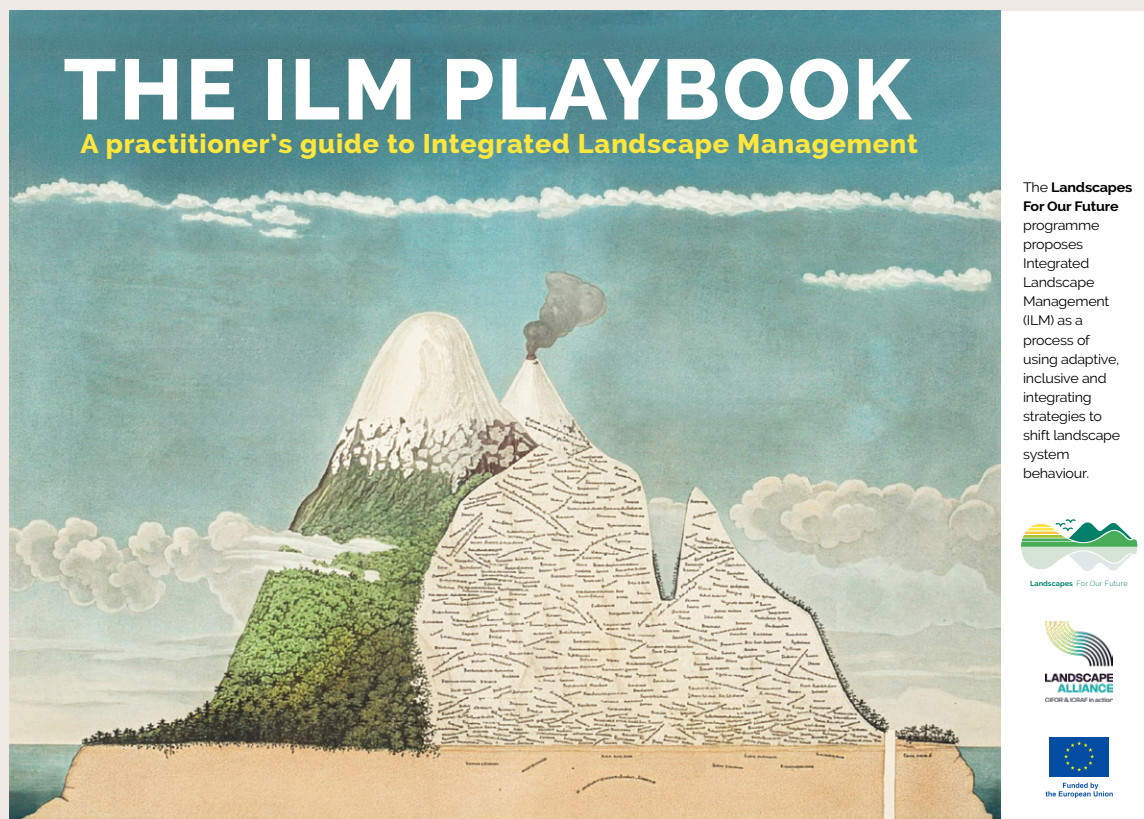


Extract from The ILM Playbook

The ILM Playbook is a practitioner curriculum developed through the EU-funded Landscapes For Our Future programme. Its **interactive web edition** provides a quick, non-linear route through the concepts and tools, while the **full-length PDF** provides the conceptual foundations, evidence and methodological depth behind them.

The concepts, methods and practical guidance were developed through the Central Component's work with project teams, partners and practitioners across the programme, and through the experience and learning generated in participating landscapes.



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Explore the full interactive ILM Playbook or access the complete reading edition at:
landscapesfuture.org/ilm-playbook

INTEGRATION

The emphasis here is  ILM

Key take-aways

- Integration is about the inbetweenness of things – the quality and character of what passes between landscape elements – not a property of the elements themselves; fragmentation occurs in the connections, not in the parts.
- We characterize integration as a spectrum of system states (Conflict → Coordination → Cooperation → Collectivism) in which what flows between actors changes from threat, to command, to transaction, to mutual regulation.
- The critical threshold is Compromising → Collaboration: a paradigm shift from power accumulation to power sharing, and the leap that intensive convening work has to enable.
- Integration also involves a shift in governance geometry from monocentric to polycentric: distributed regulatory capacity is more resilient because failure is localized and many centres detect what one centre would miss.
- Geographic extent matters more than 'scale': Actor A's regulatory reach may originate far from the landscape, so integration may need to address wide-extent regulation before cross-sector connection.

Integration – why does it matter?

Natural systems are integrated. The interconnections between system elements mean that when we do one thing in one spot, the impact ripples outwards, often giving rise to serious unintended consequences. Clear-logging a patch of forest may trigger downstream erosion, affecting sediment loads, delta formation, and aquatic life.

The opposite of integration is fragmentation. The problem lies not with natural systems but with how we approach them. Through training and specialization, we create fragmented vistas of systems that permeate our management and institutional structures – universities splitting natural from social sciences, governments separating finance from environment. With fragmentation, difference rather than similarity becomes the organizing force. We focus on elements rather than interconnections. This structural problem gives rise to silos frequently blamed for intervention failure.

When we speak of integration, we refer to how we approach the system. The emphasis in ILM is on the 'I'—as it is in Integrated Water Resources Management or Integrated Natural Resource Management. These approaches appeal to the need for us to focus on the system as a whole and the interconnections between its elements, which generate its behaviour. Integration, in this sense, is about the *inbetweenness of things* – the quality and character of what passes between landscape elements. It is not the elements that are fragmented or integrated; it is the connections between them.

The key fragmentation problems we are concerned with are institutional fragmentation (specializations that cannot see the whole), perceptual disintegration (inability to observe interconnections), and regulatory incapacity (no or few capabilities to monitor or regulate inter-relations that we do not detect or even look for).

The problems with integration are well recognized and have been levelled at the Sustainable Development Goals and efforts to address climate change (Box 1).

Fragmentation concerns with the SDGs and climate change mitigation

James Lovelock's 'Gaia Thesis' vividly demonstrated the tight interconnections between the globe's natural elements and systems. The latter was first published in 1979¹ and has been reissued three times since then. More recently, arguments about the 'anthropocene' have tried to simplify these arguments, in ways that might better be understood by policy makers and national elites.

Implementation targets in the SDGs are largely silent about interlinkages and interdependencies among goals, leaving open the possibility of perverse outcomes and unrealized synergies.² This has prompted growing concern with the isolated approaches often used for achieving SDGs, prompting calls for more integrated approaches.³

The scientific community generally recommends integrated approaches since there are many synergies among the SDGs, and Agenda 2030 explicitly promotes integrated approaches.⁴ The structural persistence of strong policy silos in most governments, however, makes it difficult to implement integrated approaches, and the scientific community has not been able to provide clear guidance on how integrated approaches might be implemented concretely.

