the earthly community

reflections on the last utopia

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contents

foreword

The present reflections bear, in a general way, on the Earth, its becomings, and above all on the kind of community or collective that it forms with the cohort of animate and inanimate species that inhabit it, have found refuge in it, or sojourn on it. We must thus, when treating the Earth, bear in mind the living world in its entirety and its innumerable manifestations. Of this Earth, humans, together with animal, plant and mineral species, as well as microbes, bacteria, and viruses, seas and oceans, skies, climates, technological devices, and other artificial and externalized apparatuses, are an inseparable part.

forces of becoming

Also an inseparable part of it—at least according to the animistic metaphysics of the ancient Africans—is the living in its myriad richness: all the invisible and obscure forces, the genies, the ancestors, and their substitutes, together with the spirits and masks, red fibers, clothes and jewelry, cowrie belts, long-handle calabashes and baskets of sesame, dances and ceremonies, funerals and festivals. Not all these things are of the same kind and they are strictly speaking different entities. But each in its own way is a *sketch of the living*.

Amos Tutuola's 1952 novel, *The Palm-Wine Drinkard,* paints a striking picture of these metaphysics, of these very different ways of thinking, of

thinking other things, of thinking differently to the ways that we, that many, have wrongly deemed assignable to "inferior societies" in recent times.[1] Significant in this respect is how these latter societies distinguish between what is possible, what is probable, and what is plausible. This is the work performed, for example, by divination.[2] All that is true and real participates in one or other of these categories to a varying degree. Some events occur. Others do not. Still others are likely to occur, but nothing guarantees either the possibility or the probability of their occurrence. Some establish themselves as probable. Others do not. Essentially, nothing formally prohibits anything at all from coming to pass. In return, nor does anything guarantee this coming to pass. There is no absolute impossibility.

There is nothing passive. Nothing is mere continuous repetition of the same. Everything is radically approximative. Taken in isolation, no entity, or subject, has full control over its freedom and destiny. Time is unending. But while its sweep is unlimited, inexhaustible, it is made of segments, of different branches. For its part, life has an arborescent quality and thus contains a multitude of possible futures. It is not only woven of uncertainties but randomness is part of its "egg cell." Life, as a dice game, is always exposed to disintegration. As every risk threatens gnawingly to turn into an existential risk, the living subject is one that is prepared for incessant mutations and is ever able to change its state.

When unlinked from one another, each of the collectives, entities, and objects that makes up the living is perishable, putrescible, liable to succumb, and each of these events is furtive and ephemeral. Placed together, these sketches are transformed into dynamic assemblages. Thus coming to life, they become so many of the Earth's mirrors, and contribute to social durability. Because they are open to each other, made for each other, the Earth thus assumes the properties of a vibratorium: a scene that is at once solar, nocturnal, and lunar. The Earth is a sort of *binder;* it makes possible the passage from one form to another—metamorphosis.[3]

According to these sorts of metaphysics, the Earth has vibratory, corporeal, sensory, and carnal properties that pre-exist those of human beings. The Earth's body and flesh figure in them as counterparts to the body and flesh of the multitude of beings that compose it or that it hosts. The Earth

thus is, like all bodies and flesh, fungible and perishable. In permanent contact with matters of death, it runs the risk of decomposition, like the deceased under a red shroud. The Earth can attain unlimited duration, but only if it is capable of fecundity and regeneration. In the absence of this capacity for periodic (re-)begetting, it amounts to no more than the darkened mask of a vast house of the dead. This is why, among ancient Africans, interrogations into the Earth's becoming, or into technology's destiny, often took the form of a long meditation on the theme of seeds, sowing, and germination.[4]

For, if there is one enigma that most myths and ancestral knowledge strive to solve, it is that of knowing how to pass from one world to another, from one form to another, and, in so doing, to give life to what is threatened with demise. This function was assigned to techniques and other objects, beginning with the mask as the eminent and indeed first form of commemoration of the dead. It was also assigned to liturgical materials, such as throwing sticks, or the stones or those on which the newborns are placed for their official naming, those on which the sanctuary's wooden statues rest, or the turtles said to represent an ancestor, or even the snake that comes of a night to lick and clean the priest.[5] Techniques are *utensils of life*. Their role and that of objects is to increase energetic potential and thereby to help humans complete themselves, augment their strength, and establish a link between restoring themselves and restoring the world. Thanks to techniques and objects, it was believed that the mysteries of that secret language, the secret of death, could be penetrated, and that the various metamorphoses that precede the sowing festival could be endured.[6]

Among all the brutal changes that affect the living in this age on Earth, two in particular deserve to be examined from viewpoint of the animistic dialectic of seed, germination, and sowing. The first, thanks to the world's ongoing combustion, concerns the possible exit from the climate niche in which humans and non-humans have thrived for the past six thousand years.[7] For, though the planet's regions are not impacted equally or to the same extent, overheating is real everywhere. Oxygen is now hit by scarcity. The radical vulnerability of bodies can no longer appear as accidental. It is that by which we are composed, that through which life itself happens.

As the planet becomes ever smaller, the utopia of limitless growth will run its course. Study after study shows that, if nothing is done, we will inevitably reach thresholds, lethal thresholds, resulting in heat exchange blockages, protein deformation, the destruction of muscle cells, and poor blood circulation. But this will jeopardize more than the human body's cooling mechanisms.[8] The Earth's body itself, and its vital organs, will fail in an interconnected chain.

The second change concerns the world into which we have already entered. This world will be mostly dominated by computational reason. Gigantic computing devices will be to the twenty-first century what the alliance of steel and concrete was to the nineteenth and twentieth centuries.[9] In other words, technology is going, more than ever before, to be one of the *fundamental forces* of our world. It will provide this world with a semblance of unity, but will also drag it into a process of splintering and endless fragmentation. In this respect, technology will leave a profound mark on the world's future. More than this, it will be our environment, the territory in which we move, our *biotope*. It is thanks to and through it that new imaginary territories and new languages will appear, that the living will have its coexistence organized, that other ways of making or breaking the world will emerge. In addition to computing devices themselves, countless mega- and nanostructures will come about whether through EHV lines, energy infrastructures, or a multitude of satellites placed in orbit and all sorts of relay antennas.

Everything will therefore revolve around technology. If technology were to close in on itself, it would cease to be the pledge of life and restoration of the human species to which it aspires. For the time being, it continues to lend to our feelings of prodigiously accelerating speeds, of the exponential expansion of time, of the dilation of space and even the cosmos, and of the almost limitless irradiation of energy flows required for earthly existence—it has become the new magnetic field of all earthly existence. In the beginning, the energy flows necessary for life on Earth came directly from the sun. Very early on, human communities learned that if they could exert enough pressure on the natural environment, it was possible to extract from nature and appropriate part of the Earth's primary production. Gradually,

they worked to replace game with livestock, gathering with crops, and the extraction of wood from the forest with silviculture. They intensified thus the controlled production of biomass, and eventually moved from subsistence farming to modern, production-oriented agricultural systems.

Moreover, since mastering fire, humanity has continually turned to other, always more powerful and energy-intensive sources. This is how the major leaps from one civilization to the next have occurred, right up to nuclear civilization. Certainly, in many parts of the world entire communities still rely on wood burning to convert energy into food.[10] And there are other places in which domestic animals and human populations continue to produce energy using muscle power, leaving the sun to do the rest.

mutant powers

For the most part, however, since the domain of machines tends to prevail over the reproduction of life, the norm is fossil-fuel dependency—a dependency on resources that accumulated in the ground over millions of years. This norm is partly what has gradually enabled nuclear fission to serve in weapons and energy use. However, humanity's entry into the nuclear condition has not come without a cost. This cost is precisely radioactive contamination[11]—a contamination that continues apace and is extending its grip on the planet across all national borders.[12]

What account can be given concerning today's vast acceleration of fires, or the marked increase in virus alerts and other health disasters? Computing devices, which now feature in the daily experience of millions of human beings, are not only gadgets used for surveillance and capture. They foreshadow the advent of a new form of power. Let us call it *mutant power*. Its properties are invisibility and, often, undetectability. This power is fundamentally predicated on the predation of the living. Mutant power has a twofold dimension: radioactive (irradiative) and viral (parasitic). It moves either by irradiation or in the viral mode. Concerning the former, radionuclides, as Sabu Kohso remarks, "travel far and for a long time." They "permeate the Earth in an elusive and chaotic nano-dimensional pattern," and "the genetic

mutations they generate are hereditary." As for viruses, they can only travel short distances and for a short time. But "infected cells spread coextensively to all humans through the dispersion of body fluids (aerosols and microdroplets) or direct contact."[13] Mutant power, in the course of its spread, produces sometimes non-organic (or machinic) effects that are dispersed in space and time, and sometimes organic effects that directly attack social relations.

Populated by processors, cameras, and objects connected to all sorts of surfaces, including the body, the world into which we have already entered hatches and feeds a regime of existence in which automated systems collect and process innumerable amounts of data on our every act, desire, and behavior. Mutant power also acts through *enclosure,* including even where it claims to be ensuring the protection of lives. Vital activities then become subject to technopolitical management. Such measures generally consist in isolating infected bodies and placing drastic restrictions on social life, including physical interactions between bodies. Mutant power indeed registers more through what it destroys than what it protects. It can eradicate all desire for truth. So doing, it turns politics into an existential struggle where everything comes down either to protecting or losing one's life. In other words, politics is now lived out at the intersection of several catastrophes, the nature of which is techno-informational, radioactive, viral, and techno-environmental.

Although flesh-and-bone bodies, microbes, and bacteria still play a part in reality, our existence, or much of it, tends to play out on screens, and most gestures are robotically guided. Whether we are talking about video games, e-commerce, or pornography—that is, all manner of artefacts, media, and applications—a large part of everyday life unfolds thanks to the ready availability of sites, as great in number as the tales they peddle, in a world that is increasingly mobile, in the most polymorphic, viral, and cinematic sense of the term.

All this means that the forces of becoming—whether virtual or actual—are now, more than ever before, born by *a constellation of technical beings.* Technology is generally the name given to this constellation and its modes of operation. The term refers not only to an assembly of objects, tools, ma-

chines, and instruments, but also to an institution and an imaginary that extends to the world's most invisible peripheries. There is a tendency to forget this. The *technological* is *prima facie* an archetype of the *artificium*, of the *artificial*, of that which, as *manufactured,* is the result of combinations of skill and ingenuity. But it is also, in itself, a regime of meanings, even a constitutive dimension of the fabulist imagination. In this sense, it is the exact opposite of the natural domain, with which it nevertheless shares the attributes, properties, and functions of use and utility. But what ultimately determines the technological today is not so much its artificial properties as its *android status.*

Technical objects do not only provide mediation between the human and the natural and supernatural worlds. In reality, human be-*ing* itself gets materialized in the technical object. Human be-*ing,* that is, delegates some part of humanity to the object, which thus becomes the human's double, its recipient. Endowed with a part of the human's humanity, the object is transformed into *a being in its own right*. It is no longer a pure assemblage of matter. It is now vested with intentions, as an expression of the human being's desire for mastery and power. Yet, while the human lends part of its own individuality as a living being to the object, the latter nonetheless acquires an autonomous existence. From its own interior, the object transforms into a generic vector of indetermination.

This is the sense in which we could interpret what Gilbert Simondon calls "the presence of man in machines."[14] "The human," he claims, is not only the inventor of machines, their living interpreter, or "the organizer of a society of technical objects."[15] The human is "*among* the machines that operate with them" and, according to an animistic metaphysics, *in them.*[16] Insofar as it can be said that "what resides in machines is human reality, human gesture is fixed and crystallized in structures that function."[17] Conversely, the claim can also be made that a part of the human consists in the reality of objects. The human is not only among or in machines; machines, in turn, elaborate the human, pass through it, and move into it. This is what gives machines their android character.

three paradoxes

Three paradoxes, however, lie at the heart of our technological present. On the one hand, the question of technology as an expression of the *forces of becoming* has increasingly been severed from the political questioning of the *sense of that becoming*. Instrumental reason and the power it generates no longer bear the burden of meaning. Driven by profit, they have notably freed themselves from all judgement and now suffice unto themselves.

Thanks to the triumph of pure force over meaning, everything happens as if all possible futures depended almost entirely on the ability to manipulate tools, objects, and instruments. The only real would seemingly lie in that which has practical functionality, with immediate utility being the decisive word of all things. As the real is now defined by the mere law of use and utility, intelligence itself gets reduced to a simple recipe. Technology thus becomes the repository of both the most obscure human desires and what remains of human and historical will. It no longer merely frames flows. It no longer simply vests all kinds of organs. It marks bodies, all bodies. It is on the point of becoming the *second body of the Earth*.

On the other hand, there is no longer any doubt that thermo-industrial civilization will eventually drive the planet to exhaustion. Abetted by financialization and technological escalation, humanity's predatory capacities have greatly intensified, further envenoming inter-species relations. From this, a dramatic involution has ensued and a profound dissociation arisen between technological reality and social-political thought. This occurs at a time when technology, along with ecology, should rather be the privileged terrain of new political struggles.

A third characteristic must be added to these two. Technology now tends to take on all the attributes of religious thought, of magical or animistic reason, as well as of aesthetic activity. Until relatively recently, it was presumed that the artificial object made humans more remote from the real world. Now the artificial object is a vector of potential fusion with it, since the world itself has become artificial. Hence, to inhabit the world means to engage uninterruptedly with matter, forms, and objects. It means immersion

in sensible existence, in a direct relationship with the world—a relationship without mediation, one that is consciously material and objectal.

This integral participation in the life of objects and matter, this fundamental adherence to the law of utility, means that contemporary humans live in relative co-naturality with technology. The corollary of this lack of mediation between the human and the material world is the exhaustion of symbolic reserves. Technology comes to fill the vacuum thus created. Doing so, it seizes hold of the functions formerly assigned to transcendence, donning a timelessness that establishes it as one of the last universal religions. This religion, however, unlike the classical ones, is Godless.

