



ECOOCENE

POLITCS

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7. Mutualism

A Philosophical and Political Orientation

I have presented different descriptions of what it means to be embedded within a given environment, always on the assumption that these kinds of descriptive experiments open up political possibilities. These possibilities are not absent otherwise, they always exist to some extent; but they are devoid of the vitality that naming breathes into them.

In this chapter I want to offer one more description of a concept that may succeed in threading together a common pattern that has been implied throughout the argument. I have no interest in tying a firm knot that would commit me, or anyone else, to a defensive stance, preventing the possibility of untying it. I have talked about the relationship between creatures and space, and how a voluminous description of both, without collapsing their differences, allows ecological thinking. Vulnerability marks the passage from an ontological to an ethical political ecology, one that re-dimensions humans by rooting them in the impossible necessity of reciprocity and responsibility. These thoughts were occasioned by experiments already underway and by situations that inspire, or at least have inspired me by undoing and reshuffling my own misplaced concreteness. These were situations that drew on, and further teased out, to borrow and modify a phrase from Isabelle Stengers (2015), the possibility of “conscientious objectors” to modern development.¹

All of these stances share a fundamental intuition of the important and often overlooked role that mutual beneficence plays in natural phenomena. Mutualism is a simple name, but one with the power to connect the ontological and the ethical and breed commitment to the stubbornness of living in the Ecocene. The concept of mutualism is

¹ The original phrase is “conscientious objectors to economic growth”.

not new, but perhaps has been resuscitated. As Deleuze and Guattari wrote, “ideas do not die. Not that they survive simply as archaisms. [...] Their application and status, even their form and content, may change; yet they retain something essential throughout the process, across the displacement, in the distribution of a new domain” (1988, 235). Mutualism has indeed had multiple histories of prominence and obscurity. The part that stays roughly the same is the conviction that mutual beneficence plays a structuring role in the world.

The idea that mutually beneficial relationships are extremely important for life in general has had several histories that, if considered together, offer a chance to deploy the concept once again. I have in mind two particular strands of mutualist thinking: the biological and ecological sciences that have, for the past two centuries, been dominated by an internal tension between competition and mutualism, and the anarchist tradition of social and political philosophy.

Let’s start with biology, as it will allow us to connect the imagination and understanding of creaturely life to the politics that is necessarily rooted there. But if ideas have a life of their own, traveling in surprising and unpredictable ways, there is no point in presenting them chronologically. I’ll therefore start by walking backwards.

* * *

It is impossible to consider the history and practices of biology and ecology without thinking about evolution. Lynn Margulis decidedly moved the study of evolution away from a near obsession with competition and towards at least more sustained curiosity in the myriad ways in which life is only possible because of cooperation, as well as the ways in which it is free, to some extent, to pursue paths that themselves condition future evolution (also see Chapter 3). As we will see later, she was neither the first to do so, nor the last, but rather a bright node of renovation of an idea that is probably as old as natural history itself. This is not a romantic view that denies the many different struggles inherent in life.² Anything that is alive will struggle, definitionally, but the conditions of its liveliness are never assured by competition only.

2 Margulis championed what she called a “symbiotic” view of life. Symbiosis refers to parasitism as well as mutualism, and in the biological sciences these are both implied when using the term. For the political purposes of this argument, I focus

Instead, each creaturely life is only possible because of (often unknown) generative connections that benefit a wide range of participants.

The general idea that life is fundamentally cooperative has become refracted in many different ways throughout the natural sciences. In immunology, for example, Gilbert, Sapp and Tauber (2012) have championed the concept of the holobiont, already encountered in Chapter 3 (also see Thomas Pradeu's *The Limits of the Self* (2009), and Tauber 2017). Margulis traces the idea of "holons" to the work of Arthur Koestler, who observed the common phenomenon of smaller beings coexisting in larger forms ("holarchy"; Margulis and Sagan 2000, 9). The holons then are "not merely parts" but "wholes that also function as parts".

The holobiont does not deny the ways in which boundaries are formative of precarious individuality, but rather stresses the differences that make individuals separable to begin with. And those differences are never autonomously generated, but rather are always the result of dense relational networks. From this perspective, the relation between two human individuals becomes infinitely more interesting and more complex inasmuch as it becomes a relationship between two porous networks. As such, actions between holobionts are open to continuous reassessment as to who stands to benefit: microbes, gut bacteria, fungi, and so on.

Individual creatures are only ever individual inasmuch as that concept serves a purpose in forming relationships. For example, the relationship a person may have with a particular tree is only superficially the relationship between two individuals, but this does not mean that pointing out 'the tree' in question is a mistake. Instead, what the designation 'that tree' may make possible is itself influenced by the deeper knowledge of the differences that make the apparent individuality of the tree possible. Simard (2016, 2018) has shown how, for example, mycorrhizal networks are fundamental to the thriving of trees, to such an extent that making a stark distinction between roots and fungi is itself problematic and only useful inasmuch as it makes further probing possible (also see Sheldrake 2000). As Margulis and Sagan argue, "independence is a political, not a scientific, term" (2000,

on mutualism, but it should be understood that it is only one part of symbiotic relations.

20). And yet an ecologically congruous politics cannot afford a dogmatic concept of independence either.

Mutualism in one way or another operates through the holobiont, making relatively stable appearances possible. The biological sciences are producing incredibly exciting evidence for the vast interconnections that define the living world. As I have argued throughout, human ignorance is in an important sense structural, as nobody can consider the vastness of relationships that populate the environing world. But no-one needs to; that is why we need infrastructures of reciprocity built through political processes committed to the living world, such that ignorance becomes an openness towards populating the world with further agents, rather than a blindfold.

Biology is moving in the direction of a mutualist theory of life, from the formation of the tiniest creatures all the way up to the surface of the planet itself, the critical zone of life that cannot exist outside of myriad mutually beneficial relations. At the limit, it has also started to show the porosity of “biotic” and “abiotic” processes. Not only has “more and more inert matter, over time, [...] come to life” (25), but distinctions between, for example, minerals and animals are not as stable as one may think: over fifty minerals have been identified that are *only* produced in living organisms (29). These kinds of discoveries do not take anything away from the difference between tectonic movements and human embodiment, but they do plot a thick network that ties these together in ways that allow for much more interesting, and politically salient, questions.