1 Lovelock, 2000 (1979).

2 Stafford-Smith et al, 2016.

3 E.g., Stafford-Smith et al, 2017; Malekpour et al, 2023; Weitz et al, 2023.

4 Elder, 2024.

“Fragmentation is the hallmark of international environmental law,” writes Piñon Carlarne. “[I]t is both the key to its success and the pathway to its unravelling.”⁵ Institutional fragmentation impedes efforts to develop effective systems of supranational climate governance whether this is in international law, the resistance of national elites to evidence of climate change, or the differences between national agendas. While addressing climate change insists on a unified global approach, the issue has instead served to polarize the global community.

Fragmented governance settings, where different levels of governance, institutions and policy sectors are not moving in the same direction, can hamper progress, with ambitious climate mitigation or adaptation goals frequently being undermined by actions in cognate sectors.⁶

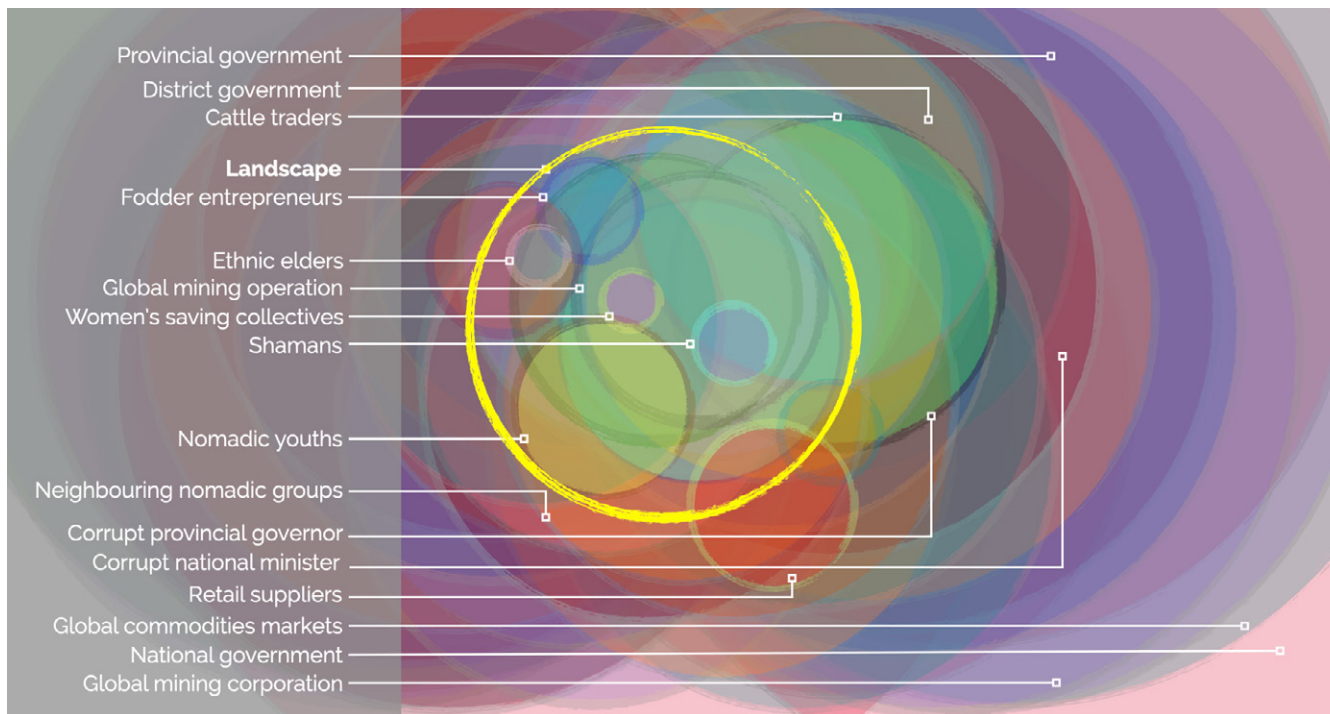
5 Piñon Carlarne, 2008.

6 Jensen et al, 2020.

Understanding integration

Fragmentation manifests as broken or absent connections between actors in the system. We can observe it across sectors and social groups (what is often called ‘horizontal fragmentation’ – sectors, interest groups, cultures operating in silos), across geographic extent (what is conventionally called vertical fragmentation – but which we understand as disconnection between actors whose regulatory reach extends across different geographic ranges, from immediate neighbours to distant capitals and global markets), and across time (disconnection between present action and future consequence, driven by ambiguity and discounting).

When we try to integrate, we tend to focus on connecting across sectors and social groups. But the actors with the greatest regulatory reach – those whose accumulated power extends across wide geographic extent – are of high strategic relevance. In Our Theory of Change, we identify Actor A – who wields disproportionate influence in the landscape system. Actor A need not be located in the landscape. If Actor A is a national government, its regulatory effects reach into the landscape through local representation, police and armed forces, legislation, administration, and resource flows – relations that are no less horizontal for operating at wider geographic extent. Actor A’s influence may result in disunity, complicate integration, and demand loyalty to objectives located far from the landscape. Hence, integration may need to address these wider-extent regulatory relations first, and cross-sector connections later.



In the graphic above, we display a 'power vista.' Here, fictional landscape (the yellow circle) has been selected for biophysical reasons (an ecosystem, for example). Within it, there are a variety of empowered actors – shamans, nomadic youth, women's savings collectives etc – overlap and converge in ways that affect the landscape's condition. The nomadic youth are responsible for the communities' livestock, and trek across the landscape in search of pasture. Their power – and regulatory effect – on the landscape is substantial. Another key actor is a mine operating in the landscape, that answers to the global headquarters located far away, in another country. Its regulatory reach extends across the entire field, but this landscape is instrumentally relevant to it – it contains ore. The corrupt national minister's reach also similarly wide, but this landscape is one among hundreds that contribute to patronage networks. The global commodities market does not even know this landscape exists – it registers only as a price signal. Meanwhile, the ethnic elders, the women's saving collectives, the shamans – their regulatory capacity is geographically tight, but their stake in this particular landscape is existential.

Each of these actors represents a strand in the system – a set of practices sustained over time that contributes to system heading. Some strands are heavy: the mining company and the corrupt minister exert disproportionate regulatory force on the landscape. Others are light: the ethnic elders, the women's savings collectives, the shamans. Their regulatory capacity is geographically tight, but their stake in this particular landscape is existential. The power vista above shows how the things they do – the practices they employ – exert influence geographically across space, and how the strands inter-relate, regulating each other.