By virtue of this, we may well be witnessing the almost definitive triumph of gesture and artificial organs over what André Leroi-Gourhan called speech. This end of speech—the wholly definitive triumph of gesture and artificial organs over speech, or fact that the history of speech may be closing before our eyes—is the "historial" event par excellence. In this context, can the question of governing the Earth be grasped simply through the categories of social anthropology inherited from the nineteenth century? To what extent does the digital density of the contemporary human subject and its relationship with the animal, mineral, and vegetable world, as well as with the rest of the living world, oblige a way of thinking about the Earth that is no longer based on the old separation of subject and object, of the useful and the useless, of that which counts and that which does not?

These questions emerge as different modes of violence are being tried out on the world's population. The accumulation of brutalities meted out by state apparatuses (army, police, immigration systems, criminal justice) does not fail to include all countries. In addition to this visible and increasingly spectacular violence, however, there are other more insidious, delayed, slow, and indirect forms. Both sorts of violence, spectacular and indirect, are combined in technology, which is essential to the development of affluent societies, whose myth it also sustains. In return, even if, from time to time, this myth recognizes the devastation caused by technological escalations, technological development in itself is persistently framed as a history of uninterrupted improvements and thus of human emancipation.[18]

This quasi-automatic reinscription of the technical object within an emancipatory trajectory has led to the negation of the very idea of planetary limits. Technological acceleration is deemed able to help us overcome every limit to growth, including even land availability or non-carbon energy. For every natural resource consumed, some artefact can simply be made to replace it. As Rémi Beau observes, for example, the search is on to substitute "natural materials with synthetic materials and direct withdrawals of foodstuffs from nature with the consumption of agricultural and livestock products."[19] Within this purview, the solution to the anthropocenic is indeed technology itself. Technical systems can be used to supply the same services that the planet's ecosystems fulfill. The resources necessary for life would, then, no longer be drawn from nature. Understood in this way technology remains within the instrumental horizon in which a certain tradition of Western thought has long effectively confined it. Might technology, as a set of devices enabling us to act on nature in order to transform it, thereby lose its disruptive power, its power to capture, to transform the things of the world into energy? Or, by contrast, might it sanction the supposed separation of the human from the other forms of life that make up nature? This is one of the major questions at the center of this essay.

chapter one

the universal right to breathe

Recently the split between the production of tools and the production of symbols and, above all, of speech has been pointed up. The case has notably been made that the tool has taken precedence over the word, instrument over meaning, force over sign. There are three advantages to taking Africa as the starting point for an investigation into the becoming of the Earth and the destinies of technology.

general ecology

First, Africa is a region of the world from which a theory of life and a theory of ontogeny emerged whose potentialities we have not yet fully exploited. As Amos Tutuola explains in his novel *The Palm-Wine Drinkard*, here, in Africa, almost everything is variation, life included. Nothing is ever identical with itself. Sizes, external forms, internal structures, environments vary constantly, even and especially when they are intertwined in interdependent processes. The living itself is recognized by its variability and unstable structure, a property that is not the equivalent of disorder or anarchy. On the contrary, the tissue of the living is formed through differences in expression. And this tissue is open to multiple recombinations. Any such order is, by definition, *plastic*.

In *The Palm-Wine Drinkard*, originality, ambiguity, and singularity take precedence over identity, while random events outweigh essentialism, fixity, and determinism. In it, history assumes the structure of a die. Actors constantly change their identities and positions. Metamorphoses, transpositions,

mutations, and rearrangements are the norm. No entity is static. Instability is part of an entity's architecture *and* its functioning. New entities arise through processes of continual combination and recombination. Indeed, the living can only ever have an order imposed on it that is articifial. Its structure is not cellular. It is formed on the basis of a potential for variability, elasticity, and plasticity. This potential is what gives the living its molecular constituents. Such is general ecology.

At the heart of this ecology, two activities—namely the making of artefacts (in other words, tools, instruments, and images) and the production of symbols—have always proceeded from one and the same flesh, the flesh of language. What is common to tools, images, and instruments, on the one hand, and to signs and symbols, on the other, is that they are *utensils of life*. Moreover, as far back as we go in history, human existence in Africa has always had a fundamentally ecological dimension. Ecology was the very source of language and its ultimate destination. The great diversity of environments was matched, as if in echo, by the great *diversity of beings*. For the ancient Dogon, for example, the multitude of beings included humans, genies, invisible things and powers, the souls of the ancestors, and other realities associated with life, such as the heat of fire and the sun, ants, termites and birds, plant fibres, masks, and even words themselves.[1]

These beings were divided into several categories. Of these categories, three in particular—human beings, immemorial and night beings, and the artefactual beings produced by technology—were linked to each other through synergistic relationships. Similar to groups in other parts of the continent, the Dogon considered each being to be in itself the cause of its own movement. But this same movement could, moreover, be set in motion by an external force. Speech was a case in point, its value was matched only by the constant danger it represented for every speaking being.[2] Each category of being was also engaged in a multiplicity of actions simultaneously. Acting and perceiving were, in fact, inseparable. Peering, glimpsing, and seeing were in themselves ways of acting on, with, and through the world.[3]

All beings made multiple uses of the environments and milieus in which they lived, uses that made sense only in relation to the general struggle against death. Moreover, human life and death were part of one and the

same story, one and the same framework. These original myths, rites, and systems of thought were preoccupied with a single enigma: the introduction of death into the world. Which resources could be garnered to check the corruption and threats to the disappearance of not only the human but the living world in general? This struggle against death, that is, to restore and continually renew the universe, was organized "with elements that were partly immaterial, partly material."[4] For the rest, being alive required the deepest immersion in a spatio-ecological framework. This immersion had the distinction of allowing close communication with other universes, including the cosmic and that of plants. The material control exercised by humans over the environment, that is to say, the organization of its matter, was performed through all kinds of techniques, including cults and rites. The environment could be exploited and transformed. But every ecological environment was above all a universe in which beings of all kinds learned how to move.

This way of *making the world through moving and resonating with the other forces of the living* gave prominence to a diversity of forms of know-how. These forms aimed at understanding what was hidden and at bringing the invisible within the reach of humans. Forms of know-how and objects were considered to be a guarantee of life. Further, learning consisted above all in listening to the landscapes and their surroundings, to topography (*relief*) and sacred places, to lines and fringes, to the cycle of the seasons, to myriad sounds and images, and to the glebe. The basic question was indeed how to decipher the signs of life, the thousand paths of the living, to capture life flows and ensure life's redistribution along its various chains—mineral, botanical, zoological, psychological, biological, and organic.

For that matter, the various categories of beings wove relationships with each other that were not limited to human society.[5] If there was a *secret,* it lay in the shift from one state to another. And this secret of knowledge could be acquired only after a gradual unveiling, at the end of a long initiatory journey. The society of humans was merely a singular segment of *the general community of beings, which included the dead.* Further still, technical processes were by definition a part of all vital processes.[6] The ultimate function of technical objects was to participate in life's irradiation and possibly also in

reaffirming the cosmos. Life itself was understood both as an energy that circulated between singular bodies and myriad environments *and* as the capacity to actualize the profusion of possibles.

Second, Africa is one of the oldest and youngest laboratories of the living in the history of the human species. It is where humanity as a species first became aware that a certain future would open up ahead if it freed itself from the animal condition, that achieving this could not be left to chance, and that continuing to grow and reproduce would require the addition of gesture to speech and a marking of its own memory by making tools.

Added to this realization was another—and this is the third advantage—namely that species transform, or else are fated to disappear, and that technical objects are one of the major keys to this transformation. Technical objects are not simply means by which humans objectify nature. By producing artefacts, humanity also objectifies itself, materializing its desires and intentions as well as its constructive and destructive power. In short, through technology it projects its sensible qualities onto materials. This is how humanity set itself in motion, releasing a whole range of possibles in the process. All this transpired long before humanity came to understand that atomic processes could be used to end its earthly adventure. Indeed, when brought to its maximum point of incandescence, the technical object, a human creation, can be turned into an instrument of humanity's suicide.

Among the ancient Dogon, two archetypal figures came to express this fundamental ambivalence: the ant and the termite. The ant, by devouring seeds, destroyed life. It was a bearer of death. It was simultaneously a sign of life, because metamorphosis was thought to characterize its biological cycle. Its corpse did not rot but dried out. The termite, by contrast, mainly fed on plant debris, and thus on dead substances. In so doing, it destroyed death while simultaneously connoting it, since it did not metamorphose during its biological cycle. Furthermore, a dead termite mound exuded a particular odour comparable to that of a corpse.[7] In both cases, there is a clear dialectic between dissolution, decay, and the perishable body, on the one side, and metamorphosis and transposition, on the other. In both cases, the emergent question is one of sustainability.

In this schema, the Earth is grasped not so much through a contrast with the stars, or relative to its multiple geological ages and epochs. Instead, and from an expressly political and symbolic point of view, it is perhaps to be understood as the *ultimate, or last, utopia*. The Earth is indeed, in its minor sense, a global unit of subsistence, a material and social resource whose conquest and appropriation, redistribution and development give rise, almost everywhere, to multiple, and sometimes existential, conflicts.

Isn't the Earth, more than any other identifier, associated with stories of origin and feelings of belonging and affiliation, with myriad identity neuroses and the mythology of blood, soil, and kinship? As a source of food, a place to work, an alienable commodity, a taxable object, or a place of burial, isn't it everywhere liable to be used in varied fashions, or to be the object of fixations, occasionally even lethal ones? Doesn't making it one's own require occupying it, settling on it, and defending it against other potential occupants? In many respects, it appears in the final analysis to be a power of underpinning that cannot be shared, since two distinct peoples cannot own it simultaneously.[8]

There is something about the relationship to land that, beyond its expanses and reliefs, its lines and depths, makes it a primitive source of dispute, one preferredly dealt with by force. As appropriable, land is the sort of good that arouses a desire to dispossess others of it for one's own benefit. This is undoubtedly why, in the name of defending or conquering it, there is a willingness to shed blood and inflict death—one's own and that of others. Through effective occupation, the right to govern is transferred unreservedly. This is what happened between 1870 and 1900, when Europe seized the last colonial territories, first by signing "treaties" with non-state power structures along the African coast—thus acquiring "legal titles" that were not really titles at all—and then by proceeding to "fully effective occupation" through conquest. In his *Nomos of the Earth*, Carl Schmitt refers in this regard to the Congo Act (1884–1885). On the pretext of "open[ing] up the only part of the globe it has not yet reached, piercing the darkness, [and] enveloping the entire population," civilization undertook, in the words of King Leopold of Belgium, "a crusade worthy of this century of progress."[9]

This is one reason why peoples whose land has been taken mostly fall under foreign rule. After the sword has passed through and blood is paid, by preference against blood, sovereignty is wrested from these peoples and their lands are proclaimed "leaderless, even empty."[10] Every colonization or bloody adventure has involved precisely this—a given land is declared virgin or uncultivated, and its occupants are confined to reserves, the typical example of an enclosure and some gaping elsewhere.

By likening the loss of land to a loss of limb and worse, acts of dispossession or expropriation have fuelled many revendications in return. These revendications have generally aimed at obtaining reparation or restitution. In this way, acts of dispossession have been met with demands for justice. Justice, in this most elementary sense, consists in returning what is owed, in recovering what is lost, in preventing theft and usurpation. The thief and the usurper are precisely those who have unjustly taken something essential from others but have themselves suffered no offense.

Inscribed thus into the Earth's very foundation is the right to reclaim it as that which belongs to us. But this foundation is also that which our works are based on, the ground without which we remain as if voiceless, deprived of air and water and left suspended above the void. This right to restitution or reparation is inseparable from the right to defend yourself, which derives ultimately from the supreme duty to *take care of yourself*. For many earthly communities, this injunction is among those that the Earth bears: take care of yourself.

land grabs

Yet the terms of land ownership change constantly. In the second half of the twentieth century, powerful multinational companies kick-started a frantic land grab. Millions of hectares of land were the target of massive alienation. Once used for subsistence farming, this land is now given over to the trade in food raw materials. Some lands have been alloted to logging and producing agrofuels such as soya, sugar cane, palm oil and jatropha, which is processed into oil for industrial products. Tens, if not hundreds of

thousands, of hectares have also been earmarked for rubber or maize plantations. Abetted by financial speculation, combined occasionally with support from international institutions, a new plantocracy is emerging due to the transition from food crops to agrofuels. Thanks to these same international institutions, and on the basis of unequal agreements, the assets and financial investments of this plantocracy are protected against political risk.[11]

In addition to large agricultural areas as such, rare metals and other natural resources are also targeted. This is especially true of forests, water, and minerals. The seas are not left untouched. Powerful private interests are taking ever greater control of coral reefs, coastal shores, estuaries and lagoons, deltas, wetlands, and mangrove forests. The seabed cannot elude capture either.[12] All this means that entire populations, which once lived from fishing, are deprived of their means of subsistence. The way is slowly opening to the financialization of the oceans.

This financialization has been enabled thanks to giant farms of salmon and shrimp, as well as various types of drilling. Financialization also impacts the immense carbon stock of coastal ecosystems, marshlands, mangroves, and seagrass beds. The financial markets offer "blue bonds" on top of the already existing "green bonds," the idea being that only under the aegis of large-scale financial capital can we best protect the oceans and best govern marine resources.