Even before the sophisticated and vital instruments of modern biology could reveal the *extent* of mutual intermingling that is itself a feature of life, field observations pointed in the same direction. A particularly good observer, though often forgotten because of his ecologically congruent politics, was Peter Kropotkin.

The common root of mutualist thinking in both biology and political thought is nowhere better exemplified than in his 1902 book, *Mutual Aid: A Factor of Evolution*.³ It is one of the widest reaching systematizations

3 In strictly historical terms, the ideas of Proudhon are much more closely related to the concept of mutualism in anarchist theory. There, it is mostly developed as an economic theory, a strand of theory that continues today (see Carson 2007). However, Proudhon’s theories are much less suited, in my view, to reinvention

to date of the role of mutualism across scales. The deep challenge that this work posed to social Darwinism has still not fully been answered, and the subsequent separation of political and biological thought, after its horrible fusions in the twentieth century, has yet to be mended in a satisfactory way. Kropotkin's main thesis is that what he calls mutual aid is "a feature of the greatest importance for the maintenance of life" (4). His argument is crafted against both the biological view, inspired by a selective reading of Darwin, that competition is the main driver of evolution, and the political view, obviously related to this, that normalized authoritarian forms of power because of their supposed naturalness.

Besides this main thesis, Kropotkin makes a series of insightful observations that have been strikingly uninfluential so far. One of the first things that surprises the contemporary reader of this text is how much of Kropotkin's descriptions of animal lives (which are much better than his decidedly dated descriptions of early human life) are expressed in what today appears as radical language. He routinely speaks of animal societies, he imputes various levels of consciousness to animals unproblematically, he speaks matter-of-factly about animal morality, and he generally describes animal behavior as structurally, necessarily intelligent. In the twenty-first century, using this kind of language has

for the Eocene. His narrow focus on economics is one particular obstacle, as is his (and his followers') failure to see the environing world as itself possessed of various agents that labor in their own fashion. Not that Kropotkin theorized labor as applicable to non-human beings, but his development of the concept of mutual aid opens up towards such expansion and is therefore a much better ancestor than Proudhon's mutuality can be.

Besides Proudhon himself, many radicals of the nineteenth century operated fully within the bifurcation of nature. For example, in an 1867 discussion on the social ownership of soil, Cesar de Paepe argued that "the soil is not the product of anyone's labor, and the reciprocity of exchange is not applicable to it". This forecloses the possibility of the kind of concept of reciprocity discussed in Chapter 5, and definitionally restricts mutual beneficence to human-to-human relations. Kropotkin did not himself overcome these difficulties, *per se*, but his conception is much more open to reappropriation.

Finally, the idea of mutualism as coming out of Proudhon's work is intrinsically tied to individualism. This is also true for Kropotkin's concept of mutual aid, but the latter's forays into biology allows a renovation of mutualism that is open to the biological uncertainties attached to the concept of the individual. Taking all of these points together, it becomes clear that I am not proposing a historical exegesis that would *clarify* the meaning of mutualism, but rather reinventing a term within a conceptual constellation that takes decisive steps away from exegesis.

been the subject of serious effort on the part of courageous researchers. It is as if Kropotkin's inheritance skipped a century, more or less. It may be worth thinking about why Kropotkin's language appears so new today, even though it was inscribed within biological thinking in this extremely formative period of its history. The (temporary) hegemonic success of hierarchical and machinist views of life snuffed out a rich source of inspiration that never disenchanting the enviroing world to begin with.

Another revealing feature of Kropotkin's text is his treatment of nature, also very similar to the postmodern nuance which seeks to go beyond the bifurcation typical of modernity. Kropotkin's nature is not only suffused with intelligence, as in the animist philosophies explored earlier, but also sketched as a violent background. His 1902 book starts with a beautiful description of the irruption of Gaia within creaturely worlds, spelling recurrent disasters (which Drury also talks about) for untold numbers of individuals in ways that seem cruel and arbitrary. However, as Darwin also showed, these processes of recurrent destruction are "the natural checks to over-multiplication" and, as Drury shows, are already taken into account by the living through the widespread overproduction of young. This nature is neither the dumb, flat space of modernity, nor the romanticized version that was routinely opposed to modern conceptions in Kropotkin's time.

The arguments of *Mutual Aid* are mostly developed along a series of observations of the way in which life actually organizes itself. According to Kropotkin, it makes sense that competition would be a rare occurrence, rather than the engine of evolution, because of the obvious advantages that cooperation imparts to all participants. He makes the brilliant point that, when arduous competition does occur, the individuals undergoing it are left so debilitated by it that "*no progressive evolution of the species can be based upon such periods of keen competition*" (italics in original, 5). From this, he postulates mutual aid as an engine of evolution, on both empirical and logical grounds. Or, as Margulis and Sagan express it, "life is free to act and has played an unexpectedly large part in its own evolution" (4). This relative freedom often expresses itself in cooperative fashion.

Mutual aid can be thought of as applying, to some extent, to all living creatures. The thought would be that some form of mutualism

helps many kinds of creatures further evolve. Turning it upside down, the idea of evolution presupposes mutualism, more or less across the board. Kropotkin only discusses the kinds of creatures for which there was evidence of mutualism during his time. Since then, the evidence has grown tremendously, and we can now postulate mutual aid as a principle of evolution much more broadly than he could have. It seems to hold in plants as well as animals, something that Kropotkin could only have guessed (see Simand's *Finding the Mother Tree* 2021).

Despite its roots in the early history of biology, mutualism never really left the fringes, and this is partly because of its political associations. It is as opposed to statist authority as it is to the primacy of competition in evolution, and this common antipathy towards authority and inter-specific as well as intra-specific strife made it incompatible with what turned out to be the victorious ideologies of the twentieth century. Mutualism as anti-statist and broadly anti-capitalist made it difficult for the work of its nineteenth-century proponents to be amply adopted. This marginalization testifies to the successful deployment of modern bifurcation through the modern nation state, which has perpetually suppressed anti-individualist and anti-competitive views of life and modes of living.