One key source of disintegration is temporal. The future is not a distant horizon to which we must connect the present. It is embedded in the present – produced by the practices, feedback loops, and power configurations operating now. Soil depletion, groundwater decline, biodiversity loss – these are not future problems but present practices whose future consequences are already contained within them. Temporal fragmentation occurs when we cannot perceive the futures already being assembled by present action. We tend to over-emphasise the present – consuming resources now rather than later – in part because the future is ambiguous, so we discount it. As Gandhi observed, “The future depends on what we do in the present.”

Characterizing integration

Integration as system states

We characterize integration as a spectrum. At one end sits fragmentation; at the other, integration where actors function collectively while maintaining productive diversity. Between these extremes lie various integration states, each characterized by distinct patterns of power distribution, regulatory dynamics, and collaborative capacity.¹ Each state describes a different quality of inbetweenness – a different character of what flows between actors in the system. In conflict, what flows between actors is threat and coercion. In coordination, what flows is command. In cooperation, what flows is transaction. In collectivism, what flows is mutual regulation. The states are not properties of actors; they are properties of the relations between them.

We identify four dominant integration states: Conflict, Coordination, Cooperation, and Collectivism. Each contains two sub-states capturing gradations in how power regulates behaviour and how collective action emerges. In the dashboard diagram below, integration increases clockwise; fragmentation increases counter-clockwise. It is important to note that none of the states is ever pristine or static. A landscape in a collaborative state will still exhibit pockets of conflict – especially slow violence variants (Box 2) – but collaboration dominates.

These states reflect how power generates regulatory effects. Power operates in each. ‘Regulation’ is the effect generated by feedback loops that dampen some behaviours while amplifying others, determining system heading. Who controls these regulatory dynamics, and whether regulation serves power accumulation or power sharing, fundamentally shapes landscape trajectories.

Movement from one state to another is generally incremental except at one critical threshold: the transition from Cooperation (Compromising) to Collectivism (Collaboration). This represents a paradigm shift from power accumulation to power sharing, from transactional to transformational relationships, from external to internal generation of governance capacity. Crossing this threshold requires intensive convening work—practices that build trust, model power-sharing, and develop collective regulatory capacity.

¹ This section draws on Galtung’s (1968) structural theory of integration, public administration literature on coordination-cooperation-collaboration (Keast et al, 2007; Castañer, 2020), commons governance theory (Ostrom, 1990; Bollier, 2014), and regulation theory from political economy.

Slow violence as cross-cutting structural condition

Rob Nixon defines slow violence as “a violence of delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all.”¹ This encompasses what Galtung calls structural violence (harm embedded in social hierarchies, economic inequality, unequal resource access)² and Bourdieu’s symbolic violence (power so thoroughly internalized people do not experience it as violence).³

Slow violence is not a distinct system state but a structural condition affecting all states. It manifests differently depending on the dominant interaction pattern.

Slow violence reveals its frequently structural origins when we think about how landscapes are located within wider geographic extents. Local collaboration can dampen slow violence when it manifests locally—for example, collective monitoring prevents overextraction, equitable distribution addresses poverty, adaptive management responds to degradation. But slow violence generated at wider geographic extent requires governance at that extent.

Perfect village-level collaboration cannot stop climate change, reverse upstream mining contamination, or counteract global market forces extracting value from landscapes. This is why polycentric governance across nested geographic extents is essential—not because local governance is insufficient, but because regulatory effects operate at multiple extents simultaneously.

Treating slow violence as cross-cutting condition rather than discrete state allows us to:

- Recognize structural harm operating within any interaction pattern
- Understand how range mismatches enable violence (governed well locally but harmed from outside)
- See that moving rightward on integration spectrum doesn’t eliminate slow violence, only changes how it operates and whether communities have capacity to resist it
- Identify that collaboration’s advantage isn’t eliminating slow violence but providing collective capacity to recognize, name, and adaptively respond to it

Slow violence shapes system heading across all states. Soil depletion, groundwater decline, biodiversity loss, climate disruption—these operate over timescales making them invisible to immediate perception yet constraining future possibilities. Integration work must attend to slow violence: making invisible harm visible, connecting delayed effects to current causes, and building collective capacity to resist structural violence generated at wider geographic extent.

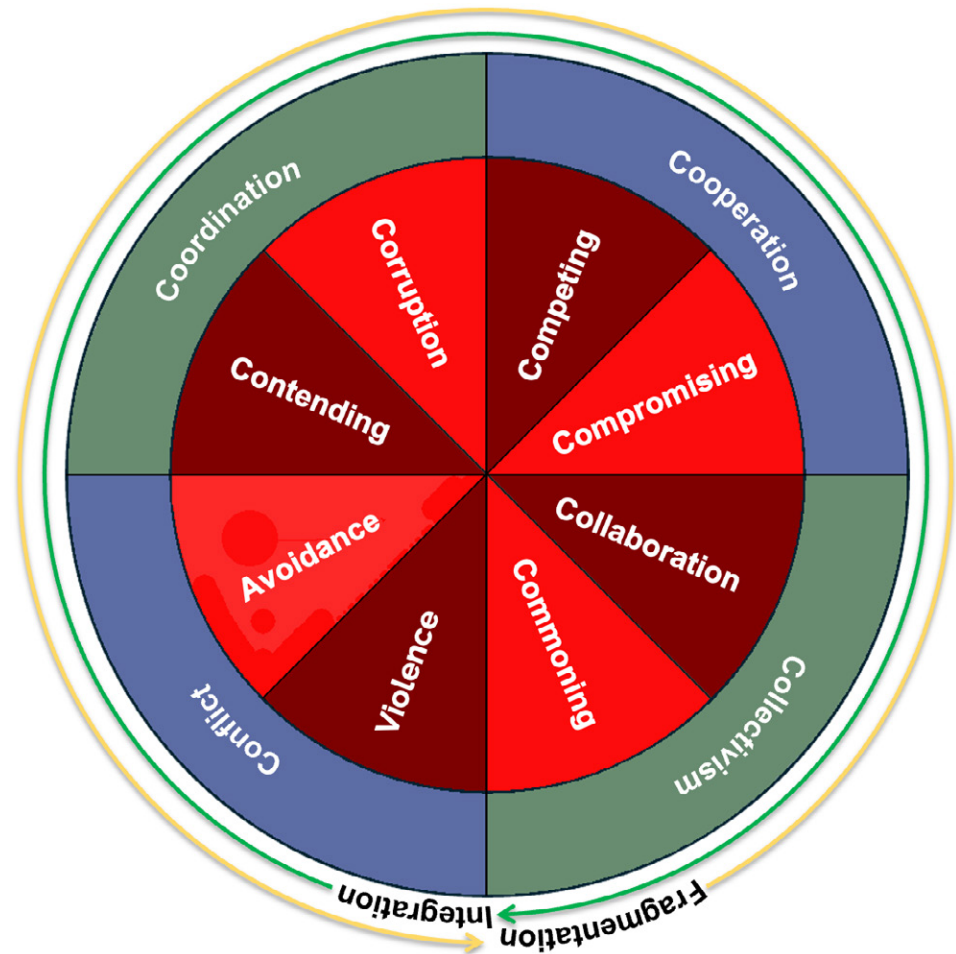
1 Nixon, 2013.