In addition to these latter changes, it should be noted that a handful of powerful companies are gradually wresting control of halieutic resources. This control is achieved by monopolizing production chains, starting with fish farming (salmon, Nile perch, fresh red tuna, fish oil rich in omega-3, and so on), shrimp farming, or canned food processing. For the rest, the capture or "extraction of fisheries resources relies largely on deep-sea fishing engaged in bottom trawling, which destroys the seabed."[13] A few large retailers and multinational fishing companies (Marine Harvest in Norway, Nippon Suisan Kaisha in Japan, Pescanova in Spain) have effective control over the entire aquaculture market. Ever greaters numbers of carp, tilapia, pangasius, clams, shrimp, and salmon are being farmed. These farmed fish and shellfish are then dumped into freshwater systems and oceans where they threaten wild fish populations. As a result, ecosystems are set to suffer

lasting degradation. As one commentator put it: "Pollution generated by the discharge of chemicals, faeces and fish feed into the aquatic environment—anti-fouling chemicals, antibiotics, colorants, and tons of nitrogen and phosphorus—promotes the growth of toxic algae."[14]

It doesn't stop there. Technological laboratories are increasingly engaging in interspecies breeding, a rarity in nature. They are creating new transgenic fish in specialized tanks, for example, by transmitting an eel gene to half-salmon half-trout fish. Biotechnology laboratories are performing the same transgenic procedures on animals by genetically modifying species such as pigs (with a mouse gene), chickens, goats, and rabbits.[15] The great glaciers are not invulnerable either. In Antarctica, for example, warm currents filter down into the circumpolar current and attack the ice beneath the surface. The ice shelves themselves are constantly losing surface area and volume. A huge part of the ice sheet has been permanently weakened. A rise in sea and oceans levels is thus an inevitability.

Also intensifying is the exploitation of subsoil resources, at least when the land holdings acquired are not being used as collateral for the purpose of speculating on carbon markets. Huge areas of land often located in countries already beset by hunger and poverty, have been annexed for intensive industrial farming. A new class of landowners has emerged that consists of private and public companies, states, sovereign wealth funds or investments for the production of soy-based diesel, energy from biomass, or for the trade in metals or food commodities.

At the same time, while multinational biotech companies are busy patenting and privatizing conventional seed varieties, many governments are withdrawing from the management of gene banks. This lays the path forward to the progressive privatization of seed conservatories. Thereby ancestral knowledge is disappearing that, for centuries, has allowed for the selection of varieties that fit local needs. A large variety of organic agriculture is thus also disappearing along with this knowledge. Importantly, these shifts must be set in the context of the technological intensification of production methods. At issue here is not so much the freeing of nature from the ties that bind it to humans, as the eco-modernist current of thought, among others, claims. Still less is it about renewing our thinking about nature con-

servation. Nor is it about the crowning of humanity's domination over the rest of creation. Rather, the idea is that through technical power, humanity can overcome everything, including the very idea of limits; that it can produce more and more in spaces that are *a priori* restricted; and that it owes no debt of life to anything.

metamorphic power

Our relationship with the Earth has never been merely economic. The relationship is a quasi-existential one of exchange insofar as the material that is the Earth is imprinted in us at the same time as it receives our imprints, our memory and our traces, the material remains of disappeared bodies, the bodies of all those who, born of the Earth, have returned to it. This is what makes the Earth flesh, the flesh of ancestors. It is also what makes death a libation. In the Earth, as symbol of permanence, being sheds its perishable envelope of a body and is stabilized. If it is indeed true that to die means to go into the Earth, or to rise as aroma to the heavens, then death is ultimately a way of nourishing the Earth. Its function is to reaffirm the principle of consubstantiality between the soil and the human person.[16]

But, as Tania Murray Li reminds us, earth "is not like a carpet. You can't roll it up and take it with you."[17] In its major sense, which we are employing here, the Earth is precisely that which one can only move across. Only temporarily can we inhabit it or stay physically on it, after which only the traces or marks of this passage speak for us in memory of who we will have been with others, in their midst. Our fundamental relationship to the Earth is therefore that of the *passer-by*. The Earth receives us and shelters us as passers-by. It also maintains the traces of our passage as passers-by, and, in the last resort, it is perhaps this tension between sojourn and *temporality*, passage and permanence, that gives the Earth its character as indecipherable enigma, something that the ideology of property stubbornly refuses to accept.

On the other hand, the Earth does not exist as a naturally constituted political entity. There is no Earth-people, no Earth-nation, no Earth-gov-

ernment, no Earth-parliament or assembly, no Earth-army, no Earth-police force. To reiterate, the Earth as a global political unit exists only as a utopia, perhaps the last of all. It must be imagined, convened, assembled, created, and driven. It is a name that will always refer to a reality that is unable to be found, to a time ever ahead of us, to a space opposed in all points to that of States, a space irreducible to that of empires and nations, with their countless walls, borders, and enclosures. The name Earth is and will always refer to a subject that must be *composed* and, consequently, to an ever irresovable dispute among its components, humans included.

We should add two other major features to this utopian function. The Earth's political dimension is not only to be seen manifested in those who fight to master it, who occupy and settle it. It is also present in its material density, by which I mean its expanses, its intensive surfaces, what it is capable of, and, above all, what it shelters, what it conceals in terms of materials and substances, including those that come from its soil and subsoil, in short, the treasures hidden in its bowels.

It is the life of these materials, of this energy and other—magnetic and atmospheric—substances that gives the Earth element its exact form, its subterranean power and, above all, its lasting power. This life also gives the Earth its attributes as forge and granary, womb and cave, home and refuge, making it equivalent to what should be called *reserves, a general reservoir of life,* which is something that ancient African myths constantly underscore. The Earth sets itself apart from the other planets by being a general reservoir of life.

Beyond soil and wood, stone, clay and dust, iron and other metals, air, fire and water, there is a metamorphic power that animates earthly matter, a power that gives the latter a certain consistency, solidity, and stability. It is this same vital power that, both force and energy, is at the origin of its substances. Hard, soft, liquid or gas, mobile or immobile, sometimes ephemeral, often incandescent, or icy, and always elusive, these substances have awakened in humans what Gaston Bachelard calls "muscular joys,"[18] the other name that should be given to the technical gesture, which, at least in ancient Africa, was never separated from what is often cast as the other instance known as speech. Probing into the future of the Earth thus also means look-

ing into the future of technology, and thus into the connections between the human species and the immense variability of the living world.

For a long time, the purpose of technology involved liberating humankind from both the natural and the supernatural environments. In his analysis of what he calls "the essential traits of human technical gesticulation," André Leroi-Gourhan gives a central place to actions of prehension, which he claims humans share with a "whole category of mammals starting with rodents and carnivores." "The great apes," he argues, "can grasp, touch, pick, knead, peel, and handle; they tear food apart using fingers and teeth, crush with their molars, cut with their incisors, hammer with their fists, scratch and dig with their nails."[19] But they are not completely free-handed.

Humans have been through the stage in which "digitopalmar grasping operations, affectionate or hostile contact, kneading or using the hand as a receptacle remain[ed] fundamental in bare-handed techniques" and others that required "some delicacy of execution such as spinning yarn."[20] In contrast to the primates, however, the human hand did not only ensure the movements of grip, rotation, and transfer. Free during vertical walking, the human hand was more than a simple osteo-muscular device. Thanks to the development of the cerebral apparatus and the nervous system, the hand ceased to be "a tool and became a driving force."[21] This made it possible to transfer to tools the operations of cutting, crushing, molding, scraping and digging.

Leroi-Gourhan highlights two other decisive moments in the history of the human hand in its relationship with the nervous apparatus, that is, once the manual tool is separated from the motive gesture. From this point, "the hand would intervene only to start the motor process in animal-operated machines or mechanical machines such as mills." Then, in the last stage, "the hand is used to set off a programmed process in automatic machines that not only exteriorize tools, gestures, and mobility but whose effect also spills over into memory and mechanical behavior."[22] In particular, Leroi-Gourhan emphasizes the action specific to the hand in human technical behavior. The whole body machine is naturally involved in the technical gesture, with different operations requiring different combinations.

If, yesterday, the encounter between humans and matter largely revolved around the hand, and fire and its domestication, today's project of liberation from the natural environment plays out around the computational. The computational is becoming our new physiological apparatus, the centerpiece of the new *general assemblage* that is the Earth and the living. The incandescent test of fire has taken the form of calculation, the computer, and dematerialized images. And the old earthly edifice has been joined by an expanded world that seeks, if not to get free of all limits, then at least to span all parts of the earthly body and its components, whether marine and subterranean, or aeromagnetic and atmospheric.

Are we thus bearing witness to the appearance of a second Earth, or instead to an outgrowth of the first? To suppose that a second Earth were appearing, we could not consider it a simple duplication of the first. For one thing, it would no longer be clothed in the same thick mythological mantle. This first Earth of clay and limestone pertained not only to the universe and the cosmos, but above all to the world's mysteries—to its unfathomable part. The human adventure, that is, the conquest of unknown land, has partly consisted in discovering this Earth, all of it from its center to its furthermost reaches. It was thought that the Earth had to be known so that the frontier between the human, the natural world, and the supernatural could be established once and for all. Calculative thinking was tasked with drawing this boundary, and technology came to enable the exploitation of the inert matter of which the Earth was the depository.

Today, this first Earth no longer suffices unto itself. It is now called to project itself, and then to duplicate itself in an externalized apparatus that functions as its osteo-muscular and nervous apparatus. Or perhaps this artificial and exteriorized apparatus is now its brain and its envelope, the means by which, based on this first Earth's materiality, but at the same time freed from its material support, the second Earth can finally unfold as an infinite chain of symbols, codes, and algorithms. Little matter—an unfastening is underway. The technosphere has become a structuring dimension of the biosphere. The faculty of symbolization is no longer the exclusive property of the human brain. From this unfastening a totally new world will perhaps suddenly arise, in which technology, biology, and genetics will be-

come one, and both language and the faculty of symbolization will be shared between human intelligence and that of machines and other artificial organs.

As these epochal changes occur, the prevailing idea remains that the Earth pertains to the realm of that which can be conquered and appropriated.[23] Grasped as a neutral entity and as inanimate matter, the Earth is presumed to be fundamentally vacant. The right to land then derives from the use of force, from the erecting of all kinds of enclosures. However, the idea that the Earth basically concerns that which is speechless, calculable and appropriable, is by no means universal. In ancient African thought, for example, the universe's reticulation transpired through culture.

Culture was the name given to the various categories of beings and forms, to the plethora of objects made by humans since the freeing up of the hand and the unlocking of the brain, to rhythms, languages and symbols. Similarly with gestures and speech, seasons, and days. Taken together, these and other elements *filled* the Earth. They dwelled in it and participated in its breathing. For the duration of their lives, they contributed to its general movement, its *animation,* and its vibration. They were not, however, goods as such, nor even capital, in the classical sense of the term. They belonged to what could be called reserves, or even *multiplicity*. The Earth, a *vibratorium* as much as a sensorium par excellence, was the envelope and the dwelling, the attic.[24]

There was not, therefore, a world of symbols and language, on the one hand, and a world of technical activities, on the other. A conjugal relationship bound the one to the other.

And two privileged modalities of the *animate* came from the marriage and the conscious and reflective contact between the bodily frame and the psycho-nervous apparatus, that is, duplication and hybridization. Objects and symbols did not only serve practical purposes. Each object and each symbol had its own personality. But they were also part of a *family,* in the sense that everything was linked to everything else through an essential kinship. On this vital chain, the dead and the ancestors had a special place, as did water, the sun, rocks, plants, fish, animals, birds, spirits, not to mention all the unborn.

Thanks to this dual origin, individual and familial, each object intervened in human action. The individuality of objects also stemmed from their form, their mode of inscription in reciprocal, and always fragile, exchange relations both with other objects (objects among themselves) and with humans—that is, with the whole chain of the living (of which the dead were also a part). Each object was capable of bringing about effects and, in this respect, was endowed with autonomy. Each object could be instrumented. Each object was, therefore, *animate*, that is, exposed to the risk of decay, a process at the end of which it was discarded, or, precisely, passed from one form to another—the same object but different, an object that was new and yet, as familiar, was recognizable.

It was as important to know how to compose assemblies, how to recycle or get rid of seemingly outdated things, as it was to know how to share in their enjoyment. Where it existed, the right of ownership was valid only when founded on the guarantee that what was enjoyed absolutely had not been taken from others. Moreover, it was considered that *to make room for the rest* was more important than *to have possession of*. After all, that which one had taken away from others by arrogating it to oneself, or monopolizing it, could be taken away from one, or monopolized by others. There was no uncontested right to ownership. Moreover, the Earth was one of those animate entities that could not be appropriated by anyone in particular. This is not because it was a common thing, but because it was a genetic resource, by definition life-giving and capable of breathing, and no one had a monopoly on life and breathing. These did not depend on having possession of an enormous mass of objects, but on a knowing that, passing through the objects, had its foundation in the *quality of the social and communal link and the capacity to make room for the rest.*

The era of bows, crossbows, traps and pulleys is behind us. So is the age of the cart, the plough, the mill, and animal-powered machines. The power of rivers, of the wind and the hardness of metal have largely been harnessed. Today is all about acceleration, about the sprawling networks of connections that encircle the entire globe, about the inexorable mechanics of speed and dematerialization. It is assumed that the future of human groupings, material production, and the living now reside in the computational. Abetted by

a ubiquitous logic, high-speed circulation and mass memory, the claim is that we have only to "transfer all the skills of the living onto a digital duplicate" and history will change for good.[25] But change in what sense, if not toward an additional stage in the biological evolution of humanity?

Did André Leroi-Gourhan not suggest, and not all that long ago, that some technological evolutions should also be conceived as crucial stages in our biology?[26] "Some species change," he said, "takes place whenever humankind replaces both its tools and its institutions."[27] The ultimate mutation, he predicted, would take place once "exterior to the human there would be another, wholly artificial human acting with unlimited rapidity, precision, and force."[28] The moment would then be one "when everything—tool, gesture, strength, and thought—would be transposed to a perfect twin image of the social ideal."[29]

At the supreme stage of our brief history on Earth, the human may ultimately be transformed into an elastic compound. The human's capacity to duplicate or multiply would put a lasting end to what had always been considered its original misfortune and affliction, namely its self-division. What Leroi-Gourhan forgot to add is that each stage of technological and biological evolution constitutes the *passage to another Earth*. At issue here is no longer exactly the creation over which God cried out at the end of the Seventh Day, but instead another Earth that has been enabled through the infinite expansion of the market. What Leroi-Gourhan could hardly have foreseen was that one day it would be possible to proclaim, without risk of contradiction, that *the Earth is a market creation. It is merely a vast market.*

We now stand at the threshold of this proclamation, or proposal, and the Earth's future plays out around it. As the birthplace of humanity, Africa has, perhaps more than other region of the globe, collectively experienced the market as a paradoxical power. First of all, the market is a power of dazzlement.[30] Second, due to debt, it is a power of institution. Lastly, it is a power of catastrophe. The market has learned that a catastrophe is not an event that happens once and for all and then vanishes after its fateful labor has been achieved. For many peoples, catastrophe will have been an ever ongoing process, accumulating and sedimenting, and forcing the survivors to spend time in uninhabitable places, to live amid ruins, to stitch together

the threads of existence in extreme conditions.[31] The lot of all, our condition in this viral age, now tends to become the living of life at the edge of extremes, which is a corollary of both the irreversible transformation of environments and the expansion of a new form of colonialism: techno-molecular colonialism.