For both the biologist and the anarchist of the mid- to late-nineteenth century, mutualism is a feature of the living that is occasioned by the irruption of the elemental world and its destructive force, that is to say it is a feature that *allows* evolution despite the vicissitudes to which natural processes subject individuals. Mutualist relationships are therefore as old as the living world itself. Strictly speaking, then, anarchism is also part of the mechanisms of the living. If ecological processes are understood as stochastic affairs, then they are not subject to overarching systems that direct their functioning. The change in evolutionary processes and the shifting alliances of countless creatures need not be structured according to pre-determined patterns, which implies that mutualist relationships change all the time. There is no such thing as a final and forever decided mode of mutual interaction. Thinking this way presents a radical challenge to politics wedded to relative stasis achieved through control, as well as competition-driven evolution, where competition would precisely be an overarching principle. Mutualism is in the fiber of interactions, not a strict natural law.

From the specific meaning of mutual aid in evolutionary theory we can move towards a wider concept that considers the ways in which the human animal practices mutualism both among its kind and in wider networks of living creatures. Anthropology is evidently a rich resource here. As David Graeber suggests, at the end of his book *Fragments of an Anarchist Anthropology* (2004), anthropologists “have tools at [their] fingertips that could be of enormous importance for human freedom”. What he means is that anthropological studies have already been documenting the richness of human social-ecological organization, and partly because of that they can be read as containing important ideas about how societies endure or perish, thrive or descend into oppression.

What he has in mind as standards for thriving or resilience are not the usual fixations on monuments and kingly glory. Instead, he asks us to think about just how unlikely priestly and kingly casts are, given the vast experience of human beings with governing their own affairs in a collective fashion. The anthropological record overwhelmingly supports this thesis, as most human societies everywhere have developed along roughly egalitarian lines. Graeber is no idealist; he is quite explicit about the ways in which human life is always preoccupied by existential problems that egalitarianism cannot wish away. Instead, his account gives proper consideration to the processes through which human societies change, as well as embedding (albeit implicitly) the idea of mutualism within the matter-of-fact way in which most humans interact. He argues that “[...] anarchist social relations and non-alienated forms of action are all around us. And this is critical because it already shows that anarchism is, already, and has always been, one of the main bases for human interaction. We self-organize and engage in mutual aid all the time. We always have”. What makes modernity distinct, in this reading, is the radical way in which it exiles people from what have always been bonds of reciprocity and responsibility.

Anarchism as practice is not a universal solution that would embed mutual beneficence within politics; it can become a dogmatic ideology like any other, foreclosing the possibility of new alliances. It often veers towards individualism of a kind that is anathema to the ideas developed in this book. It is no surprise then that libertarianism perpetually haunts it. Thinking sideways and engaging in small theory, insisting on the level at which situations happen, does not mean that anything that

does not happen at that level can be ignored or opposed as such. In this sense, anarchism is not so much a goal to reach, another utopian end, as a continued fidelity to an operation of always challenging power relations, wherever they appear.

Anarchist political theory is a good bridge for mutualism precisely because of this commitment. At its best, it is rooted in the intuition that power always hides ties that cannot be predicated on power differentials alone, and that it is those instances of resistance that hold the most political potential. Anarchism is therefore a difficult practical problem, and it is precisely because of this that it cannot afford to be dogmatic. Anarchism and ecology work well together, and the idea of mutualism challenges the dominance of competition in both fields. Thinking ecologically and thinking anarchically by definition require a similar kind of situatedness, or what I have referred to in relation to ecology as its constant pull towards the terrestrial. Planetary managerial thinking will likely never disappear. But it can be perpetually challenged and brought to bear on specific situations, where it will inevitably be transformed.

The kind of mutualism that I have selectively extracted should not be applied to human relationships only. This is why Kropotkin is a great guide here, showing just how many different kinds of creatures also rely, structurally, on the practice of mutual beneficence. My argument is that mutualism can be a name for a political ethic that cannot decide, *a priori*, on a complete list of benefitted parties. Even if we choose to think about human relations only, the ways in which the biological sciences have themselves taken up their own radical nineteenth-century precursors makes it impossible to think about isolated individuals. Margulis' symbiotic view of life is both crucial to biology and—like mutualist ideas before hers—holds political potential that emphasizes the necessity of sustaining mutualism through infrastructures of reciprocity.

* * *

Mutualism has always implied spaces of multiplicity. This is not simply because mutually beneficial relations presuppose several participants. The multiplicity in question is part of the ontological and ethical underpinnings of the concept, as made clear by their respective histories. It makes no sense to speak of a principle of mutual aid in biology without also conceiving of the living world as one of voluminous depth,

as I argued in Chapter 2. We cannot relegate mutualist relations, for example, to a curiosity that exists under special circumstances. No, if mutual aid is indeed thought of as an engine of the perpetuation and enhancement of life, then it is more akin to a rule, not an exception. And this is why an ecologically grounded political ethic needs to take this concept into account, as it is inescapable in the context of the ontological commitments developed here.

Some version or another of mutualism seeps into practices that do not self-consciously or explicitly adhere to it. In Chapter 4 I spoke about rewilding as a practice that tries to enhance ecological processes through the reintroduction of certain creatures to certain spaces. If we look at these practices from the perspective of enhancing the number and variety of relations between humans and their environments, it becomes obvious that they in fact pursue a project of mutual beneficence. The point is to have both the reintroduced creatures and the humans that participate be transformed, beneficially, by new kinds of interactions. These relationships are not limited to, for example, humans and wisents. No, the point is to encourage a vast number of relationships that had disappeared, or laid dormant, in the absence of human—wisent interactions.

The kinds of things that rewilders think about are the relationships that the wisent metabolism makes possible, from enhancing soil communities to extending the possibilities of life for countless insects and birds. All of these features become part of the human world, especially if humans participate actively in sustaining these renovated interactions. Yet rewilding practice seldom thinks of itself as a politics of mutualism, and therefore misses the point of what it *could* be doing that would be much more transformative for the humans involved.