2 Galtung, 1968.

3 Bourdieu, 1977.

The typology also describes a shift in the geometry of governance. At the conflict and coordination end, governance – to the extent that it exists – is monocentric: a single actor or coalition imposes order, concentrating regulatory capacity in one centre. As we move through cooperation towards collectivism, governance becomes progressively polycentric: regulatory capacity is distributed across multiple centres, each exercising regulation within its domain but connected to others through negotiation, shared norms, and institutional arrangements. This is not a movement from order to disorder. It is a movement from imposed coherence – which depends on a single centre maintaining control and collapses when that centre fails – to emergent coherence, which is sustained from many points and is resilient precisely because it has redundancy. The polycentric governance literature demonstrates that systems with multiple overlapping centres of decision-making are more adaptive and more resilient than monocentric alternatives, because failures are localized rather than systemic, and because distributed sensing detects problems that a single centre would miss.²

Below, we describe each state and its two sub-states, elaborating on three constituent dimensions of complex systems: (a) the container – whether ‘loose’ or ‘tight’; (b) difference – high or low; and (c) exchange – which emerges from the former two. Information exchange is of particular interest because the direction and openness of information flows serve as one of the most empirically observable indicators of power distribution within landscape systems.³ For each system state, we also examine practices through the meanings-materials-competencies (MMC) framework.



² For example: Andersson and Ostrom, 2008; Carlisle and Gruby, 2017; Ostrom, 2009.

³ Our inspiration here is the second dimension of Lukes's (2021) three dimensions: nondecision-making power, or agenda-setting, is precisely about controlling what information enters decision-making space. In Bachrach and Baratz's (1962) original formulation, this referred to the power to keep issues off the agenda entirely. Lukes extends this to argue that even without deliberate intent, structural biases in how information circulates can exercise power. His third dimension goes further still: shaping preferences so that actors do not even recognise grievances or alternative possibilities. Information is not just a resource in this framework—it is the medium through which power operates at its less visible registers.

Conflict

Conflict comes from the Latin *confligere* – ‘to strike together’ – revealing its essence: actors colliding destructively rather than connecting productively. This is the most fragmented system state where actors work actively against each other’s interests through destructive interaction marked by threats, coercion, or silence.

Violence

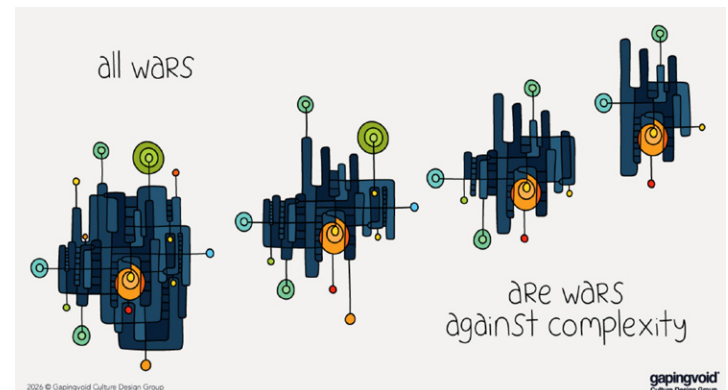
This is the most extreme fragmentation, characterized by direct physical harm and overt coercion. Power operates through raw force: muscle, guns, threats, physical domination. There is no stable regime governing behaviour at landscape scale, while at smaller scales, behaviour is reactive and threat-attendant. Power is expressed as ‘power over’.

At landscape scale, the *container* is collapsing or non-existent. Violent belligerents – whether armed groups or the state – may have tight containers due to identity or employment (as soldiers). At small scales, defensive communities also form tight containers. *Difference* is extreme and deliberately accentuated – clashes between religions, ethnicities, ideologies, or those with and without weapons. Distinctions are weaponized.

Exchange is severely limited. Contact between people may be minimal; tools of information exchange (mobile phones, internet, newspapers) may be absent; levels of trust are low and suspicion high. The choice of which information to act upon is highly safety related. Such exchange that occurs may be tightly controlled by dominant militia. Resource flows are blocked or extractive.

Practices directly reflect context. Sedentarization is regarded as highly risky; agricultural activities are limited. Foraging behaviour or mobile livelihoods (livestock) may prevail. *Meanings* refer to the preservation or taking of life. For belligerents, *materials* revolve around weaponry; for victims, tools for foraging and shelter. *Competencies* are skills of attack or, for victims, the ability to detect attack and escape.

System heading is chaotic, often towards rapid degradation. Free-riding may be rampant (Box 3). Contested territories may be deliberately destroyed – poisoning wells, burning forests, laying landmines, extensive shelling damage. Resource extraction becomes predatory: armed groups logging protected forests, illegal mining destroying watersheds, livestock raiding collapsing pastoral systems. The biophysical landscape both shapes and is shaped by conflict – resource scarcity triggers violence, violence destroys resource base, creating amplifying feedback loops. Refugee camps suffer intense resource extraction close to settlements. Further afield, resource extraction is limited by security concerns and restricted to those bold or foolish enough to venture out.



The commons and free-riding

'The commons' refers to a class of natural resources that, due to their characteristics, can only be managed in common. These may include air, water, the oceans, pasture etc. They have two key characteristics: first, they are rivalrous—i.e., if you remove a certain amount from them, this means proportionately less is available to others. Second, they are difficult to defend from would-be exploiters.¹

Free-riding occurs when some actors take advantage of a collaboratively managed resource. For example, a community may have successfully managed a fishery or a water resource, which yields benefits to society. The free-rider manages to fish more than their share or takes more water than was allocated to them. At the same time, free-riders do not contribute to the collaborative management of the resource.²

Free-riding is a persistent threat to all collaboratively managed natural resources—which speaks to the importance of collective monitoring (of who is doing what) by the community, the presence of rules to define what is allowable or not, and sanctioning mechanisms to ensure that free-riders are disincentivized or punished.

Economists often frame free-riding as 'externalities'—i.e., the costs transferred elsewhere (such as society) as a result of resource extraction or the activities of private enterprise. It is very common that the low prices that we enjoy for something (e.g., electricity) are possible because much of its cost has been externalized elsewhere (e.g., the environmental costs of hydropower being produced far away).

In Garrett Hardin's³ 'tragedy of the commons,' a free-riding scenario in which many actors have 'open access' to a finite resource. Here, each actor maximizes private benefit while collectivising costs, inevitably degrading the resource until it collapses. Hardin argued this tragedy required extinguishing 'the commons' through either state control or privatization.