But the history of the market in Africa is also a matter of breathing. For the philosophy of the living in precolonial systems of thought in Africa breathing was key. Indeed pretty much everywhere today, breathing is again at issue, not only because the air that we breathe is becoming increasingly filled with dust, toxic gases, substances and discharges, particles and granulations, in short, with all kinds of emanations. But also, due to ozone-layer destruction, the atmosphere itself will become increasingly filled with concentrations of carbon dioxide, nitrous oxide, and methane. Should we also mention all the extremely fine dust particles, the releases of toxic gases, invisible substances, fine granules and particles of all kinds? Africa, in particular, suffers from a litany of issues that are are no less worthy of attention. Fish-stock depletion, mangrove degradation, increases in nitrate flows and coastal areas—all this will continue apace together with the sell-off of forests, manure spreading in agriculture, the artificializing of soils, and rare species loss. In short, biosphere destruction.

This destruction is not the fruit of chance. It is the inescapable outcome of a model of extraction and squandering of the Earth's riches that persists simply as a result of the constant and uninterrupted combustion of fossil fuels, of gigantic masses of energy, which are sought further and further down in the bowels of the Earth and its oceans.[32] This picture would be incomplete if no account were given of the technological and industrial devices that are crushing and emptying the planet like a chain caught in the snare of—what I have recently called—brutalism.

Beyond its origins in the architectural movement of the mid-twentieth century, I define brutalism as the contemporary process "by which power as a geomorphic force is henceforth constituted, expressed, reconfigured, acted upon and reproduced." By what, that is, if not by "fracturing and fissuring," by "the emptying of vessels," "the drilling" and "the removal of organic substances," in short, by "depletion"?[33] Attention must also be drawn to the mo-

lecular, chemical, viral, and even radioactive dimensions of these processes: "Is toxicity, that is, the multiplication of chemical substances and dangerous waste, not a structural dimension of the present? These substances and wastes do not only attack nature and the environment (air, soil, water, food chains), but also bodies exposed to lead, phosphorus, mercury, beryllium, refrigerants."[34]

But there are many ways of suffocating and asphyxiating, starting with that of human bodies. Let's take the case of virus-obstructed breathing. For asphyxiation to occur, the virus must cross the barrier of the pulmonary alveoli. It must get into the bloodstream. It must then attack the organs and other tissues, starting with the most exposed. The usual outcome is systemic inflammation. Those most acutely affected have often had cardiovascular, neurological or metabolic problems, or suffered from pollution-related diseases, prior to the viral infection. Some people, rendered breathless and deprived of breathing machines, depart suddenly, as if in a rush, without a chance to say goodbye. Our time is indeed one of suffocation and putrefaction, of the piling up and incineration of corpses. In a word, it is a time of the resurrection of bodies, dressed, on occasion, in their most beautiful funeral and viral masks. Is the Earth on the verge of becoming, for humans, a rustling wheel, the universal Necropolis?

How can we forget, moreover, that environments and habitats are being suffocated thanks to intensive deforestation, mega-fires, and ecosystem destruction? How can we forget the harmful actions of companies that pollute and destroy biodiversity? To seize the future of the Earth and living beings in this era in which dream machines and catastrophic powers are decisive actors in a multi-scale and multi-speed history, we must therefore return to the body, in particular to those of its organs that are most exposed to asphyxiation and suffocation. Returning to the body also means returning to the Earth, understood no longer as appropriated land around which enclosures are erected in keeping with the logic of division and the repression of those who do not count, but instead as an event that, in short, fundamentally defies any idea of appropriation or "frontierization."

Thus understood, the Earth could be the starting point for a broader thinking about the in-common. Such thinking differs from abstract or

bird's-eye view universalism, which seeks to "make the world" including against others, or in spite of them, just as it does from the dreams of listless cosmopolitanism, which always ends up giving prominence to all kinds of enclosures.[35]

The Earth's specificity lies in that it *makes room* for all its inhabitants, *with no distinction of race or species*. It mocks both the blind particular and the bare singularity. It reminds us how each body, human or otherwise, however singular, bears on it and within it, in its essential porosity, not the marks of the universal, but traces of the in-common. As a result, every politics of the living rests, by definition, on the idea that the living is that which is priceless. And because it is priceless, it is fundamentally beyond measure. As such, it can neither be counted nor weighed. It belongs, simply, to the *incalculable*.

chapter two

the second creation

Let's thus return to the Earth. Our planet. The last utopia. It is distinguished from the other planets by its hospitality, that is, its disposition to *make room* for more than just one, to give space to multiplicity. Hence its participation in the form of the reserve as much as in that of the reservoir.

The Earth we are talking about here is not the exact equivalent of the world. We should not either understand by "Earth" simply ground, or plot. Instead, "Earth" refers to the idea of a self-renewing life of literally incalculable value that escapes any absolute power of mastery. This body of the Earth is thus living and animated, and one of its properties as a material is, moreover, that it is life-enabling. The Earth is consequently this living body without which we could not exist. It functions as a condition of survival for practically everything else. This makes it a metamorphic power, which is not anything abstract. It is a power that it is physical, sensible, insofar as it affects the living and lets itself be affected, even touched by it.[1] If this power has a body, it is also permanently actualized through a multiplicity of bodies in movement, which it constantly mingles with and accompanies, and to which it contributes to provide a relative ontological stability. This has not always been so. In order to become a vast reservoir of life, the Earth needed the sun's radiant energy and that reflected by the continents, the oceans and seas, and the atmosphere, among other things. Of all the names it has been given, this is probably the one that suits it best. The Earth's specificity lies in its being a place of refuge for life, when life might otherwise have been extinguished.

Even after the great periods of extinction, life has endured. But nothing indicates that this will always be the case. The sun is going to get hotter and

hotter, and redder and redder. It is going to get older and will perhaps die out one day. As regards the Earth itself, should it run out of water, it will turn into a gigantic negative mass. This would then definitively seal its kinship with the other planets.

In most African cosmogonies, the Earth is given as an uncountable set of signs, the means by which life comes about, matter is animated, and movement, actualized.[2] As powers and spirits of nature inhabit and animate it, we cannot say that the Earth is immutable. In reality, it is always in the process of constituting itself; that is, it is disposed to foster the appearance of unforeseen figures of the existing, which it welcomes in its midst and in its hollows.

In this sense, the Earth is a substance that is both constituted prior to its inhabitants and all those who live off it, and is in turn assembled by these latter, humans included. This assembling occurs through the practical operations by which they form alliances among themselves, share it, divide it into delimited parcels, codify its uses, exploit it, confront each other, unite or separate, and redistribute its resources. As it stands, through the air we breathe and, to a lesser extent, the water we drink, the Earth includes those major links to which we are all connected, the chain of things and people, all living beings, animate and inanimate of which it is like the common fabric, both soil and shelter.

No one has absolute sovereign power across the entire expanse of the Earth. Some singular uses can be made of this common soil and shelter here or there. But no one actually owns it, and it is unable to be entrusted to the goodwill of a single person. When it comes to the Earth, no one, not even a state, has the power to act alone freely. Notwithstanding legal fictions, we are therefore not its owners, that is, if by property rights we mean the integral holding and exercise of "full powers over the thing-object of law."[3]

In truth, we are above all its inhabitants and, most of us, passers-by on it. We can, through technology, capture the Earth's forces and recode them. But according to an animist metaphysics, we are unable to enframe the deployment of its life and essential springs. In other words, while we participate in its regulation, we do not do so as its equals. We are simple inhabitants among many others, or, better, "guardians" among inter-generational

chains of solidarity. Moreover, our status as inhabitants and guardians is provisional, as our demise brings this status to an objective end. Indeed, upon dying, our ability to access that plot of land, whose owner we consider ourselves to be, for its use and its enjoyment, terminates. Besides, were the Earth to leave the world of nature and become a legal entity, it could only be as *that* which, by definition, is *inappropriable*.

Thus, the Earth has an immaterial dimension that fundamentally distinguishes it from the sphere of things available for appropriation, or for integral absorption into property relations. This is precisely what makes it not a "common thing" but a "community," an *ambiguous community*. Corresponding to this community of Earth is the basic universality of all its inhabitants. Taken all together, human persons cannot be said to own the Earth, nor can any other entities. Rather, they are its citizens, insofar as they are given an indisputable place on it. If they have a right to this basic hospitality, it is limited to a *right to shelter*, to a right to dwell on it. This right is, strictly speaking, a *right of lodging*, and it is unconditional. The Earth indeed provides a place for all, without discrimination. To enjoy this place, you do not need a property title. You receive it by the simple fact of existing, of being alive, of being here.[4]

The idea of an earthly community is thus poles apart from the concept of a "land law," as that which is deemed to exist prior to any convention and any contract (a *nomos* of the Earth). Contrary to the gesture of division and appropriation, contrary to the logic of enclosures typical of the European *nomos* of the Earth, *the faculty of inhabiting* is not the equivalent of the right to dispose of things unreservedly. On the other hand, habitation necessarily supposes co-habitation, that is to say, *making room for others*, for beings other than oneself, other than human, for All, in fidelity to the Earth's very vocation to be a dwelling for all. In this scheme of universal redistribution, no one is deprived of shelter and everyone has the fundamental right to a share. This *birthright* precedes all other rights. It is the equivalent of the right to breathe.

Today, the Earth shelters in its midst not simply the sum of the living, but countless technical objects as well. These objects are not only living; they contribute to the production of life. Most of them are connected, day and

night, to all kinds of circuits. Antennas, routers, servers, a range of energy consuming devices and immaterial technologies process and transport gigantic datasets. These technologies are also part of the computational infrastructure that we use in the hope of dominating nature, of "putting society into equations,"[5] of domesticating the living, in short, of moving to another stage of humanity's biological evolution. This other stage of humanity's evolution can be called *the second creation*. Succeeding the clay-being of the first creation, condemned to return to dust, there will be, or so it is believed, a synthetic being made of multiple sorts of equipment. No God will beget this new being. Its birth will result strictly from the play of human, natural, and artificial forces. Creation may thus continue and with it the dream of modifying the human species itself. Wedded to this dream is the belief that decipherable laws govern the social as they do nature. The second engendering will transpire through the addition of new materials to already existing substances.

Try as we might to define a living being as ceaseless movement, as an impulse, even as a drive, what best characterizes such being is, perhaps, that it is never given in advance; or even, that it is ultimately only an experience or experiment that we live through. Everything, in other words, is on its way to its inevitable demise. The "end" being our ultimate destination, everything thus lies in the meaning that we grant or not to the experience of living through, or crossing. As a result, it is not enough to simply decipher the biological mechanisms of the living, to establish the zoological part of the human, and to examine the osteo-muscular and nervous apparatuses. All this must be understood as inseparable from the activity of imagination and the manufacturing of meanings. André Leroi-Gourhan rightly recalled this point as follows: "there are not two distinct typically human facts, one being technics, the other language"[6]—or, we could also say, consciousness, memory, symbols, in short, thought.

But for the crossing to be undertaken, something must have already come to pass. Something of the order of a destination must have taken shape in advance. This *coming to pass* is, strictly speaking, an act that occurs a first time and that is never determined once and for all. That which happens is also that which is to come, that is to say, that which always lies ahead of us,

but not as the unfolding of current affairs, and is always of the order of the promise. The future always opens onto the unknown, the undetermined, and the infinite. This is also the name of the pure event, that whose time, form, or place we are unable to determine. In this, technology is more than something that we simply use, something that enables our enjoyment of things in the universe. Its ends go beyond the utilitarian. Technology is, literally, a way of welcoming the living, that is to say movement, the coming-to-pass, a set of possibilities to which we try to assign forms, contents, and meanings. This is its positive side, as a utensil of life.

However, an insurmountable paradox lies at the heart of the human adventure on Earth. The production, reception, and development of the living requires, each time, the destruction of this same living. This contradictory and Herculean movement requires the moving of gigantic, almost atomic, forces and colossal energies at the same time as their dissipation. Technology has been this tragedy's instrument and stage.[7] Still today, much technical progress is achievable only at the cost of tremendous devastation, to the point where we no longer hesitate to say that humanity is at war with nature, environments, and territories.

Let's take the examples of two the Earth's largest lungs: the Congo Basin and the Amazon. In these places, many communities managed to establish a sober balance with the natural environment across many centuries. It is not that consumption and expenditure were unknown. But in the forms of government, the ways of making war and peace, as well as in the management of resources, the idea prevailed that all living beings share a co-responsibility.[8] This ethic of sobriety went hand in hand with a certain frugality. Where extraction took place, it was often done in an artisanal manner. It practically never led to resource depletion or the degradation of what we now call biodiversity. In any case, it was never carried out at the expense of animal and vegetal populations, species, and ecosystems.

Pathogenic viruses with pandemic potential existed, but infectious episodes were not very frequent. The consumption of bushmeat was common practice, but the overexploitation of animals on an industrial scale was unknown. There was contact between humans and wildlife, but the likelihood of micro-organisms passing from one species to another was reduced,

and forests were never emptied out. Agricultural practices involved the controlled use of fire, for example, as a means of forest management, but the fires produced never altered the structure of the forest. Even when relatively large-scale deforestation took place, the forests retained their ecological functions, the prevailing belief being that the living world contained territories that were not only unexplored, but unknowable. This was the fundamental mystery of the world, and any hope of understanding it once and for all was deemed hubris. The protection of social ties was linked to the protection of nature and of the living. The one was inseparable from the other.