As I have already suggested, one way in which an explicitly mutualist restoration could work differently is by insisting on intervening in ordinary environments. Renovating the commonplace relations that make up the daily lives of millions is not what ecological restoration usually contemplates, but there is no reason why it could not do so. My wager is that the preference for ‘spectacular’ environments comes out of the separation of the sciences, including the ecological ones, from a more widely conceived human meaning. Practitioners dealing with restoration think of themselves as specialists in technical interventions

that relate to certain species, or certain processes. Their disciplinary training needs to be unlearned in order for them to see that, *in their own practice*, what drives their efforts is the pursuit of a network of mutual beneficence. In this, they are no different from any other human being that flourishes under conditions of environmental abundance and wilts with the impoverishment of the surrounding world.

Breaking out of its technical shell, restoration understood as a mutualist practice can be applied to any environment. Freed from baselines and therefore free to adapt to situations, it can work from relations with worms and bacteria transforming soil to relations with threatened species in the last remaining enclaves of their lives. I am not denying the importance of saving tigers and protecting their world. But saving tigers is ultimately useless without also addressing the underlying impoverishment of the world. Biologists and ecologists may have a hard time recognizing that their practices can become radically democratic and diffuse. And yet they must do so.

Just like field ecologists return to their study site time and again, sometimes for an entire lifetime, so too can everyone be incorporated into ritualized practices that repeatedly, and endlessly, commit to observing and enhancing the surrounding world. This is of course hard. But it can become easier, inasmuch as restorative practices are conceived of and built within infrastructures of reciprocity.

What is an infrastructure in this sense? One way to think about it is by looking at what infrastructures do: they allow movement to flow in directions that, outside of the infrastructural conditioning of space and time, would be *difficult*. One can travel from point A to point B on a rutted dirt road, but that kind of travel is slow and laborious, implying a space of volumetric resistance. A highway, by contrast, allows for smooth, featureless, frictionless travel, and therefore makes possible exchanges and events that would be very unlikely, even impossible, without it. The dirt road is infrastructural too, and so is a path, and each allows for specific kinds of things. There is no life without some infrastructure that makes up, to a great extent, specific ways for that life to have a life-form.

So, one of the main reasons for building infrastructures is to make it relatively easy to move about. This is not just a physical, literal moving, but also crucial for flows of power, energy, capital, nutrients, waste, and so on; flows in general. You could say that the flow of a river depends

upon water building its own infrastructure, on the base that geology provides. The riverbed allows the river to flow, but it also allows all kinds of other processes to happen that would otherwise not exist, or would be much weaker. The natural world is dense with infrastructures, each particular process carving out its own or using those carved by others, often in tandem. The valleys that glaciers carve become the rivers whose nutrients feed the creatures that themselves carve the paths of their own movement—a continuous change in infrastructural possibilities.

As Marx knew, there is no edifice of power without a basic infrastructure that makes it possible. In today's consumer world, there is no consumerism as we know it without a vast network that makes it easy to fly a chicken from one part of the world to another in order for it to be plucked and returned. People do not do this because they find it to be a good idea in itself; they do it because, under current infrastructural conditions, it is the easiest thing to do (the cheapest, most efficient, quickest, and so on). Planting a lawn as opposed to using one's waste for the creation of rich soil around the house is easier, but not in any objective sense. If anything, letting fungi do the work is technically easier than riding a lawnmower every week, servicing it, fueling it, and generally incurring the expenses that it demands. Planting and maintaining a lawn is made easier by the infrastructural background that makes monoculture seeds more available than fungi, by planning permissions and neighborhood regulations that demand them, by immediate access to fuel, and so on.

Everything creatures do is made possible by some infrastructural network, and in the case of modern people these networks are built to make the most destructive behaviors easily attainable. The point of building infrastructures of reciprocity, as opposed to ones of consumption and control, is to make reciprocation one of the most straightforward ways of being. This is why ritualization is needed. Again, there are hardly any valid *a priori* logistical reasons as to why flying chickens around the world would be easier than raising one's own. Logistics is not a base category, but infrastructures are, because they create logistics.

Setting up and continuously fighting for infrastructures of reciprocity does not need pre-approval. It does not require a policy-driven approach, though it can surely benefit from policies that would more explicitly follow this kind of logic. The state apparatus that has transformed the

infrastructural networks through which more and more people live into networks of consumptive destruction can be continuously challenged from below, even if enhancement through ritualized restoration were to become state policy. This is where the anarchist commitment to being vigilant whenever power differentials are normalized becomes crucial: the maintenance of infrastructures of reciprocity is always going to be primarily a local affair, and therefore will always largely function outside of the state's capacity to exercise control.

* * *

Mutualism need not have universalist tendencies: it is about specific relationships, inasmuch as relations always exist between specific terms. There is no meaning to something like "relating to the world", and therefore being "beneficial to the world", or saving it. This is crucial, as it implies that ontologically infinite multiplicity does not have to, and alas cannot, be translated into relations *to* multiplicity. Instead, the task is to understand under which sign specific relations must be developed in order to also stay true to the infinite multiplicity that permeates them. As the authors of *Manifesto for the Invention of a New Peasant Condition*⁴ (2019) remarked, "inventing more desirable ways of living without waiting for a generalized social change. [...] this will be the work of those who have actually begun to break away from the most insidious forms of life" (40). And this always already implies the open-ended selection of the relationships that matter.

Many proposals and alternatives today implicitly engage this kind of conceptual apparatus. The kind of nature restoration William Jordan has proposed is rooted in the idea that people can be beneficial to the environment, and shows a practical commitment to an open-ended mutual beneficence. Restoring the prairies of the mid-West does not seek to recreate an era of supposed ideal conditions, but rather to recreate a relationship between people and lands that is predicated on the capacity to help each other. These practices are necessarily ritualistic, and the rituals that Jordan explores have to do with the cyclical gathering of

4 Published in French (2019) as *Manifeste pour l'invention d'une nouvelle condition paysanne*. The original quotation is: "[...] inventer de nouveaux modes de vie plus désirables, sans attendre un changement social généralisé. [...] ce sera l'œuvre de ceux et celles qui ont effectivement commencé à rompre avec les formes de vie dont on a le plus grand mal à se défaire".

people in order to engage, for example, in controlled burning of the prairie environment that is designed to help certain assemblages. Mutual beneficence can never be total (with the *whole* environment benefiting), but that is not the point. The idea is to consciously benefit a growing number of creaturely networks.