The act of 'commoning' is broadly equivalent to our understanding of 'collaboration' – although for us, collaboration is how all resources in a landscape are managed and regulated across multiple geographic extents – among other differences. We also, like the commoning literature, emphasize the importance of power dynamics when it comes to managing landscapes.

1 Olson, 1965.

2 Olson, 1965.

3 Hardin, 1968.

Avoidance

Actors withdraw from direct confrontation into minimal interaction. Following violent confrontation, exhaustion or stalemate leads to separation – physical, social, communicative. This is fragmentation through disconnection rather than collision. Regulation emerges from trauma of the recent past. Actors maintain mutual suspicion and avoid each other. Trust levels remain very low; free-riding remains high. Communities retreat to separate territories, factions behind boundaries. Regulation is absent or delivered through the latent threat of violence returning if contact occurs.

The *container* is highly fragmented. Actors maintain separate spaces; boundaries are barriers preventing interaction. *Differences* are extreme and unengaged, distinctions used to justify separation; “us vs. them” narratives may harden. *Exchange* is minimal to absent. Information is withheld or distorted, its trustworthiness consistently in doubt. Resource flows are blocked. Feedback loops are absent because actors are not monitoring each other; local communities and resources are very vulnerable to regulatory pressures of wide geographic extent.

Practices reflect cautious sedentarization inclined towards flight. Small-scale farming is limited as farmers weigh risks between investing in production and potential attack. Trauma and fear are significant factors in land-use decision-making. Where reassured of safety, nascent farming systems may emerge through forest clearing, though inclination towards mobile livelihoods persists. *Materials* are those related to chosen production types but are few and far between. *Meanings* are limited and still constrained by safety preoccupations. *Competencies* focus on avoidance and fight-or-flight responses.

Resource management and governance are fragmented. Upstream users extract without communicating downstream; adjacent communities manage separate territories without coordination; ethnic groups avoid shared commons, leading to degradation from lack of collective governance. The landscape becomes a patchwork reflecting separation—some areas overexploited, others abandoned, with no coherent management. Biophysical feedback loops are broken because actors watch only their fragment, not the landscape as a system. System heading is ambiguous.

Avoidance can persist for extended periods – generations maintaining grudges, communities avoiding contact, households not speaking. Fragmentation may be stable until something forces interaction: a resource crisis, an external coordinator, or gradual reconciliation attempts.

Coordination

Coordination comes from the Latin *co-ordinare* – ‘to set in order together’ – but critically, the ordering is imposed by external coordinating force rather than emerging from mutual agreement. This system state involves activities aligned through imposition of externally-derived power – perhaps market force, government, or dominant warlord. There is directionality to system heading, but it is determined by the source of ordering, not by those being ordered. This yields regulation reflecting the coordinating force’s interests – which may or may not have legitimacy in constituents’ eyes, may or may not have power to enforce regulations. The coordinator

accumulates regulatory capacity; power flows from periphery to centre, with minimal horizontal exchange among other actors.

Coordination is, by definition, monocentric. A single actor – typically the state, a donor, or a dominant private sector entity – holds regulatory capacity and dispenses it. This can be efficient under stable conditions, but it concentrates governance in a centre that is structurally distant from those it governs. The coordinator governs through abstraction: the village becomes a ‘target area,’ the farmer a ‘beneficiary,’ the landscape a set of indicators on a logframe. This abstraction is not incidental to hierarchy – it is the mechanism by which governance at a distance operates, and it systematically strips out the experiential, relational knowledge that would make governance effective. The governed are rendered legible but not understood.

Contending

An external coordinator emerges or imposes itself, obliging avoidant actors back into interaction. Actors must engage within the imposed framework but may resist, test boundaries, and push against imposed order (e.g., via ‘weapons of the weak’).⁴ This is struggle within structure, not violent confrontation. Actors contend for voice, resources, and recognition within a system they did not choose, exploiting opportunities a fragile peace can bring. Much activity revolves around testing opportunities – potential or otherwise – but without directly challenging the coordinator. For the coordinator, this involves establishing predominance – extinguishing challenges from competing armed groups while enabling peace. Among the broader populace, opportunism may be high, which can bring localized violence and free-riding.

The container is emergent but imposed. Its boundaries are contested. Membership is determined by coordinator. Difference is managed through the coordinator’s efforts to impose ‘legibility’⁵ the controls it seeks to establish and solidify dominance – and strong power asymmetries exist. Exchange is diversified and emergent as trade and interaction are established. Limited feedback flows from periphery to centre; resources flow but can be disrupted by coordinator whims. The coordinator may try to dominate information consumption by limiting press freedoms, issuing propaganda and blocking internet and mobile services. Within the populace, person-to-person information may be high, enabled by opening transportation routes.

Practices reflect that sedentarization is now considered more safe. *Materials* are farming implements, transport, or infrastructure to get goods to markets. *Competencies* are the ability to use these effectively. *Meanings* and values are likely still unsettled, but opportunism and ‘every-person-for-themselves’ attitudes predominate.

In the landscape, land use is increasingly intensified; depopulated lands are reinhabited; forests are cleared for agriculture. Regulation is determined by markets and whatever restrictions the coordinator imposes. Desire for peace to be maintained is high. At this juncture, large-scale investments are limited to non-existent.

⁴ Scott, 1985.

⁵ ‘Legibility’ refers to a concept advanced by Scott (1998) who defines it as the process by which centralised states transform complex, local social practices, landscapes, and knowledge into simplified, standardised forms that officials can read, measure, and control from afar

Corruption

This widespread and common sub-state occurs where the coordinator has retained and consolidated power but has insufficient mechanism (or inclination) to impose this upon society. The coordinator allows society considerable latitude provided its supremacy is not challenged and it is allowed to conduct its own, largely self-interested, activities. Thus, investments in security apparatus may be high – to detect challenges. This system state may exhibit high levels of collusion – itself a collaborative form of engagement but conducted for illicit or nefarious reasons. Acquiescence, informing on colleagues, or prostration to the coordinator are necessary to provoke disbursement of favour and for upward social mobility.

The coordinator retains and nurtures its policing rights because these are the mechanism by which bribes are extorted. It is resistant to collective action or local-level empowerment. Outside of the coordinator, society competes – for resources, jobs, influence, basic necessities. Few rules regulate how competition is enacted; the playing field is rarely even. Nepotism and patrimony are common throughout. Rules are frequently discretionary – the coordinator can decide which rules apply, when, and to whom. These are not overtly violent contexts, though threat may not be far away. Legal recourse is generally pointless; any judiciary is not independent. Crime may be common, including crime syndicates colluding with the coordinator. Land-grabbing is common, as are large-scale investments – these serve the coordinator through corruption opportunities they represent, demonstrating commitment to development while having high externalities (Box 3) and few social dividends. Where groups cooperate, their successes draw attention and are quickly captured or stamped out. Many forms of collective action are regarded as threats, though certain neutered forms may be tolerated.⁶ Where resources are managed and conserved, it serves the coordinator's interests. Importantly, power is here a commodity: it can be bought, traded, and stolen.