That was yesterday. Since then, three events have profoundly transformed the situation. First, thanks to technological progress (specifically devices using X-rays, nuclear magnetic resonance, ultrasound, infrared, fluorescent proteins), it has become possible to see right inside the cells of living organisms, whose DNA may also be manipulated. With the intersecting of billions of pieces of information, we have passed from the age of mystery to the age of apotheosis. Driving the age is the mirific hope of finally being able to understand life's very origins, to reconstitute humanity's biological history, and to decipher the complex logic of the functioning of living beings once and for all.

Second, the hope now is that it will be possible to uncover brain functioning. The conviction is that the specificity of the human being resides in the brain, that is to say, in the consciousness one has of oneself, in the capacity to apprehend one's own existence, death included. How does the brain function? How does consciousness emerge from this functioning? How can assemblies of neurons lead to mental experiences? These are some of the questions that human brain imaging technologies are being used to decipher.[9]

Third, additionally to this project of extending the frontiers of knowledge and the living, there is a will to monopolize the Earth's very matter, its atmosphere, its magnetism, its soils and subsoil, water, air, and seas. The Earth's forests are being relentlessly eroded. They have been surrounded by soy and oil palm monocultures and by pasturelands. As for the savannahs, they have been decimated by peanut and cotton crops. A major shift has also occurred

in the fire regime, as fire susceptible areas increase. Further, through agro-industrial colonies, large dams, roads, and mining, indigenous peoples are having their land rights trampled on.[10]

Another imaginary of *all-powerfulness* has thus been born. The very idea of all-powerfulness has shifted toward the benefit not of reason, the State or the reason of state, but of private property. Almost everywhere today private property has been erected as a natural, sacred, and inviolable right. This sacramental status is fundamental to the imaginary that underpins the carving up and appropriation of the Earth, of which capitalism, in its various forms, is the manifestation in act.

The all-powerful is that which no authority can limit. In the name of the principle of appropriation, entities such as the oceans, the high seas, and many resources provided by non-human ecosystems are being treated as private resources, liable to quasi-exclusive enjoyment. Moreover, the prevailing ideology is that private property is legitimized by work. One who works is deemed the personal owner of the product of a labor conceived as fundamentally individual. Elementary solidarities have thus been jeopardized and, at the end of the day, a parasitic humanity feeds off the living fabric of the planet.

All critical reflection on technology must thus start from the relations between the living and matter, the matter of the living, and the living in its materiality—the dialectic of matter and the immaterial. However, a very large swathe of the planetary living remains unknown or is yet to be inventoried. This is true for bacteria, protozoa, fungi, and viruses. Viruses, in particular, are major forces in the biosphere. They are constitutive of the living world and their impact on the physiology, morphology, and behavior of their hosts (in terms of their food resources, habitat, and means of locomotion) can be immense. In turn, the diversity of genes, species, and ecosystems makes up the planet's living tissue. It can also be said that some technologies contribute to the extension of anthropic structures. These technologies are generally the means by which natural habitats and spaces available for biodiversity have been eroded.

Placing technology in the service of destruction requires the structural involvement of large companies, most of which are based in the world's

North. In the case of Africa, there are also some from China. These companies' undertakings, whether they are engaged in the logging of forests or extraction of rare metals from the subsoil, involve hundreds of thousands of hectares. Take, for example, the dried salt lakes from which lithium is extracted to enable the production of computer, telephone, and electric car batteries. This production also requires the dispossession of indigenous communities and their often murderous eviction from collective and often ancestral lands.

No matter how much we invoke dematerialization, the immaterial depends, from start to finish, on access to metals and their intensive exploitation. The cases of lithium and aluminum illustrate the point. The process of drilling for lithium requires, we know, the large-scale extraction of huge amounts of scarce water. As Celia Izoard writes, "pumping brine from the lithium-rich subsoil creates a vacuum that causes the available fresh water to migrate to the depths." She further talks about "chlorine treatments and the dispersion of pumping waste in the water, waste mixed with solvents that destroy micro-organisms about which little is known, except that they are the oldest living organisms on the planet."[11]

Let's take the case of energy. The servers installed in data storage centers are essential for surfing the web. They are also indispensable for the circulation of the billions of e-mails, junk mails, photos or videos sent daily, to say nothing of "tele-meetings," online commerce, downloads, and the manufacturing of connectivity equipment. Put together, the four stages of the cycle, which runs from manufacturing to transport and from use to disposal, would seem to show that the Web is becoming increasingly heavy in its energy use and thereby also the emission of greenhouse gases.[12] In this regard, how can we not also mention the pollution generated by the extraction of raw materials? Or that caused by the manufacturing of equipment, motherboards, and chips, as is the case with pollution from phthalates and chlorinated solvents?[13] In order to increase the proportion of aluminum in the bodies, rims, and gearboxes of electric vehicles, bauxite must be dissolved with soda and the precipitate heated to temperatures of up to 1,200 degrees Centigrade. This treatment requires the creation of huge tailings dams. If

they break—as has happened more than 135 times since 1961—they inevitably lead to a flood of mining waste that contaminates waterways and soils.[14]

Copper, millions of tons of which will ultimately be extracted from the Earth's bowels, is strongly connected with toxic metals such as arsenic, lead, and cadmium. As the cases of the Congo and Zambia illustrate, copper mining cannot be carried out without the open pits, the hillsides cut by multiple headframes, the tens of thousands of kilometers of tunnels hundreds of meters deep, the smelters with high chimneys belching smoke and, thus, inevitably, the high levels of soil toxification from the presence of the aforementioned toxic metals. "Mining copper therefore involves dispersing these other metals into nature in the form of vapors, particulate emissions or through tailings runoff."[15]

Let's not forget cobalt, tin, manganese, and nickel. How many tons of waste have been released into rivers that, thanks to rainwater runoff, over many years become silted up? How many rivers and streams have been transformed into vast muddy expanses deserted by fish and all aquatic life due to sulfuric acid, cyanide, mercury, and arsenic?[16]

Toxicity is not the only aspect of concern. There is also the scatophagic part, the waste and the emissions. At the big e-waste dumps on the African continent, there are tens of thousands of people at work dismantling devices, recovering some of their parts, and burning the cables. The waste arrives in hundreds of WEEE-filled containers that, sometimes dumped right among all the other types of waste, contain refrigerants, cathode ray tubes, liquid crystal displays, mercury switches, lead, cadmium, and chrome.

And what account can be given of the state of the oceans, which are becoming giant dumping grounds for human activities, the terminus of many kinds of substances? The oceans, marine organisms, and their habitats are essential components of the planet's living fabric. As Kheira Bettayeb explains in "The Paris Agreement Must Be Adhered to Urgently": "the ocean absorbs most of the excess heat related to warming and stores large amounts of carbon dioxide (CO_2); the ice in the cryosphere reflects solar radiation back to space and thus reduces warming."[17]

Second, the oceans are essential habitats for wildlife, plants, and humans. Julien Bourdet points out that humanity does not only depend on the sea for its food, but also for its economic activities. The sea absorbs 25 percent of the CO_2 emitted into the atmosphere each year. He notes that

> living organisms play a key role in the functioning of this carbon pump: phytoplankton, situated at the base of the marine food chain, use CO_2 and transform it into organic matter, some of which falls to the bottom of the ocean. In the process, these microscopic algae and bacteria provide half of the oxygen produced on Earth.[18]

The plastic bags, disposable dishes, cotton buds, straws, microfilms in scrubs, fishing nets, and cosmetic products that are thrown into the sea contain concentrations of persistent pollutants, which are then ingested by fish larvae.[19]

In addition to plastic waste, there are the forms of pollution caused by oil spills. Some marine bacteria can devour hydrocarbons, it is true, but oil nonetheless kills. It kills by bogging down. But also by lining the internal walls of stomachs and by blocking tissue exchanges in fish. Bourdet also points to other forms of chronic pollution, such as from chemical products. This pollution includes drugs, endocrine disruptors, pesticides, flame retardants, cosmetics, detergents, and many other molecules that are potentially harmful to marine ecosystems.

elasticity

Every reflection on technology returns us to the reality of the body, whether human or animal. The body only has meaning through, in, and for movement. This is also largely true for technology. Strictly speaking, however, there is no body without active organs, endowed with primary capacities, no body without tissues, without bones, without skin, without vessels, without ligaments, and so on. Organs and tissues have in common that they are living, that is to say susceptible to being deformed and returning to their

more or less initial form. This return to their initial shape after deformation is what we call elasticity. Without this capacity of return, rotation, and transfer, movement is almost impossible. Technology mimics these elementary functions of the body—the walls of lungs and trees that expand and contract, in short, elasticity in its many expressions. Such and such a technical object can imitate the organs of phonation and hearing, starting with vibrations from vocal cords and the tympanum. Others can draw on the functioning of the intestines, or the crushing action of the teeth.

On the whole, technology is haunted by a certain imaginary of the aging process, against which it fights insofar as this process induces tissues and organs to lose their mechanical properties. It is obsessed by phenomena such as heart failure, ruptured aneurysms, emphysema, and herniated discs. The archive it draws on is the imaginary of the physical, natural, and human body. Technology seeks to make itself a body. This body is held to be superior to all others, deemed free of the genetic syndromes that would induce it to lose elasticity.

This body is one that would supposedly be protected against all oxidizing agents and all that, through such agents, might accelerate the process of elastic fiber degradation. The techno-body is a body that will allegedly be sheltered from genetic malformations. It is a body that nothing will affect, whether UV rays, cigarettes, pollution, junk food, or caramelization (the overabundance of sugars). It will be immunized against elastic aging, even menopause.[20] The repairing, replacing, and operating of a body is thus deemed to be not only about restoring its mechanical components. The point would also be to know how to regenerate it at the molecular level, in terms of its chemical arrangements.

Yet we often forget that the body is not just a matter of engineering. No technology can ensure that failing tissues will be repaired once and for all. Biomaterials can be implanted, collagen fiber substitutes used, and metal springs inserted to dilate a narrowing artery. But try as we might to imitate nature or be inspired by its forms and materials, the techno-body will never replace the human body. There will always be a dimension of the human body that escapes chemical synthesis. The body that breathes, runs, eats, uri-

nates, excretes, gives birth or sings can never be broken down into its technological components.

But nowadays technology evokes above all that which is thin, flexible, mobile, ultra-light, transparent. The material par excellence is silicon rather than steel. We must also add other materials to the list, such as germanene (made of germanium atoms), stanene (made of tin), phosphorene (made of phosphorus), or even molybdenum or tungsten. Matter and materiality have been given the new destiny of providing electrons the right amount of energy in the form of heat and light to enable the digital world and its electronic components to function at will.

The contemporary electronics industry is essentially silicon based. One of the most iconic materials of the artificial, silicon is synthesized through a process called epitaxy. This process

> consists in evaporating pure silicon in an ultra-high vacuum chamber by bombarding it with an electron beam. The silicon atoms thus torn off the block of material come to rest on a substrate whose crystalline structure forces them to arrange themselves according to a honeycomb network.[21]

But here the materials involved are also capable of absorbing, emitting, or converting light. Miniaturized lights, photodetectors, flexible screens—in short electroluminescence—represent the materializations of tomorrow.

On the other hand, whether it is computers, televisions, iPads, cameras, or phones, the material conditions for the production of digital media remain the same. To supply the world market, more and more energy and fossil fuels are needed, as well as mines for rare earths, gold, copper, tin and columbite-tantalite. It is known that tantalum, in particular, is a conductor of heat and electricity. A malleable substance, one of its properties is to resist corrosion. In a survey on the trade route of Congolese coltan, one commentator reminds us that

> initially appearing as a grayish stone, tantalite and columbite are separated by a technical process and reduced to a crude powder. The tan-

> talite powder is then transformed into tantalum powder, ingots, chips and wires. These new components then get introduced in several technical products (sometimes combined with other elements, such as cobalt) and in the end wind up in common products (cell phones, video cameras, computers) and in highly specialized products (missiles, aircraft engines, satellites). They are also found in alloys that are used to make cutting, turning, and boring tools.[22]

The universalization of the computational world requires, on the other hand, gigantic infrastructures, cables, data centers, routers, terminals. The immateriality of images is based on the materiality of machines, a formidable arrangement of heterogeneous elements, a technical and cognitive base, in short, logistics. It also requires globalized production lines that, just like the assembly lines of the products themselves, operate twenty-four hours a day. Just as in the days of classical Taylorism, tasks are timed down to the second. Things are sorted, cleaned, labelled, scanned, standardized, stored, and shipped. At the end of the chain, we get all the tablets, diskettes, hard disks, multimedia recording tools, scanners, printers, and so on. More than this is produced, however. So are cancers, respiratory and neurological diseases. There is exposure to aluminum dust, cutting fluids, and solvents. There is the slave army of the electronics industry, in which we must include the survivors, all the discarded workers, and the suicides. This is what eventuates, upstream and downstream of electronic circuits and other assembly production processes.[23]

The digitalization of the world does not only result in the devouring of the Earth's forests and increasing water withdrawals. At each stage of production, it leads to a great deal of toxic discharge.[24] Hence the vast mountains of waste that, dumped outdoors, are burned, or recovered in one form or another. Most of the waste mixes electronic circuit components with electrical or battery power, such as cell phones, computers, tablets, television sets, cameras, drones, and so on. The various objects are disassembled so that internal components and other precious metals such as gold, silver, copper, platinum, palladium, ruthenium, rhodium, iridium, or osmium can be recovered, or even recycled. The plastic parts are burned in the open air.[25]

Working bare-handed, sometimes armed with iron bars and hammers, the workers suffer burns, eye injuries, respiratory problems, and develop cancers—such is their plight. Upstream, the extraction takes place in open-pit or in underground mines.[26] It is a world of waste, scrap, and dumping. It is a world of forms of material decomposition, and the process has something *scatophagous* about it.