Similarly, the idea of commons as a mechanism of territorial governance is increasingly being reinvented, as its remnants are starting to grow in more and more places (see *inter alia* Gutwirth and Stengers 2016, Tanas and Gutwirth 2021, Bollier and Helfrich 2019). The commons are rediscovering land practices that treat the land as a good that cannot be legitimately appropriated by one owner, and that therefore is not subject to the whims of one. George Iordăchescu recounts how, in Northern Transylvania, the commons have survived centuries of enclosure and are currently fighting the fortress conservation model that is supposed to protect the diversity of life on their lands. Private buyers have consolidated enormous amounts of land that they plan to manage as conservation reserves (Iordăchescu 2019). This is the latest face of fortress conservation that, in its faithful merger with capital investment, mutates into private reserves supposedly serving the common good and inaugurating a new kind of consumption.⁵

Some rewilding projects have also embraced this model, which is inimical to everything that I have argued for so far. In Portugal, for example, Rewilding Europe works with wealthy owners to manage their private land according to ‘rewilding principles’, and the owners get a fantastic holiday retreat in return, plus the good conscience of saving the world. In the Transylvanian case, this kind of mutated conservation practice is the greatest threat to the commoners’ way of life, and to their lands. The commoners, in their turn, are seen by the growing reserve as a grave threat to the natural world.

One need not look far to discover that commons have in fact had a tremendously important role in keeping lands both rich *and* useful for people for centuries, if not millennia. There is ample evidence for this. And one of the things that makes the commons work is the relationship that people develop with each other *through mutualist practices* that share both benefits and disadvantages. This does not only apply to land

5 Conservation has been a form of luxury consumption since its beginning, as reserves have always been enjoyed *as reserves* by relatively wealthy visitors.

practices, though here I am primarily interested in these, but works through any kind of social practice that pursues mutual benefits. Bollier and Helfrich give the example of a telecommunications company in Catalonia that set up Wi-Fi services through a network chartered as “free, open, and neutral” (25). The point of the network is to provide Internet services to anyone abiding by the network’s values at the lowest possible price, and in a mutualist fashion that allows for free exchange of services and information without the overseeing eye of a communications monopoly. Crucially, it is *because* of the “mutualizing of costs and benefits” that the network can function in the most price-effective manner, marking a step away from dependence on money, “and therefore [on the] structural coercion of markets”.

Bollier and Helfrich give many different examples, from homecare commons started by nurses resisting the increasingly marketized and alienated healthcare system in the Netherlands to community agriculture. But what they share is a commitment to a social process that ritualizes their interactions and generates knowledge primarily aimed at cultivating skills for mutual beneficence. The role of ritual is crucial, because it is through repeated, organized, and routine interaction that skills of togetherness are developed, as well as practical skills for creating lives outside the dominant modes of consumption and production. Another surprising example is the ritual of the hackathon, where hackers gather to solve difficult problems and learn from each other. In land-based practices, the members of an urban community garden getting together each weekend is a ritual, as is the regular transfer and creation of knowledge within communities dedicated to permaculture.

There is nothing romantic about this. I am not claiming that commons are perfect; nor are the restoration projects I have spoken about. These kinds of examples are not really examples, strictly speaking. Thinking of them as such is what may lead towards the charge of romanticism. They do not exemplify in that they are not models to be emulated. What they do give is an occasion for thinking of alternatives by picking out operations through which different kinds of infrastructures are set up, and different modes of mutual beneficence imperfectly pursued. It is crucial to notice the resilience of reciprocity and responsibility and think with others about how their implacable force can carve out its own grooves to enable them to flow more easily. In a sense, ritualizing

practices simply allows suppressed reciprocity and responsibility to resurface.

There is no need for utopian solutions that depend on orthodox allegiance in order to deliver a better world. Instead, these and many other practices are ways of articulating an eclectic conceptual constellation that is increasingly being mobilized against modern development. It is counterproductive to nit-pick the faults and inconsistencies of each particular experiment. It is better to support their overlapping commitments, and to discern the kinds of life that are encouraged in each case, particularly through their interactions. This motley approach to revolutionary change does not have requirements of purity; one need not have the right utopian ideology in order to be considered as sharing “the right politics”. Allies need only have partially overlapping commitments to the roles humans may play in ensuring a thriving living world. This seems like a tall order, but in practice it can take so many different forms that it would be a careless mistake to theoretically preclude most of them.

* * *

As I have argued throughout this book, reciprocity as a practice has never disappeared, but rather has been drastically marginalized through the disappearance of its social infrastructure. What I mean is that any social group, in order to practically express the reciprocity necessary for mutualist relations, builds and upholds conduits of thought and practice that make it relatively easier for people to engage with the environing world in a reciprocal way. Thinking back to the discussion of Māori philosophy, for example, it appears that in the pre-colonial Māori world, as far as we know, the entirety of social organization made reciprocal relations the most obvious ones for participants. It may be worth revisiting that world once more.

Inasmuch as status, for example, depended on the cultivation of relationships with wide genealogical networks inclusive of all sorts of creatures, it stands to reason that community leaders would have been those that were best at reproducing mutualist practices. Conversely, in a context of intense competition for infinite growth, predicated on the bifurcation of nature, it is *hard* to engage in mutualist practice, because the paths that would lead there have become clogged. How, then, can these vital infrastructures be restored?

An important ally of the practices already explored is indicated by one of the most famous treatments of Māori philosophies, in the work of Marcel Mauss. Mauss' work sought to show, through anthropological studies, the political possibilities inherent in human communities. In his 1925 (translated into English in 1954) book *The Gift*, he specifically attends to the possibilities for different exchange logics implied in the act of gifting, as well as in gifts themselves as objects imbued with particular powers. Above and beyond the anthropological debate generated by his work, I am interested in digging deeper into the idea of gifting as encompassing, already, a logic of reciprocity that escapes what we have grown accustomed to call 'the economy'. Instead, gifting is a practical embodiment of a deeper logic of reciprocity based in ontological commitments that modernity has never managed to fully exorcise.