The *container* is hard-edged with an upper limit which, if approached, increases risk. Membership is determined by coordinator and maintained through collusion and/or threat of exposure, violence, or disappearance. *Differences* can be significant – between rich and poor, haves and have-nots, the influential versus the insignificant. *Exchange* may be highly diffuse for small agreements or capital flow but highly unidirectional for large flows (from source to coordinator). Information exchange is high but may be highly regulated. Networks of trusted friends and colleagues are important. The coordinator may allow internet access but is sensitive to negative perspectives of its role, monitoring social media closely. Information exchange between coordinator and general population may be one-way – restricted to such information that the coordinator wants to know (if opposition is forming, negative commentary). Information from the coordinator is unreliable and propaganda.

Practices can be diffuse and dependent on coordinator interests. If collectivization is seen as a means to controlling the populace, this might be pursued. If large-scale monoculture is seen as in its interest, this is another option. Small-scale communities, uncaptured by coordinator intent, will deploy MMCs appropriate to their activities.

⁶ Terrence McGee's (1979) 'conservation-dissolution' theory illustrates this strategy well. Power accumulators work to dissolve local-level power structures just enough that they can no longer resist the dominant group's interests. Elements of these local structures are, however, conserved—to suggest the state is sympathetic to their identity, or to conserve certain traits (e.g., cultural symbols) that address other interests. For example, the power of an ethnic minority is dissolved, but because their dances and traditional clothing are of interest to the tourism sector, these are conserved.

At landscape level, it can be very apparent that there is administrative structure monitoring on behalf of the coordinator. Its role is not to dispense social services, mediate conflict, or be neutral arbiter. External initiatives often kowtow to this administration—not because it adds value, but because it has power to close them down. Local communities feel marginalized and ignored. Production can be very primary – small-scale agriculture, pastoralism, fishing, collection of forest products – and then large-scale investments: plantations, monoculture, hydropower plants. Many of these can become white elephants that go nowhere, yielding little besides disruption.

Biophysical consequences can be stark. Plantation agriculture may be present. Resource exploitation may be extensive and unregulated. Clear-felling, small-scale mining and ore processing, wild animal trafficking, poaching, sand-mining are common. Large-scale infrastructural investments and seizure of land for monoculture or ranching are also common – frontier economics in action.

Cooperation

Cooperation comes from the Latin *co-operare* – ‘to work together’ – but in this system state actors increasingly work alongside each other pursuing separate goals with lower levels of coordination. Regulation is emergent, though tensions remain around its source. The coordinator is inclined to be the primary source, but pressures have been applied upon it to cede some degree of its regulatory powers. In this transitory place, atomization may be high, regulation still weak. Many characteristics of the corrupt state may be retained in dialled-down form. Recourse mechanisms are struggling to emerge. The importance of scale is retained—a central, potentially distant coordinator is still ‘in charge’ – but more localized opportunities for regulatory emergence exist. There is uneasy balance between coordinator and civil society – they are competing for regulatory space. In this dynamic state, opportunities exist for both to seize the upper hand, though eventually compromise may be the outcome.

Competing

Something has happened forcing the coordinator to cede much of its dominant power. In the landscape beyond the coordinator, other actors are seizing the initiative – movements emerge of many different varieties, spinning off commonly perceived concerns around conservation, farming, religion, ideology. There is willingness to engage with the coordinator, though everyone understands difference persists – the coordinator has its interests and *modus operandi*, while civil society has theirs. The retreat of the coordinator has opened regulatory space to competition. Actors jostle to take advantage. There is therefore also competition between actors – potentially to secure more followers but also over a limited resource pool – but for many movements, they are seeking to carve out some right to dominate or at least influence regulation. In this sense, the competitive sub-state is still highly fragmented. The competition between actors is a relation the coordinator may well use to keep them atomized while simultaneously broadening its own regulatory envelope – this is divide-and-rule strategy, a strong example of how interrelations between actors can be tweaked or manipulated in particular directions. Regulation exists – there is persistent, moderating effect both between coordinator and wider society and between all actors in the system. There may be an elevated (though highly diversified) sense of ‘value’ – human, moral, natural values—that goes beyond simple commodification or monetization. Violence may exist but is considered surprising and accompanied by broad outrage.

The *container* has contested boundaries, which ultimately means they are weak. Membership is fluid. *Differences* are widespread – exemplified by differences in opinion and virtue, though there is still an elite and often accentuated differences in income. All these differences are perceived as contestable and vulnerable to being influenced. A high degree of *exchange* exists, especially around communications and information. People are exposed to large quantities of superfluous information potentially augmented by a free press and diversified sources of information, argument, and perspectives.

Practices are diffuse. *Materials* are very much in evidence – trade thrives, government initiatives implement infrastructure products, aid organizations promote a variety of farming inputs and systems, enterprise and small businesses flourish. The diversity of materials reflects both competition and the diversity of interests and the extent to which materials can further these. *Meanings* are equally diverse – though dominated by markets and businesses. While an air of possibility hangs over the competitive sub-state, disappointment is widespread. People may channel unrealized ambitions into a plethora of religious outlets. Key *competencies* reflect the dynamism of this system – identifying a competitive edge, a new product, a new niche market, a new political angle. Specializations are relatively niche demands; generalist capacities contribute to survival.

In the landscape, actors jostle to have their interests represented. The coordinator's white elephants have shamed it. There may be large amounts of reclaiming going on – for example, lands previously grabbed being reclaimed by local communities for small-scale agriculture. The landscape is a mosaic reflecting the diversity of interests and claims. Pockets or islands of biodiversity may form but require vigilance to maintain. The coordinator may inject larger-scale land use (e.g., protected areas, outgrower schemes) which better reflect emergent societal values around conservation or community engagement that it feels it needs to address to maintain legitimacy.

Compromising

In this state, there may be many coordinators, though some dominate more than others. Some may be regarded as more legitimate than others – for example, because they may have been selected via democratic processes and in transparent ways. There is order in this system, emerging from the tension between coordinators' interests and an acceptance of institutional structures (which influence how interactions occur). The system is generally stable. Power accumulated by coordinators is perceived to be moderated and excesses deemed mostly unlikely. It is in the interest of coordinators to maintain themselves in this position – they can still address their own interests while maintaining the appearance of civic responsibility.