It might therefore be said that some of the world's regions have entered the digital world through its residues and waste, through the clutter and chaos generated by what remains of it once the raw materials have been hauled off and the breaking down and destruction have begun. There can be no underestimating the shock of this violence. These are regions of the Earth that are forced constantly to rebuild themselves, retaining indelible traces of fragility and vulnerability on their surfaces. In turn, the digital waste they receive involves them in new relationships, new narratives, and practices.

miniaturization and digitalization

The age is thus one of the miniaturization and universalization of new technical objects. Everything seems to happen as if seeing and acting at smaller and smaller scales—those of microbes, radionuclides, dusts, viruses, fine particles and nanoparticles—henceforth conditioned humanity's technological future. In addition, new entities, slightly visible or not at all, unstable yet proliferating, now populate the human experience of the world. Human DNA sequencing has revolutionized molecular biology. DNA biochips, cell chips, protein chips, and new bio-objects, like functionalized nanoparticles, have been created. They all make it possible henceforth to analyze proteins and cells themselves at the smallest scale.[27]

We have only to examine how these figures of the infinitesimal are articulated in what some have called "the horizontal panopticon," or "participatory panopticism," that is, the form taken by power in our networked society, in which "everyone watches, controls, judges and gauges each other without a general supervisor."[28] In this respect, it has been widely demon-

strated that this reticular panopticon, made of myriad mirrors, emerges at the intersection of digital social media, cognitive capitalism, and the digital giants; at the juncture of neoliberal government and the authoritarian dynamics driven in part by contemporary democracies.

The revival of state surveillance devices through the Internet and the commercial control of consumers are structuring aspects. Combined with the quest for visibility and online celebrity on networks, this leads to the surveillance and control of all by all.[29] Digital objects are part of a larger *ecological relationship* within which each object, in its singularity, has its mirror and is only understood in relation to this mirror.

To this process of miniaturization and universalization, we ought to add the generalization of computational devices, and thus, also, the new ways of gaining access to the infra-sensible, the infra-perceptible, the infra-visual, and the infra-sonorous. Ought we not further mention here the new modalities of inter-individual communication, the acceleration of speeds, the transience and ephemerality henceforth constitutive of our atmospheres? Technology, especially in its digital form, has not only become permanently integrated into all aspects of our lives. It has become our condition.[30] It provokes, from this point of view, new ways of feeling and world-making with the rest of the living.

Yet the universe of the new technical ensembles (or what others have called electronic hyperspace) is far from being homogeneous. As a fundamentally hybrid environment, it presents many features that specifically show just how much the interweaving of the technical and the social now conditions the evolution of the Earth and, along with it, the living in its entirety.[31] Let us note, first of all, the importance that the *finger* takes as a pivotal organ and the place it occupies in the new circuit of exchange between the human, the non-human, and surfaces in general.

In his classification of human evolution, André Leroi-Gourhan indicates that while "manual technicity develops in an almost exclusive way, a new form of activity gradually takes possession of the facial field: facial expressions and language."[32] The movements of the lips and language shift "food operations towards the shaping of sounds." Thus a close relationship between manual technicality and language is born. Without the liberation of

the hand, this trade between gesture and word, "between expressible thought and the creative activity of the hand," could hardly have seen the light of day.[33]

Today, rather than the hand, it is the finger that occupies a more or less similar position. The advent of digital civilization coincides with the finger's quasi-total liberation. Indeed, the finger is the first to be called upon whenever it is a matter of pressing a button on a mouse or a similar device, or performing an action on the screen, writing, typing, or processing a text, storing it in memory or choosing signs. The pressure that the finger exerts on a tactile surface makes it possible to position a cursor. The finger is also used to select elements, launch applications, or arrange data computationally.

Yet the finger does not act alone. It is always used in combination with the eye and the ear, the voice and the brain. It needs muscles, for example. But in order for the gesture to be realized and for the interaction actually to take place, the finger is practically indispensable. However, we cannot simply emphasize the finger's ascendancy if we want to account for the transformations taking place. Doesn't the optical pointer fulfill similar functions? Moreover, clicking or touching is, in the last resort, a way of emitting a voice. This form of expression in no way eliminates oral expression itself. Plus, the progress made in artificial intelligence and voice recognition means that the finger will no longer have a monopoly over interactions between humans and new, connected technical objects.

As the race to automation, predictive technology, and robotization intensifies, voice (or sound), through voicebots and chatbots, will play a decisive role in the techno-social system. The finger will be part of a syntactic complex in which the visual, the image, and sound will occupy an increasingly prominent place. This syntactic complex (language, the image, sound, and perception) will be at the service of the organo-computational machine. It bears repeating that the function of this machine is to perform remote calculations. These calculations have language as their object. Language is their matter, whereby the calculation of language is performed, in return, in the language of calculation. Beyond the finger and its prints, the body itself is gradually transformed into a unique identifier. Soon, cars, computers, and cell phones will recognize their owners alone.

Control over matter and energy is now combined with a sway over genetics, and natural and artificial brains. Biometry indeed dreams of measuring and certifying physical characteristics such as the face, the iris, the shape of the hand. The idea is thus to be able to read thoughts using techniques such as electroencephalography or magnetoencephalography, or, better, to use the brains of living individuals as digital fingerprints by characterizing their potential. However, one of the key interfaces of the future is considered to be natural language recognition. Ultimately, the goal is to be able to speak to a machine using ordinary language, or thought. For this a great deal of data must first be collected. And, since the crux of life happens in the brain, tools must be built that can monitor its activity, in the same way as that of the eyes, the ears, and so on. Sensors are thus required for this task, especially eye movement sensors. How far is it possible to go in the human-machine interface?

Then there is the screen. The screen is simultaneously today's *seal*, *profane sanctuary* and *scene* par excellence. The screen has become today's seal, profane sanctuary and scene par excellence. It is at once the official seal and the effigy of this singular body, at once smooth and protean, that we called the *organo-computational machine*. And it is a scene because it is a triple site: one of appearance/bedazzlement, one of vanishing, and one of epiphany; it is the tabernacle of what should be called sensory incorporation. The screen makes possible encounters between diverse individualities that are distant in physical space, in time, and indeed ontologically. It is a binder and an operator of connection, but also a kind of altar and a shelter. At the center of this sensory incorporation is the organ of sight—the eye. The eye captures light signals and relays the information to the brain, which reinterprets it and transforms it into forms and colors.

Screens therefore have meaning only in relation with the eyes, with colors. But, as in the case of anthropods, the eyes in question are *compound eyes*. To a large extent, this is one of the functions of so-called smart glasses. As in the case of flies, dragonflies or crabs, the point of them is to deploy a set of light-sensitive photoreceptors, to graft onto the human the equivalent of a dioptric apparatus that serves to refract light. There can indeed be no

screen without light. But whoever says light says speed—propagation of an electromagnetic wave in the void as well as in matter.

The screen is therefore the virtual reality headset par excellence. It enables immersion in a digitally created artificial world, a world both real and imaginary. It invites an experience at once visual, auditory and, in some cases, haptic and quasi-religious. From this point of view, we need only look at the way in which the marriage between technology and religion is proceeding. Devices such as online video games, webcams, websites, blogs, online videos, blogs, digital applications, digital slideshows, and digital televisions have been integrated into the exercise of worship and practice of faith. Religions now know how to use digital information and communication techniques to convey words and images, propose new forms of worship, reread texts and practices, in short, to institute a new order of symbolism, deliverance, and community. In return, a technological spirituality is taking shape that is itself formed by the ecstatic experience.

In fact, old questions are making a comeback, such as: What is human nature, and, beyond it, what is the living? What makes us moral subjects? What is our purpose on Earth? For a long time, these questions seemed to concern only theologians, metaphysicians, and philosophers of existence. Strange as it may seem, they are being raised again today, including and especially among scientists. But whereas yesterday it was mainly a question of whether the human being was primarily body or spirit, today the debate is about whether the human being is matter and only matter, or whether, in the end, the human being is simply a set of physical and chemical processes. The discussion also bears on knowing where the living ends, what the future of life is in the age of extremes, and under what conditions this life ends.

The body, matter, and the living are three quite distinct concepts. It is no longer necessary to subscribe to Christianity to understand that there is, in every human body, in its organic unity, and in its fundamental anarchy, something that is not only matter. Several names have been given to this something, in accordance with the cultures and the times. Yet whatever the cultural differences, the truth of the human body will have been to resist all reduction. Likewise with what we could call the body of the Earth. This

body of the Earth can be recognized by its profusion, of which viral explosion is typical.

In the eyes of many people, viruses are a demonstration of nature's almost infinite power. They see in them a manifestation of cosmic allure, a harbinger of the catastrophes to come. For others, they are the logical outcome of the project of a Godless world, which they accuse modernity of having brought about. The Godless and supposedly free world is allegedly abandoned to itself and is left with no other way out. In the final analysis, this world is considered merely to have contributed to subjugating humans under the constraint of a nature now converted into an arbitrary power. In fact, the absence of God is hardly the characteristic fact of today's world. Nor is God's virulent and vengeful presence, in the form of the violence of viruses or other natural calamities, the defining feature of our time. The essential feature of the beginning of the twenty-first century is the shift toward animism.

Coupled with this technological escalation, the transformations of capitalism have led to a twofold excess: an excess of breath and an excess of artefacts. Nothing translates this excess better than the techno-digital universe, which has become the double of our world. As aforesaid, the specificity of contemporary humanity is to be permanently crossing screens and to be immersed in image machines, in fictional machines. Most of these images and fictions are *animated*. They are producers of all sorts of illusions and fantasies, starting with the fantasy of self-begetting. But above all they enable new forms of presence and circulation, of incarnation and reincarnation.

In this universe, it is possible not only to redouble oneself, or to exist in more than one place at a time, or in more than one body or form. It is also possible to have avatars, that is to say, other selves halfway between the body and the image of the subject's body on the screen. Besides, crossing through screens has become contemporary humanity's primary activity. It enables us to exit our bodily borders, and inaugurates a jump net into parallel worlds devoid of safety nets. Due to this crossing through to the other side of the screen, humanity can now be present to itself and remote from itself.

Contemporary animism is, moreover, the result of the vast re-construction of the human. The age of the second creation has indeed begun. It is now a matter of technically capturing the energy of the living and downloading it into the human, through a process that recalls the first age of creation itself. Now, however, the project is to repatriate all the skills of the living into organo-artificial compounds for the most part endowed with the characteristics of the human person. These compounds are called to operate as doubles of the human. Formerly considered relics of the obscurantism proper to so-called primitive societies, contemporary forms of animism are adapting to artificial intelligence, supercomputers, nanobots as much as to artificial neurons and RFID chips or telepathic brains.

We have also reiterated the fact that creation of the Earth is essentially profane. It passes through a triple process of decorporation, recorporation, and transcorporation, which, instrumenting the human body, makes it a vector of hybridization, and symbiosis. This triple process is at the base of the new technological religions. It profoundly destabilizes most of the fundamental categories of the Christian mystery, starting with those of creation itself—incarnation, transfiguration, resurrection, ascension, and even the Eucharist (this is my body).

Due to the cybernetization of the world, the human and the divine both get downloaded into a multitude of techno-software objects, interactive screens, and physical machines. These objects have become real crucibles for forging visions and beliefs—contemporary metamorphoses of faith. Today's technological religions are, from this point of view, expressions of animism. But they are also detached from it. This is because they are governed by the principle of artifice, where ancestral animism was governed by that of vital force.

In ancestral animism, there was no body or life without air, water or a common ground. In pre-colonial African systems of thought, for example, life and the body, and hence the human being, were fundamentally open to air and breath, water, and fire. This essential porosity made up its essential elasticity and fragility. It was thought that the human adventure on Earth played out in the reality of air and breathing. This adventure could last only if enough leeway was left to the regeneration of the vital cycles.

"It is possible," Simondon said, "to compare technical thinking and religious thinking."[34] Going further, he claimed that these two cultures "exist as a couple, as the result of the splitting of an intact primitive thinking." In his view, the relationship between technology and religion was one of splitting into two. This implies that there is a kind of original unity between technical thinking and magical thinking. Simondon argues that, in their being, both technical thinking and religious thinking keep the memory of each other alive. A "technical work" can "be equivalent to a religious act" and a religious work can "have the organizing and operating force of a technical activity."[35] Existing at the origin was a "magical totality" that was later left behind.[36]

In pre-colonial African thought, the reticulation of the universe took place through objects. Taken as a whole, these objects constituted a language within a symbolic economy. But both technical objects and symbols met practical ends, each in their own way. Each object and each symbol had its individuality insofar as it intervened in human action or was deployed by humans. Individuality also derived from form, from the inscription in reciprocal, and always fragile, exchange relationships with other objects (objects among themselves), and with humans and the rest of the living. It entered into a regime of causality. It caused specific effects and was thereby endowed with a relative autonomy. It could be instrumented in a particular way. It was, therefore, alive, that is, *animated.*

Despite appearances, we are actually far from having finished with the old question of knowing what the "human" consists in and what distinguishes it from the animal, from other living beings, or even from the simple tool or instrument. How did we go from human to "man" and what will remain of the latter once he has been stripped of his trappings? This question may be superfluous in view of his multiple affiliations, but it is important to revisit it, especially at a time when the human adventure on Earth is taking a new turn, a constant reminder that it is not unending. Nothing that has happened to us has been accidental. Most of what will happen to us from now on will take place through technical objects, which are a heritage of reason and culture. Indeed, all technical objects bear traces of the mind. They are alive in and through these traces more than through their materiality.

And it is because these objects are invested with spirit that they speak and endure. Through them, life continues, and beyond life, the force and energy of desire and will.

There is no technical object that is not at the same time a sign. Like living organisms, technical objects always appear within a semiotic environment. As such, they are, by definition, involved in systems of exchange and interpretation. On the other hand, they are one of the manifestations of the work that is life. In them, life continues by other means. Finally, each object opens, says, manifests, and celebrates, in its own way, not only a possibility to come but also the possibility of the future.