Mauss' treatment of gifts in Māori society centers around the concepts of *taonga* and *hau*. We have already encountered the latter in Chapter 5, but here I want to extract the political possibilities that connect the work of reciprocity to a mutualist project, through its relation with *taonga*. As Amiria Henare explains (2007, 47), "Mauss argued that when a *taonga* or treasured possession is exchanged, it carries with it *hau*, 'the spirit of the gift', an animate force binding those involved in the transaction—persons and things—into a cycle of reciprocity", which obliges the recipient to return the gift in some form. Mauss interpreted *taonga* and *hau* as separate and separable concepts, attached as it were to separate ontological categories. But Henare, as well as other Māori scholars, have argued that this is a misrepresentation of Māori philosophy, which itself never makes the step from ontology to epistemology. As Henare argues, "according to Ranapiri, one *taonga* exchanged for another does not simply carry the *hau* of the gift, it is its *hau*, translated elsewhere by Best as 'the vital essence or life principle' (1900: 189). There is a precise identity, in other words, between thing and spirit, aspects which Mauss separated out in his analysis" (48).

The gifting of *taonga* obliges participants to enter into a perpetual relationship of reciprocity. The perpetuity of the relationship lies in the fact that the gift can never be repaid, precisely because of its identification with *hau*, that is to say with a spirit that has no equivalent but itself and that keeps on gathering force with each subsequent transaction. The

signature of all those who had to do with the gift is etched within it, not as a matter of epistemological consideration (I know that so-and-so possessed this at some point), but rather as a matter of ontological augmentation (the gift itself becomes more endowed with *hau* the more it circulates).

Henare underlines that “the *hau* of the original gift lives on, requiring reciprocity through successive generations” (60). Taken together with the genealogical view of life explored in earlier chapters, this means that objects in the environing world that have been received as gifts are filled with the spirit of all ancestors (human and non-human) that have had something to do with them. Henare applies this logic to the founding Treaty of Waitangi and explains the current era of Māori claims for Crown breaches of the treaty through understanding the founding document as itself a precious *taonga*. The Crown has failed to reciprocate exchanges codified by that document.

The particular meaning of *taonga* and *hau* within a strictly Māori context is of interest in itself. However, I want to take the suggestion of an ontological reciprocity etched within gift exchange and extend it to other contexts as well. The first thing that is apparent is that gift exchange is not, in this account, strictly an economic activity. A gift is not necessarily a material good. Indeed, as suggested in Chapter 5, the ultimate gift is that of receiving life and of being embedded within forces that sustain one’s life. This unpayable gift takes its most concrete form in relations of reciprocity with the land. The basic intuition of an unpayable debt towards the environing world is seen through routine expressions and practices in many different cultures, not least in Western ones. In the Southern Italian case of human—olive tree relations (see *Intermezzo I*), the olive tree itself can be considered a *taonga*, a gift that arrives striated with the actions and spirits of ancestors that live through it. The reciprocal relation to the tree is emblematic of a reciprocal relation to the past that has furnished one’s present life.

This past-present dynamic is decidedly different from the modern one. The activation of the past in the present happens precisely inasmuch as the individual is engaged in relationships that generate the porous boundaries between present and past. Inheriting gifts (like olive trees, but also clean air, water, or rich soil) connects the present to the power of the past, a power that largely determines present possibilities;

reinvention and renovation are necessarily based on predecessors. Angelo, a fifth generation ‘fornaio’ in Puglia (caretaker of the oven—*forno*), emphasizes genealogy in how he presents himself, wearing on his sleeves the ancestral relationships to the land, to the oven, and to people, that make him who he is.⁶ Tāme Iti, a Māori activist, emphasizes genealogy in how he presents himself, as it is the relations with ancestors and the mountains and the rivers and the land that make him who he is.⁷ That core of indigeneity is not an exotic piece of anthropology, but is fundamental to who and what we are.

The modern cult of the individual, which by definition is poor in spirit (and therefore power), is inimical to genealogical relations of reciprocity. The individual is perfectly constructed for doing the work that capital accumulation and expansion demands. This is well documented through, for example, ethnographies of production (for the classic treatment, see Ong 1987), which show how inimical capitalist labor is to human beings. There is great violence involved in individualizing, the violence of cutting, slashing, stabbing at the dendrites that make up beings, the dendrites through which we all receive gifts that oblige us to reciprocate, indefinitely.

Angelo receives gifts from his clients, each according to what they consider his bread is worth. This is a good example of gifting surviving. The idea of equivalence here is that of goodness: “the things they bring

6 Interview with Angelo di Biccari available here: www.youtube.com/watch?v=pG8tcNKQsic. As the caretaker of a sixteenth-century oven, Angelo wants to encourage a general reskilling of people by teaching them how to make their own bread and other oven goods. He therefore does not work as a baker, but rather as a midwife for forgotten practices. Twice a week, he offers his own bread in exchange for other goods that, as he says, bear the signature of their maker (olive oil, fruits, cheese, eggs, wine, and so on). He explains that the partners in exchange must trust that what is exchanged is roughly equivalent not in economic value, but in quality and care. This, he says, is the first step towards a wider ethics of interaction that may apply to “the economy, social issues, banks, the internet” and so on. But one need not have an actual ancestral connection to a place and/or a craft in order to enter into this kind of generative relation. Genealogical links, as I have argued, are fundamentally open. For example, in Otranto, Puglia, a group of people that do not have a deep past connection to milling flour have opened the first communal mill in generations, pursuing ideas and practices similar to Angelo’s. Through their actions, they add to the generative genealogy of that place. See <http://ilmanifesto.it/il-mulino-di-comunita-utopia-tangibile/>.

7 See, for example, <https://interactives.stuff.co.nz/2020/11/tame-iti-50-years-of-news-making/>.

us need to be as good as the bread we give them. Good genuine products need to taste like the person offering them. They need a signature". The signature in Angelo's case is akin to the *hau* of Māori *taonga*, that is to say a power of spirit that is not separate or separable from the object, but rather *is* the object.

Being rooted in a rich genealogical soil also implies that the body is itself a composite of inheritances. For Māori, different body parts have their own agency, and this is reflected in *te reo* Māori (the Māori language; see Salmond, Chapter 3). Though in Māori the intelligence of the body is etched in syntax, in other languages it is still visible through idioms. A baker going about her business and perfectly 'weighing' dough says "*ormai le mie mani sono abituate*" ("my hands are used to it by now"). It is not *her* that is used to it, but her hands, and everyone that has had similar experiences knows that to be true.⁸ It is not metaphorical to say that the eyes see, the ears hear, and the hands do. It is metaphorical to say that *I* do those things. Experientially speaking, the body is a composite of intelligence, interacting with intelligent worlds.