The compromising sub-state represents an emergent polycentricity. Multiple actors hold regulatory capacity, none dominates entirely, and governance emerges from negotiation between them. This is messier than coordination – slower, more contested, harder to report on – but it is also more resilient, because the governance function is distributed. If one actor withdraws or fails, others compensate. The institutional arrangements that contain accumulation – the rules of engagement, the deliberative spaces, the norms of reciprocity – are themselves the product of multiple actors' investments, not the imposition of a single centre. They are therefore harder to capture and harder to destroy.

The container boundaries are increasingly defined by strong institutions. These serve to ensure that the quantum of power available for accumulation is accessible only via innovation (Box 4) or through compromise. Hence, there is much deal-making and negotiation as actors seek to influence regulation – *quid pro quo* arrangements, negotiated access, reciprocal concessions. Relationships remain transactional and power accumulation is a predominant ambition. Trust is limited to specific transactions; broader collective identity is absent – though collective approaches to empowerment are an innovation. Assuming innovation is relatively rare, compromise becomes the next best strategy. Compromise emerges from cooperation because of mutual recognition that actors are unwilling to cede all of their power in favour of another but are willing to allow a certain reduction to obtain something else. In this sense, power is still commodified, but its exchange differs from that under the corruption sub-state.

Innovation

We see innovation as “an idea, practice, or object that is perceived as new by an individual or other unit of adoption.” Fundamentally, we see innovation as novel ways of attracting, accessing, articulating and accumulating power – by mobilising new capacities and organizational forms. You may be familiar with the expression that ‘necessity is the mother of invention’ – typically, innovation emerges in response to some kind of pressure, such as a collectively experienced problem. Within social confines (institutions), power may appear to be finite (i.e., a commodity) if everyone keeps on doing things in the same way. Every so often, someone, somewhere, comes up with something novel – a new strategy, a new hood-wink, a new piece of technology that opens doors through to untapped power sources. Innovation creates novel power. In strand terms, innovation is what happens when an actor finds a way to increase the weight of their strand – or to create an entirely new strand that shifts system heading in directions that the existing regulatory structure did not anticipate.

Michael Kirton’s adaption-innovation theory offers a useful distinction here.¹ Kirton argues that people differ not in *how much* creativity they have, but in *how* they prefer to exercise it. Adaptors seek to do things *better* – refining, improving, and optimizing within established structures. Innovators seek to do things *differently* – breaking frames, working outside existing paradigms, challenging the way things are done – or, ‘thinking outside the box.’ Neither style is superior; both are creative. Kirton’s research shows that the most durable change happens when both adaptors and innovators are involved. But here is the rub: most social systems are structured to reward adaption and punish innovation. Adaptors work within the rules; they are safe. Innovators challenge the rules; they are threatening.

This has profound consequences for landscape interventions. Development programmes routinely call for ‘out of the box thinking,’ ‘innovation,’ and ‘creative solutions.’ But calls for innovation are hollow – even dishonest – in the absence of a social read of the system into which the innovation must land. Communities police the boundaries of acceptable differentiation.

1 Kirton, 1976.

Where material scarcity and fragile trust prevail, conspicuous local success can trigger fear, envy, and accusations of betrayal. Innovators are frequently regarded as deviants and 'cut down' for standing out – the tall poppy syndrome.

The implication is that innovation – whether of practices, institutions, or relationships – cannot be understood independently of the power configurations within which it occurs. An innovative practice that threatens existing arrangements will be resisted, not because people are 'resistant to change,' but because the regulatory structure actively defends the status quo. Innovation can be seen as destabilizing. An innovative practice that aligns with existing power configurations, or that can be framed as enhancing collective benefit rather than individual advantage, has a better chance of recruiting practitioners.

We revisit this in the [Foments](#) section (see 'Endogenous innovators'), where we discuss how to identify and work with innovators as opportunity points for designed foments – and why getting their political ducks in a row is a precondition for doing so safely.

Differences in the compromise sub-state rely less on physical attributes and peoples' backgrounds and more on power – those who have it, those who don't. Inequalities in power distributions may be high. In such situations, these inequalities can represent a significant threat to sub-state stability. Exchange may be very high. Actors with diverse interests often mingle, and the spaces needed (in-person contact, venues, social media) for this to occur exist.

In the landscape, practices reflect compromise between different interests, uses, and values. Upstream-downstream water users negotiate release schedules. Farmers and pastoralists negotiate crop residue grazing. Communities and protected areas negotiate resource access. Deals are made, broken, renegotiated. Each of these negotiations is an interaction between strands – and the aggregate heading that emerges from many such interactions is what defines this sub-state's trajectory. Landscape management is a patchwork of bilateral arrangements – some work, some fail, overall heading emerges unintentionally from the aggregate of individual negotiations. Biophysical feedback loops may be recognized in negotiations (upstream user acknowledges downstream impact), but responses remain individualized, not collectively governed.

The transition from Compromising to Collectivism represents the paradigm shift from power accumulation to power sharing. This is where intensive enabling becomes essential—building trust, modelling collective action, demonstrating power-sharing, developing skills for deliberation and conflict resolution. This is where the deliberative system – the constellation of arenas described in the Compromise section – becomes essential. This leap is the primary challenge for ILM interventions. It will only occur if there is broad acceptance that it should happen. The compromise state is where most western countries are, and the single biggest source of compromise is between the state and its people. If the former is seen to be exploiting or taking advantage of the latter, the compromise evaporates. Perceived legitimacy of the state and capitalism is fundamental to the operation of this state. If the state is on board and the vagaries of capitalism are reined in, then the springboard is primed for the leap into convening.

Collectivism

Collectivism derives from the Latin *collectivus*, based on *collectus* (past participle of *colligere*), meaning 'to gather together.' *Colligere* itself is *com-* ('together') and *legere* ('to gather, pick'), so the Latin origin encodes the idea of people or things being gathered into a whole.

We use 'collectivism' here in its sociological sense – the condition in which actors regulate collectively – not in its ideological sense of imposed collective structures. Collectivism is an integrated state. Regulation is internally generated through collective practice. Power distributes horizontally; leadership exists but gives power rather than takes it. This is the highest stable integration state achievable in complex landscape systems, characterized by continuous collective work maintaining conditions for shared resources and shared governance. Collectivism is fundamentally about ongoing practice, not static structure.

A collectivist state is not, however, the absence of hierarchy. In any human group, dominant individuals will surface and attempt to establish hierarchy – this is an emergent property of social organization, not an aberration. What distinguishes collectivism from coordination is not that the hierarchical impulse is absent but that the regulatory architecture – internalized norms, reciprocity mechanisms, institutional constraints – is sufficiently robust to contain it.⁷ This does not prevent individuals from attempting to accumulate; they create regulatory structures that make accumulation costly and cooperation rewarding. The collectivist state requires active maintenance; it is a dynamic equilibrium, not a resting point.

