the face of the continued territorial onslaught by extractive development.

Arturo Escobar, anthropologist, author of Encountering Development *and* Designs for the Pluriverse

This is an inspiring book about *life otherwise*. A panorama of relations where custodians of *territories of life* co-evolved unique knowledge, mētis, and realities […] stirs any thoughtful reader to ponder what modernity might learn from more plural and nature-affective ways of being human.

Greg Anderson, historian, author of The Realness of Things Past