The sense of human beings being deeply embedded in meaningful landscapes (Drenthen's legible, layered landscapes) can never be eradicated, because of its deep ontological underpinnings. The challenge, however, is not to have it survive in theory and pockets of practice and idiomatic expressions, but rather to build a politics of reciprocity with the environing world. In order to do that, all political scales are needed for the creation of infrastructures of reciprocity, conduits through which human communities can again enhance their environments, in an open-ended and endless project of mutual beneficence.

I stress again that the exchange of gifts in the sense developed here, and the reciprocity it expresses, is not simply an economic matter. In fact, much of the most radical literature on the need to fundamentally change economic practices (degrowth and the sufficiency movement are key among these) is itself a plea to de-center 'the economy' from the pursuit of a good life. One could even imagine 'the economy' as such disappearing, and instead inscribing exchange within meaningful relationships. However that may be, in the here and now there is much that can be done in order to renovate the conduits of reciprocity that sustain thriving lives. One of the most important ones, with which I

8 Also see Richard Sennett's *The Craftsman* (2008).

want to end this chapter, is the pursuit of ritual in interactions with the environment.

* * *

Throughout this book, I have referred to the practice of ecological restoration (as well as its latest variant, rewilding) as a potential illustration of how a mutualist politics may look in practice. This is not to say that the practice of restoration *is* mutualist, by definition. It is to say that it has great potential to be so in the senses that I have developed. I want to now turn to restoration, and the politics of nature conservation more widely, one last time in order to think about what ritualization may mean in practice, and how infrastructures of reciprocity may be created.

I have argued extensively that nature restoration today must be about restoring relationships with the land. The same holds for the practice of nature conservation, which has arguably always been about promoting certain relationships (between urban dwellers and ‘wilderness’, for example) at the expense of others. The salient question today is what these relationships may be, how best to achieve them, and who has the right to be involved. According to the account presented so far, the kinds of relationships to be pursued may be called mutualist, that is to say relationships that benefit all involved participants. In the context of ecological restoration, the benefits for people are not only (perhaps not even primarily) about material gains, but rather the creation of meaning through engaging the enviroing world in a beneficial way. Jordan, in presenting the history of ecological restoration, talks about a supposed moment of “discovery of the value of this work [restoration] for the people involved as a distinctive way of engaging nature” (Jordan and Lubick 2011, 177).

No such moment need exist as a historically identifiable event; instead, it is a way of expressing the idea that ecological restoration has mutated, throughout its history, from a science of control (recreating, through technical means, what people want) to one of engagement. This implies that restoration is a science that is open to ecological variation and unknowns, inasmuch as the *process* of restoring is one that strives to benefit, in multiple kinds of ways, all those involved. Andrew Light has stressed the politics of this kind of restoration as having the enormous

potential to be radically democratic. “At its best”, he argues, “ecological restoration preserves the democratic ideal that public participation in a public activity increases the value of that activity” (in Jordan and Lubick 2011, 178). In Light’s account, the democratic potential of restoration is expressed through the involvement of those affected. This means, for him, the active involvement of local communities, but there is no reason to suppose that only human communities have the right to be active participants. In restoration projects that involve the reintroduction of animals, for example, the latter also become active participants in the construction of new relationships.

The historical tendency to exclude those living closest to conservation spaces is still dominant today, though critique of it has never been stronger. The power of exclusion still haunts practices that try to be novel, like rewilding. In my fieldwork with rewilding projects, I have often come across the belief, on the part of rewilding practitioners, that locals were not enlightened enough to know their own interest in protecting the environment. This kind of mentality is a direct inheritance from the colonial history of conservation, and one way to overcome it is by designing rewilding projects to be *entirely* co-created, including the initial definition of their goals.

This is not easy, far from it. Idealizing the willingness of locals to “participate” is a mistake. What exactly does it mean to participate, who is it for, whose responsibility is it to do so and under which conditions? These questions cannot be conclusively answered, as if a formula of participation could be summoned, but one way through the thicket they imply is to realize that part of the problem is how we think about participation. Usually, the idea is that a project whose outline is more or less already settled is ‘opened up’ to locals who are now free to jump in and, at best, have some input. This is of course insufficient, and it is not the only reason why local people may rebel against conservation goals. Another reason is the facile idea that locals are always *a community*, when in fact every human life plays out within a network of friendship and animosity akin to quicksand. Or rather, approaching conservation as a project to be achieved by courting “local communities” misses the point in two ways: conservation suffers when thought about as a project to be achieved, and it is impossible to acquire allies from a notion—the local community—that is highly unstable.

These reasons combined mean that conservationists are generally content to identify representatives of the community and assume that through the partial participation of these people all will be pacified, and that the social goals will have been achieved. This is naïve and counterproductive, because whoever the representatives are, they are surely not unanimously seen as such, given that local power struggles logically exist. And whatever the project goals may be are not in fact drawn up after the lengthy and equal participation of the conservationists within the local environment. In one article on rewilding in the Danube Delta, I documented how one of the more salient wishes of many people from a particular village was the creation of a paved road to facilitate transport to and from the biggest town. Connection with this town was crucial in winter when the water was frequently frozen and therefore the river unusable for navigation. A new road would reduce the time needed to reach the town and would also reduce fuel consumption considerably: an infrastructural redoubling that would connect the towns year-round.

Building roads was not on the rewilding agenda. On the face of it, of course not. But then again, why not? *What* is the rewilding agenda such that it cannot accommodate this kind of wish? If that agenda would be more akin to what I have described as an underlying potential—the encouragement of mutual beneficence through ritualized restoration—then there is no reason to *a priori* exclude anything at all. Democratizing restoration is not about using the pre-existing channels of democratic practice, including elected representatives and power hierarchies, but setting up alternative modes that rely on deep familiarity with the situation within which reciprocity and responsibility necessarily work.