Systems of objects are thus intrinsically systems of signs. The human species comes, with its objects, to endow itself with material bodies and artificial organs. By doing so, it externalizes itself. But these artificial bodies are not only mechanical bodies or molecular bodies. They are also signal-bodies, living beings as signs, that is to say, reserves of information and meanings. These meanings are by no means reducible to the use made of them. They are inserted always within a broader ecology, a *general ecology*, a milieu. Or better: a world. But the most powerful objects are those that open onto unknown worlds, whose existence one might well suspect, but which remain invisible until the moment the object appears. Epiphanic, such objects are, in truth, rare. They work like doors that open onto not bubbles, but plastic worlds.

It is well known that Protestantism, in particular, gives a prominent place to the ecstatic experience of the Holy Spirit and the practice of spiritual gifts. Prophecy, miraculous healing, exorcism, speaking in tongues and revelations through dreams or visions are part of a panoply of gestures that also include the laying on of hands, the injunction to cast out demonic powers.[37] Animism thus means—not a deity is hidden in a tree, or behind a waterfall, but—that any object is likely to take the form of a mirror. In doing so, the technological object becomes the center of a more or less formal ritual, or the surface of an encounter, the vector of stimulation of the senses, and in particular of the electro-perceptive senses of the user of the technological object, whether one that is material or dematerialized, auditory, or visual.

Techno-animist practices thus have a material and bodily substratum. Contemporary techno-animism is characterized by sensoriality. Technological objects are not, strictly speaking, cult objects. They are not the seat of a divinity as such. They are certainly involved in all sorts of material transactions. But they also convey myths, the symbolism of which they are at the same time the incarnation. They are animated by transfusions of feelings, intentions, and desires. This is how, by endowing themselves with personality, they become alive, insofar as they are situated halfway between objects properly speaking, spirits, and subjects. And being alive, they call for ritual activities and open onto specific techniques of the body.

These objects, as the matter underlying faith and as expressing a faith in matter, embody sensory schemes, create a sensory world: acoustic, thermal, extended sensoriums. They induce sentimental landscapes, landscapes of moods. The point here is about the singular relations that contemporary individuals maintain with technical objects that are held up as offerings. Techno-animism is a fundamentally processual form of animism. It is manifested in the manufacture and consumption of objects. It is a creative and appropriative consumption that takes place in a liturgical way. An object's performance is a key element of its consumption. Almost every object links together a ritual and a liturgy, or makes them possible. There is no aesthetics without liturgy.

Equipped with adequate interfaces, the person can experience sensations related to touch, blows, and other impacts. It can experience colors, that is to say, the visual perception that the human eye—in this case augmented—has of the spectral distribution of light. The goal is to create a world where all kinds of real and virtual objects are grafted or inlaid live, whether animations, sounds, data, or texts that can be viewed.

By means of the screen, we proceed from the digital to the noumenal. The human subject is no longer merely among machines. These machines operate in the subject, standing in an intimate relation of incorporation that is not a simple hybridization. The one has become the operative image of the other. The machine did not take the place of the subject and vice versa. The one has become the avatar of the other, its visible but intangible interface, an *object-image* coupled with its *image-object*. Indeed, thanks to this

process of transfiguration each of them can cross the screen. The screen is not only the material frame which allows humans to see. What it allows people to see must be able to move and interact, and part of its power derives precisely from its ephemerality.

The screen is, on the other hand, the scene of a singular meeting, that of the signal, code, and the subject. It is on the screen, on this luminous surface, that the reciprocal actions of these latter meet.[38] Humans are not totally absent there. But, thanks to the interactive image on the screen, the *technical being* gains in intensity and in autonomy. Drones, for example, barely have any need of an operator. And the age of driverless cars is approaching. On the other hand, such devices depend almost entirely on all kinds of connections. They require sensors in order to function, sensors that make possible localization, screening, and trackability, not to mention data collection concerning our words, our gestures, and even our desires and emotions.

chapter three

weighing lives

There are two questions we face today that will haunt us for most of this century. The first is the question of *life's possible future* and the second, that of the *future of reason and freedom*. We are called upon to grapple with these very urgent issues at a time when humanity seems to have come to the realization that, if there is no significant adjustment in how we conduct our lives, parts of the Earth are likely to become inhospitable in the near future.[1] Indeed, many are wondering how we should *inhabit anew and share* as equitably as possible a planet whose life-support system has been so severely damaged by human activities as to be in dire need of repair. In view of the deep state of fragmentation in which the planet finds itself, some are asking how should we *re-member* it, that is, put back together its different parts, reassemble it, and reconstitute it as an integrated system in which humans and nonhumans, physical, chemical, and biological components, and oceans, atmosphere, and land surface are all interlinked in a grand gesture of biosymbiosis and mutuality.[2]

These questions of habitability and biosymbiosis, of sustainability and durability, of the interlacing of human history and the Earth's history are far from abstract concerns.[3] In fact, long-term and continuing planetary environmental changes have only further dramatized them. There can be little doubt that they will be at the center of any debate on the future of life and the future of reason in this century.[4] Properly attending to them forces us to refocus our attention on some of the megaprocesses that have an almost overwhelming bearing on what might become of humanity and the planet we live on (the only one, so far, where life is known to exist). To reiterate, I call these megaprocesses brutalism, which I define as a contemporary

process through which power is constituted, expressed, and reconfigured, and in which it acts and reproduces itself as a geomorphic force. It does this, as aforementioned, through processes that include fracturing and fissuring, emptying vessels, drilling, and expelling organic matter; that is, through *depletion.*[5]

all living beings and things

Recent studies on the likely courses of the Earth-system suggest that we are fast approaching a threshold beyond which the Earth could be irreversibly turned into a "hothouse."[6] A hothouse, in the strict sense of the term, is not only unfit for human habitation, is not simply that in which the many simply cannot dwell or breathe.[7] It is also a house incapable of sustaining any form of life, a house where the human body (which, after all, is arguably the last thing each of us owns) will be cooked alive from the inside out, forced to endure an endless process of radiation, calcification, and petrification.

The human race has long been concerned with how life emerges, with its spatial distribution, and with the conditions of its evolution and resilience. But whether life emerged in warm or cold ponds, or in hot hydrothermal vents, might no longer matter. There is near agreement today that life as such is built into the chemistry of the universe. It is not simply an energy or a set of properties. It is an *activity* in and of itself. Life did not passively adapt to pre-existing environments. It modified them and modified itself, to such an extent that environments have changed forms of life just as forms of life have changed their environments.

There is also near agreement that life has the ability to replicate itself while reducing its entropy at the expense of external sources. It is self-sustaining. Microbial life is the most abundant life-form on Earth. Complex, or carbon-based, life-forms only represent a small percentage of the total life on our planet. They require the availability, among other things, of liquid water. Furthermore, their sustainability and durability depends on their

being within a range of distance from a star, so that this star's radiation can maintain the surrounding water in liquid form, preventing it either from freezing or evaporating.[8] The life in question has mostly been life on Earth—terrestrial life.[9]

A shift is now underway. The key question concerns not simply how various practices in human genomics are reshaping medicine, capital, and social formations.[10] The global bioeconomy's entanglement with intimate experiences of reproduction is well documented.[11] A new form of liberal eugenics is thus reshaping the futures of populations. Female reproductive biology, for instance, is being opened to novel and profitable forms of surplus value.[12] In this post-genomic age, that such life can be patented has contributed to recasting the relationship between biopolitics, necropolitics, and capitalism.

Permanent disruption, exposure to risks of all kinds, even death itself (social, biological, human, and animal) are increasingly *incorporated*, which is to say owned, sold, and integrated in complex architectures of control and partition.[13] In their study on the impact of endocrine active substances on the reproduction and sexual morphology of organisms, Malin Ah-King and Eva Hayward emphasize the increased rates of disease, cancer, and habitat loss that affect a great many organisms, and the large exposure of workers in developing nations to weed killers, insecticides, industrial chemicals, artificially produced hormones, and medications that the rich countries of the global North have banned.

Throughout the world, steroids and other chemicals can be found in materials as diverse as plastic bottles, containers, dental materials, paper receipts, food tins, clothing, electronic devices, synthetic fragrances, cleaning products, and cosmetics. As such changes occur to the nature of the ecosystems to which we belong, to the air we breathe and to the water we drink, our organisms are altering.[14] Life, in this new regime of distribution of chemical, nutrient, and polluting matter, is not only pressed, but the old boundaries between inside and outside are moved. The continuity and inextricability between organisms and their environments is fast leading to the development of an entirely new biology as well as new ways of partitioning the Earth itself.[15]

Today, then, the core question is, or ought to be, framed in terms of how complex forms of life can still be reproduced, sustained, made durable, preserved, and universally shared in the shadow of a potential cosmic catastrophe. Human life as such comes increasingly to be seen through the prism of other forms of life, the life of all living beings and things, and the conditions *under which this life ends*.[16] Furthermore, the timescales are being reconfigured, since we have come to understand the embeddedness of all living beings and things in one another. The human body, for instance, is an environment for viruses. Plant matter informs bacteria, which in turn inform animal cells, in an endless encounter with multiple other forms of life. As a result, Earth-historical processes, which "outscale" any human sense of time (or events in the world history of humans), have become central to planet-centered thinking.[17]

Such shifts are due partly to recent findings in the fields of astrobiology, planetary science, and physical cosmology.[18] Disciplines such as biology no longer have the sole remit over life. Astrobiology, planetary science, and physical cosmology have profoundly contributed to decentering "the earthly." They have *extra-terrestrialized* the human interrogation of life and its future, while also redefining its limits, frontiers, and horizons. Crucial in this regard has been the discovery of biological organisms in the world's driest deserts as well as in subglacial lakes and in hot springs—that is, in places objectively recognized not only as unfit for human habitation, but as fundamentally incapable of sustaining life as such.

Equally decisive has been the discovery of airborne microbes in the stratosphere, as well as of microscopic animals capable of suspended animation. All these findings and many others call for a reassessment of the received notion of habitable environment, that is, of *the actual requisites for life, of what it means to be alive*. More importantly still, they are forcing us to reenvisage what living in extreme conditions (which is likely to become our new planetary condition) *might actually look like*. At the same time, technologies of assisted reproduction proliferate. Genomic reshufflings of biomatter have become common practice. Numerous organisms are being carved out as property in new ways, with some circulated as commodities.[19] Overall, it is the epoch itself that compels these debates about how life on

Earth can be reproduced and sustained, as well as under which conditions it ends. This is an epoch characterized by two key factors: the impending ecological catastrophe, and the emergence of techno-molecular forms of colonialism.[20]

capital as a magnetic field

Both factors are underpinned by the unprecedented consolidation of power and knowledge (political, financial, technological, and military) in the hands of private high-tech corporate entities whose sphere of action is not one country or one region, but the globe.[21] "Corporate sovereignty" has taken various forms throughout history. Consider, for instance, the British East India Company and its political dominance over some parts of the Indian subcontinent during the eighteenth century. A composite, diffuse, and hybrid entity, it exercised the sort of power customarily associated with formal state institutions, able to acquire territories and exercise authority over people. It also engaged in wide-ranging operations such as tax collection and waging war. Indeed, in some ways a rival of the monarchical and national state, it was a key part of the various institutional and constitutional forms that shaped imperial expansion.[22]

The conditions that enabled the expansion of privatized government and the increasing patenting of species in the first two decades of the twenty-first century are well known. Many of these conditions concern the various legal frameworks that underpin international-trade agreements, foreign-investment treaties, and other mechanisms that have turned markets into the most undisputed forces of our times. For markets have not only shaped our environment in the form of information transfer. They have triggered a whole range of co-evolutionary dynamics and led to novel forms of increased social metabolisms. Due to the diversification of metabolic activity, markets have morphed into complex extractive and digestive systems capable of ingesting all living and dead beings, and things, and turning them into waste (necrocapitalism).

These conditions also concern the evolution of knowledge and technology, in particular the computational transformations of financial markets and the possibilities afforded by media technologies.[23] Further conditions can be explained only by the radical changes to financial markets, instruments, and institutions that have deeply affected the interactions between the financial and the "real" sides of economic systems. In a context of heightened risk and uncertainty, fictitious capital now actively pursues different forms of rent.[24] Extraction is not limited to raw materials.[25] Data extraction has become a key dimension of production, circulation, and consumption processes as well as of value capture.[26]

However we look at it, capital and markets must now be understood not only as *magnetic fields* but also as key determinants of the climate system on Earth. Furthermore, the old distinction between the economic power of corporations and the political sovereignty of states seems tenuous.[27] Most global corporations aspire to secede completely while continuing to exercise surveillance over everybody else. Their big dream is to be tax exempt and accountability free; in short, it is to enjoy the kind of immunity and state of exceptionality that only truly sovereign powers are recognized as having. In a book about what she terms "surveillance capitalism," Shoshana Zuboff argues that a global architecture of behavior modification is underway. Driven by powerful states, high-tech corporations, and military apparatuses, surveillance capitalism threatens what she calls "human nature" in the twenty-first century, just as industrial capitalism disfigured the natural world in the twentieth. She shows just how much wealth is being accumulated in what she terms new "behavioral futures markets," that is, markets where predictions about our behavior are bought and sold, and the production of goods and services is subordinated to new technologies of behavioral modification. Indeed, capital, especially finance capital, has become our *shared infrastructure*, our nervous system, a sort of transcendental maw that maps our world today and its psycho-physical limits.[28] Together with *the millennial* properties that Jean and John Comaroff highlighted at the start of this century,[29] capital has now combined the aforementioned *magnetic* attributes.