The collectivist state achieves genuine polycentricity: regulatory capacity is distributed across the landscape, held by multiple actors who exercise it within their domains while maintaining coherence through shared norms and institutional connections. This is not the absence of centralization but its distribution – many centres rather than one, each influenceable by those it governs because governance operates through relational proximity rather than bureaucratic distance. People are more tolerant of regulation they consider influenceable, and regulation is influenceable when it is populated by people whose behaviour can be observed, whose reasoning can be challenged, and who experience the consequences of their own decisions.

This is fundamentally a relational argument. These are social systems: what matters is how people relate, engage, and interact with each other. This is inbetweenness at its most productive – the substance of what passes between actors is not command or transaction but shared regulatory capacity. The collaboration and commoning sub-states take advantage of this relational density because of the regulatory potential and strength it represents. Relational proximity – the capacity to know, monitor, negotiate with, and be accountable to those with whom you share a landscape – is a powerful regulatory mechanism available to any governance arrangement. It is not abstract institutional rules, but the lived experience of mutual dependence that can shift system heading. Ignoring or overlooking this potential is discussed further in Unstated Intent.

⁷ Ostrom's eight principles of 'institutional robustness' are outlined in her seminal 1990 work. These capture well the internalised norms, reciprocity mechanisms, institutional constraints referred to here.

Collaboration

The entry point to collaboration, where power-sharing begins. Collaboration is the active practice of bringing together, facilitating collective deliberation, mediating conflicts, building trust, and demonstrating collaborative governance. This is where the paradigm shift from accumulation to sharing occurs.

The emergence of a collaborative state is often inspired and encouraged by effective leadership. Effective leadership is profoundly important in integration. In a collaborative sub-state there may be one – and possibly more – leaders, who represent important opportunity points because they are central to distributing and redistributing power. Leaders are not power accumulators. While willing to share their own power, their key role in collaboration is tweaking and influencing the ways in which power circulates within a community of actors towards collectivity.

Diversity – of people, perspectives, knowledge systems, and cognitive styles – is not merely a social good in this context; it is a functional requirement of working in complex systems. A collaborative platform that convenes only like-minded actors lacks the cognitive variety needed to generate novel responses to complex problems. Stimulating a system with diversity – introducing perspectives that do not fit the prevailing frame – is itself a form of intervention, because it increases the system's capacity to generate novel responses.

Collaborative sub-states may well operate within wider systems dominated by power accumulators, where they are potentially islands in a sea of imposed regulation. Indeed, leaders display significant wisdom in the ways they negotiate the community's collaborative ways of doing things versus these external styles of wielding power. This is also a key vulnerability – external factors can penetrate and destroy them rapidly. Regulatory rights may be in stark competition – with external representatives present, seeking to uphold their rules, versus those of the community. The question of geographic extent is critical here. Localized empowerment and natural resources management will be tolerated – even encouraged by actors whose regulatory reach extends beyond the landscape – and/or sufficient decentralization exists that wider-extent actors are concordant with local action. Where this tolerance is absent, collaborative systems are vulnerable, and adaptivity in intervention design becomes essential.

The *container* is fairly well defined. There is a collective sense of identity that translates into collective action. Leaders work to maintain the container – though not in an exclusionary way. *Differences* are minor. Leadership ensures that power asymmetries are managed and adjusted. There is a key, however, vulnerability in a collaborative system. If the leader should, for whatever reason, disappear, the sub-state becomes very vulnerable to power accumulators and free-riders. *Exchange* is generally high – convened by leaders – and channelled in collective directions.

Dominant practices differ significantly from those in other states and sub-states. Materials are not necessarily physical in nature but include spaces in which to meet, fora within which small deliberations happen – the types of inter-personal venues where co-creation, decision-making, and compromise occur. But so too, the presence of leader(s) has material relevance to the sub-state, due to their mediation, facilitation, negotiation competencies. Meanings in this context orient towards leadership – faith in their abilities: equitability, consistency, fairness, and above all, power-sharing intentions.

System heading begins stabilizing as collective direction emerges. Biophysical feedback loops become visible through collective monitoring – community observations of forest regeneration, water quality, soil health, wildlife populations. Collective interpretation occurs through deliberation that integrates diverse knowledge systems. Regulation is high because buy-in to the collective project is high. Community members watch for free-riders, and communities have sanctioning approaches. Adaptive responses emerge from collective decision-making – adjusting harvest rates based on observed stock health, modifying grazing patterns responding to pasture condition, collective investment in water infrastructure. Leadership structures make biophysical feedback interpretable and actionable. Convening doesn't eliminate power asymmetries but creates mechanisms to address them – amplifying marginalized voices, rotating authority, checking elite dominance.

Commoning

David Bollier⁸ argues that the commons (Box 3) are less a noun than a verb. Commoning is, we argue, a practice – more specifically, collective practice. Commoning refers to the active social processes of mutual support, negotiation, and experimentation by which communities create and sustain shared resources beyond market/state logics. It emphasizes a dynamic 'living system' of production, governance, culture, and values, often aiming for post-capitalist alternatives like de-commodified provisioning.

Commoning applies to shared resources – and not just commons resources alone. Commoning differs from collaboration in two key ways: first, leadership is not confined to one or two individuals. Leadership is distributed. Almost everyone is power-sharing. Second, external pressures are far less threatening – far away coordinators embrace commoning. They are particularly keen to see localized forms of management and regulation. Communities are not 'islands' – commoning communities are everywhere. Governance is horizontal, not vertical.

Commoning sub-states are well regulated. People operate and behave within socially defined parameters – this system sub-state is, essentially, homostatic. These are not imposed but have emerged from society. There is little need for third parties or external authorities to maintain regulations. Everyone monitors everyone else's behaviour. Feedbacks in the commoning sub-state are dense and regulate effectively.

The commoning *container* is well-defined but highly flexible. It exists despite high diversity within it. It can tolerate perturbations well. The definition of its boundaries are socially constructed – but not in an 'us/them' exclusionary way. Differences are very high, but their relevance is relatively low – accompanied by high levels of acceptance and tolerance. The commoning sub-state's exchanges are multitudinous, amplified by high levels of societal trust. Society and ecology are largely integrated, and people are well aware that what they do ripples. *Exchanges* revolve around power-sharing, monitoring the world around them, and mutually reinforcing collective action.

Capitalizing on diversity under a commoning sub-state is similar to how this happens under the collaborative sub-state.

Practices are dominated by collective activities. Key competencies that reinforce the system state include high levels of monitoring – of landscape condition, of what others are doing within it – and sanctioning transgressors. *Materials* are similar to those in collaboration, but there is no convener. Everyone convenes through a reproducing process of socially-constructed engagement spaces that may be small or large but are diffusive. *Meanings* derive from the sub-state's self-confidence. There is a high level of trust in the system and its ability to deliver at collective scales. It is seen as fair and equitable. *Exchange* is dense and little interrupts or constrains it. Information flows rapidly and easily.

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