Under the dominant conservation regime, local inhabitants feel the exclusionary practices and the gaze that relegates them to perpetual nuisances. Their own ecological knowledge remains unused, and they are subject to the individualism of modern capitalist societies that reward consumption. Their own inheritance of ritualized practices, often all but gone, remains below the surface. In the context of the Danube Delta, for example, there is a strong memory of past rituals around commons such as reed beds and fishing grounds. Expeditions to pursue these goods were collective affairs that honed skills and built knowledge of the enviroing world. Today, the channels that these past practices have

hewn are still visible in the many essentially instructive conversations that follow inquiries into these goods. One may ask almost anything about reeds and the conversation quickly steers towards their past as a commons, how best to harvest them, what season is appropriate for doing that, and so on.

Part of what has relegated these once ordinary rituals to an increasingly unapproachable past is the monetization of the goods around which they were articulated. Reeds are now harvested through concessions given to companies. From a classic conservation perspective, reeds are not to be touched at all, and this forecloses the possibility of ritualizing beneficial use. In other words, a democratic politics of restoration/conservation/rewilding approaches what Büscher and Fletcher call convivial conservation, that is to say a conservation model that is first and foremost concerned with equality among participants and fundamentally disposed *against* the dominant political economy. Conservation's current obsession with ecotourism is a good example of how conservationists fail to use existing, dormant practices by swallowing wholesale the idea that monetization is necessary. Conservation should not aim to monetize every last bit of the environment, but rather to create relationships that no longer see monetization as necessary.⁹

Ecotourism is but the latest manifestation of the search for the exotic. It is dependent on the duality of general impoverishment and an enclave system of splendid wilderness populated by natives doing 'native things'. It is also a tremendous driver of consumption. The Danube Delta has been promoted, by rewilders and conservationists as well, as a fantastic ecological destination. The assumption is that tourism can supplant resource use in those places deemed worthy of protection. Simply put, the local who can drive a tourist around to photograph birds will give up fishing threatened species because this is an alternative income.

This seldom works. In the context of a culture of consumption, there is no reason to suppose that a local resident wishing to attain the level of

9 For example, by fighting to return now commodified goods to an economy of use and exchange outside of formal economic institutions. Reeds are again a good example: under market conditions, they have become the most expensive building material for locals themselves to use, though villages are surrounded by reed beds. The Danube Delta has the largest contiguous reed beds in the world, but they cannot be used in a non-monetized way. Their monetization has also led to the radical de-skilling of local people, who no longer know how to use them as their ancestors did. This terrain is ripe for restoration.

consumption of his guests will not drive a boat *and* fish. In the Danube Delta, this is exactly what is happening. What is more, the tourist comes to the region with a preconceived idea—promoted through ecotourism itself—of what the local lifestyle is like, and therefore accelerates consumption. Fishing is now necessary in order to feed tourists what they think locals eat. There are not enough fish in the Delta to feed all the tourists, so restaurants serve Norwegian roe and Canadian fish as local varieties. Then there are the increased emissions from transport (flying all of the tourists in) or the necessary extra plumbing, water facilities, heating, and so on. The village that ‘benefits’ from ecotourism has now been modernized, perfectly integrated into a network of consumption that brings the alienation tourists are trying to escape into the homes of their hosts.

Travelers had always visited the Delta. But they were not tourists, a category that is inseparable from commodification. Ivan (2007) documents how, before mass tourism, the people of Sfântu Gheorghe would host guests that would often become their friends. Money was not seen as an important measure of exchange, and instead gifts in kind were common. The existing culture of hospitality worked. People had always had a spare guest room, usually the biggest and most decorated room of the house, just in case someone came by. That kind of hospitality was radically transformed by tourism because the infrastructure it required was not adequate for the flow of people paying for a predetermined service. Instead of the guest room, which has disappeared, the village is sprawling with ‘guest houses’, mini hotels made to feed the tourist flow.

Answering the question of how to move away from conservation’s dead-ends and counterproductive proposals is not easy, but we can think about it by linking the practices of restoration/conservation /rewilding with ritualization. If we accept that the most important political contributions that these practices can make have to do with the creation of mutually beneficial relationships that allow for widespread meaningfulness, then it becomes quite clear that one way to achieve this is through the ritual practice of renewal of such relationships. It is through infinite reiteration that relationships are constructed, and the meaningfulness embedded in such repetition is fundamentally linked to the creation of rituals that mark the repetition itself as meaningful. This is not a new idea, but merely one that—like so many that go

against the modernist grain—have fared poorly. Jordan remarks with respect to many societies that “rituals [...] shape, renew, and transmit the intellectual, emotional, and spiritual software that defines the relationship between the land and the people who inhabit it” (Jordan and Lubick 2011, 178). Or as Bollier and Helfrich put it, “rituals tend to work best when they are woven into ordinary daily life and are not treated as something separate and unusual” (105). Ritualization cannot be a project; it can only be a process.

In practice, this will take more forms than can be imagined. But the general outlines stay roughly the same, namely the repetitive engagement, in communal settings, with aspects of the environment that, through such engagement, are underlined as meaningful; this supports the creation of infrastructures of reciprocity. This kind of meaningfulness is often enhanced and passed on through the development of skills that the ritual requires. Earlier I spoke about the pride that one feels in reiteratively placing oysters in a formerly polluted urban river, or the respect that locals have for European bison partly because they participate in their release (a festive occasion). Through these practices, people learn about the surrounding world, populating it with many more creatures and processes that had formerly been invisible.

Restoration as a ritualized practice that aims to create meaningful relationships of mutual beneficence has no territorial boundaries; it can happen everywhere. Politically, this idea must migrate across scales, such that support depends on what practices achieve in a comprehensively restorative sense, and not on arbitrary indicators of success (like how many trees have been planted). Ultimately, one has to insist on the idea that human beings can, alas *must*, play a crucial and perpetual role in the enhancement of the environing world. The best possible answer to the Ecocene would be the inauguration of a perpetual age of restoration. This book has tried to pick up threads that may otherwise have remained disconnected in order to emphasize the need for this approach. Mutualist futures are possible; they have begun, through the systematic renovation of the forgotten inheritance that ties everyone fundamentally to their world. As unlikely as it may seem, we may yet collectively find ways not only to live through the Ecocene, but to thrive.