It looks as if nothing concerning us escapes its control. Affects, emotions, and feelings, manifestations of desire, dreams, or thoughts—no sphere of

contemporary life is left unscathed by capital's spread. No sphere is shielded from its atmospheres, its radiation, its charged particles. Capital now extends its grasp deep into the bowels of the Earth.[30] Soon, mining companies will unleash their fleets of vehicles on seabeds in international waters. As Wil S. Hylton writes, they will creep across the bottom in systematic rows, scraping through the top five inches of the ocean floor. Ships above will draw thousands of kilograms of sediment through a hose to the surface, remove the metallic objects, known as polymathic nodules, and then flush the rest back into the water. Some of that slurry will contain toxins such as mercury and lead, which could poison the surrounding ocean for hundreds of kilometers. The rest will drift in the current until it settles in nearby ecosystems.[31]

Capital itself is now a *magnetic* field. In its wake, it leaves countless uninhabitable zones, vast fields of debris and toxins, and waste heaps of humans ravaged by sores and boils.[32] Now that everything is a potential source of capitalization, capital has made a world of itself: an incredible phenomenon of planetary dimensions. Early twenty-first-century corporate sovereignty is therefore an unprecedented form of power, and to be free of democratic oversight is its main aspiration. As a result, the epoch is perhaps no longer one in which the *demos* exercises sovereignty.[33] It may well be that finance capital, in the guise of a ubiquitous digital, extractive, and digestive architecture, has become the new Leviathan.[34]

techno-molecular colonialism

Meanwhile, humans are becoming embedded, in unprecedented numbers, in increasingly complex technostructures, most of which intervene in the dynamics of the Earth system on a planetary scale. One upshot is the transgression of planetary boundaries such as those related to anthropogenic climate change, degenerative land-use change, accelerated biodiversity loss, the perturbation of the global biogeochemical cycles of nitrogen and phosphorus, and the creation and release of novel entities such as nanoparticles and genetically engineered organisms.[35] Another is the acceleration of

processes of metamorphosis, decay, and extinction. Take, for instance, the metabolic lives of whey powder, which is both a pollutant of waterways and a multiplicitous substance that has been used as a protein supplement in a multibillion dollar industry over the past two decades. As demonstrated by Samantha King and Gavin Weedon, whey pollution has long been the effect of the systematic overproduction endemic to agro-food industries. The toxicity of whey is known to persist through processes of metabolism and consumption. What this highlights is not only the co-constitutive relations between bodily matter and ecological life and their entanglement with processes of commodification,[36] but also the extent to which the technosphere is a part, or an extension of, the biosphere. Flows of matter, energy, and information are being combined in complex networks and intricate webs of interactions. The body and flesh of the world is expanding as a result. This process of expansion is redefining the Earth in such a way that all species are bound together: humans, technology, animals, fungi, plants, viruses, bacteria—the same life in disparate bodies.[37]

Over the last decade, numerous algorithmic forms of intelligence have been developed.[38] Many such forms were inspired by the natural world and ideas of natural selection and evolution. A case in point is genetic algorithms. These form a subset of evolutionary algorithms that "mimic actions inspired in biological operators, such as cells." They "seek to optimize the responses to the problems of their environments by self-generating, and encompassing processes of mutation and natural selection."[39] As Margarida Mendes has powerfully argued, a redistribution of powers between the human and the technological is taking place.[40] Technologies, in turn, are increasingly tied both metabolically and reproductively with complex networks of extraction and predation. She shows the extent to which the genetic codes of humans, plants, and animals are being cracked and disseminated, yielding an exponential rise in biological patents. The human genome is in the process of being privately owned.

Life itself is increasingly perceived as a commodity to be replicated under the volatility of market consumption. Mendes further shows how thousands of new molecules, whose behavior cannot be predicted, are being produced and released into the ecosystem, as well as how seeds, chemical herbicides,

GMOs, and pesticides have been patented by a handful of multinationals. Through the widespread genetic modification of key elements in the food chain, corporations are intervening directly in the natural cycles of life and ecosystems. She concludes that patented GMO genes are being absorbed into human bodies and the bodies of various other species, turning the latter into infrastructures and inscribing them into a proprietary relationship of biological subjugation.

As algorithmic forms of intelligence develop in parallel (and often in alliance) with genetic research, the integration of algorithms and big-data analysis in the biological sphere brings with it greater belief in techno-positivism. Statistical thinking, regimes for assessing the natural world, the corresponding modes of prediction and analysis—all treat matter and life itself more and more as finite and computable objects. The idea that life might be an open, nonlinear, and exponentially chaotic system is increasingly being left behind. We seem to have reached a point where the market is reenvisaged as the primary mechanism for the validation of truth. Since markets themselves are increasingly being turned into algorithmic structures, the prevailing presumption is that algorithmic knowledge is the only useful kind. Instead of actual human beings with bodies, histories, and flesh, what alone counts is big data and statistical inference, which are mostly derived from computation.

Big data also enables the expansion of surveillance into the emotional registers of domestic and embodied experience. As Kirstie Ball and William Webster have argued, the commercial value chain increasingly involves a nexus between analytics methods, Big Data practices, and newly configured intimate spheres.[41] Data extraction is itself an economico-political regime driven by the perpetual cycle of capital accumulation.[42]

According to Matteo Pasquinelli, algorithmic reason is a form of rationality whose end is the understanding of vast amounts of data along a specific vector—the recording of emerging properties and forecasting of tendencies.[43] To some extent, the metadata society is characterized by the "accumulation of information about information." Algorithms also mine metadata in order to establish behavioral patterns, detect anomalies, and recognize an enemy. The reality of such enemies, perhaps even of the enemy itself,

is constructed via statistics, modeling, and mathematics. Power is, thus, increasingly concerned with identifying patterns or connections in random data, in a context in which the opposition between information and knowledge, knowledge and data, data and image, and thinking and seeing appears to collapse.

However, there is more to the matter than power, detection, and surveillance. Algorithms are interwoven with a multiplicity of relations and heterogeneous things, whether data, bodies, or objects.[44] In this sense, algorithms are themselves a negotiated process. Their power derives from their capacity dynamically to combine and recombine these relations and things, and, in so doing, to reconfigure different social and material heterogeneities.[45] How they fold and unfold these relations, and with what effects, is an open-ended matter.

The general perception of things now has its source in computational and algorithmic logic. Due to the conflation of knowledge, computation, and markets, only scorn can be reserved for anyone with nothing to sell and nothing to buy, or for anything that cannot be bought and sold. It may thus be rightly argued that the distribution of powers between the human and the technological is shifting, in the sense that technologies are moving toward "general intelligence" and self-replication. Technologies are being granted, rather than divested of, powers of reproduction and independent teleonomic purpose.

What is key to the future of life is therefore the extent to which technological escalation has redefined the nature of speed and enabled the unbridling of markets and the economy. It is also important to note the ways in which various technological devices constantly monitor our behavior, in an attempt to divulge how it could be modified and optimized. In fact, some of the fastest-expanding markets in the world today are "markets for future behavior." They rely on the ability to better understand what is called incipient future intent. Future voting intentions count here as much as the intent to commit fraud, buy life insurance, or stream a specific video.[46] These markets also rely on the extraction and mining of new forms of raw material. Such raw materials mostly consist of information and details about individuals' behavior that are, claims Shoshana Zuboff, taken from the distant

corners of our unconscious.[47] These raw materials are plumbed from the intimate patterns of the self—"our personality, our moods, our emotions, our lies, our vulnerabilities, every level of our intimacy."[48] The purpose here is not only to boost the predictability of our behavior; it is also to make life itself amenable to datafication.

A key feature of our times is therefore the extent to which all societies are organized according to the same principle—that of the computational. We are surrounded by ubiquitous computing technologies that are woven into the fabric of our everyday lives; all the devices, sensors, and other things that we interact with have become part of our presence in the world all the time. How the boundary between us and these devices is drawn is a matter of open debate.[49]

But what is the computational? The computational is generally understood as any technical system whose function is to capture, extract, and automatically process data that must be identified, selected, sorted, classified, recombined, codified, and activated. Yet we should not forget that the computational is also a force and energy of a special kind; it is a *speed regime* with its own qualities and infrastructures. It produces and serializes subjects, objects, and phenomena. It splits reason from consciousness and memory. And it codes and stores data that can be used to manufacture new types of services and devices that are sold for profit.

Whether it operates on bodies, nerves, material, blood, cellular tissues, the brain, or energy, the aim is the same: to convert all substances into *quantities*; to convert organic and vital ends into technical means; to capture forces and possibilities; and to annex them through the language of a machine-brain transformed into an autonomous and automated system.[50] The computational is also the institution through which a common world, a new common sense, and new configurations of power, perception, and reality are brought into being today. The globalization of corporate sovereignty, the extension of capital to every sphere of life, and the escalation of technology in the form of the computational are all part of one and the same process.

dialectics of entanglement and separation

The third megaprocess is what we should call the dialectics of entanglement and separation. Throughout the world, the combination of fossil capital, soft-power warfare, and the saturation of everyday life by digital and computational technologies has led to an acceleration of speed and an intensification of connections, creating a new distribution of the Earth and spread of population movements. To be alive, or to remain alive, is increasingly tantamount to being able to move speedily.

In the process, the human race has come up against earthly limits. Such limits are not only the consequence of the planet's sphericality. They are also limitations on the expansion of life as such. As the planet increasingly seems destined to burn, individuated bodies are imperilled, but not them alone. It is earthly existence, the fate of everything on Earth, the fluidity of life itself that is at stake.[51]

Meanwhile, more than at any other time in human history, we are not only in close proximity with, but also more greatly exposed to, one another. This closeness of proximity and greatness of exposure is experienced less and less as opportunity and possibility and more and more as heightened risk. But today is not only characterized by entanglement with, and exposure to, one another. Wherever we look, the drive is simultaneously and decisively toward contraction, toward containment, toward enclosure, as well as various forms of encampment, detention, and incarceration.[52]

The erection, worldwide, of all kinds of walls and fortifications, gates and enclaves is typical of this logic of contraction, containment, and incarceration. Various practices of partitioning space, of offshoring and fencing off wealth, of splintering territories, of fragmenting spaces are being tested out. Borders increasingly function to decelerate movement, and in some instances to arrest it entirely, that is, for certain classes of populations. Various reasons are marshalled to account for this renewed infatuation with borders, seen as the most effective form of risk management. Some of these reasons invoke security and the preservation of one's identity.

As it happens, multiple things are being arranged to transform the very nature of the border in the name of security, including physical and virtual barriers of separation; the digitalization of databases and filing systems; the development of new tracking devices, sensors, drones, satellites, and sentinel robots; infrared detectors and multifarious other cameras; and biometric controls and new microchips containing personal details. Borders are increasingly turning into mobile, portable, and ubiquitous realities. The goal is to better control movement and speed, accelerating it here, decelerating it there, and in the process sorting, recategorizing, and reclassifying people in a bid to screen more thoroughly who is whom, who should be where and who should not be—all in the name of security.[53]

As a result, borders are no longer merely lines of demarcation that separates distinct sovereign entities. They are the name we should use to describe the organized violence that underpins both contemporary capitalism and our world order in general.[54] To be exact, however, we should perhaps speak not of borders in general, but instead of "borderization"; that is, the process by which certain spaces are transformed into uncrossable places for certain population classes, who thereby undergo a process of racialization; places where speed must be disabled and the lives of a multitude of people adjudged undesirable are targeted for immobilization if not shattering.[55] Whichever is the case, the technological transformation of borders is in full swing. In a sense, the acceleration of technological innovations has as one of its major consequences the creation of a segmented planet of multiple speed regimes.

A key development in recent times is the extent to which border-security practices evince a keen interest in the connection between the human body and identity, as a means to achieve detailed control over movement and speed. This being the case, we must ask ourselves the following question: What precisely is at stake in the extension of the biometric border to multiple realms of social life and, in particular, the human body? In other words, what explains the transformation of the border from a particular point in space to the moving body of the undesired masses of populations? The answer is a new global partitioning between bodies that are *insured* versus those that are not. The former are protected from risk, while the latter are deemed risky.

It is the nature of risk to be hidden from view. That which is hidden from view is generally unknown. And for something to be known, it must be visualized. The screening of bodies at border checkpoints aims at making visible "what is hidden from view, opening up new visualizations of the unknown, potentially risky body."[56] In this context, biometric technologies are tasked with fragmenting the human body and recomposing it for the purposes of securitization, as well as the elimination and neutralization of risk. This happens because the human body is seen as an indisputable anchor, to which data can be safely harnessed or from which it can be extracted. As a result, we are witnessing the gradual extension of the intertwinement of individual physical characteristics with information systems—a process that has served to deepen faith in data as a means of risk management and faith in the body as a source of absolute identification. In this sense, biometric technologies should perhaps best be understood as techniques that govern both the mobility and enclosure of bodies.[57]

The perception is that biometric technologies are infallible and unchallengeable verifiers of a person's truth—identity's ultimate guarantors. It is presumed that they provide for the indubitable identification of a person and endow with authenticity and credibility all of the data connected to that identity. According to this logic, we have only to curb ambiguity, ambivalence, and uncertainty and the world could be made a safer place. These technologies, it is said, can provide a complete picture of who someone is, and fix and secure identity as a basis for prediction and preventing, thus leaving people merely to play out their identities thus fixed.

The three megaprocesses I have just briefly sketched drive the movement toward what I have called planetary entanglement, as well as toward its opposite: that is, enclosure, contraction, containment, encampment, and incarceration. These megaprocesses are shaped by the alliance between military power, its associated industries (contractors), and tech giants. They are also driven by corporate elites who are increasingly detached from their countries of origin and who store most of their capital in tax havens.[58] These elites can no longer be "held to account" through traditional means such as elections or protests. They thwart the scrutiny of citizens via complexity and secrecy, often suing national security or an economic rationale that privileges

capital over bodies and people as a pretext. This movement toward planetary entanglement is an erratic, uneven one. But everywhere it heightens uncertainty and insecurity. Everywhere it institutionalizes the inherent risks in the wretchedness of reality.

life and mobility

Key to this process is a novel imbrication, a symbiotic merging of life and mobility. Life, or survival, is increasingly coterminous with the capacity to move. Like life itself, movement involves continual doublings, the incessant crossing of multiple lines and thresholds, multiple transitions across layers. In some of its most vital dimensions, movement does not require the displacement of the totality of the body. The body parts of some are put at the disposal of the bodies of others. Certain bodies are "bioavailable." Such is the case of the female bodies enlisted in the transnational practice of "egg donation." And genome editing is no longer limited to humans. It is also used to alter non-human animals.[59] In the process, there is a rewriting of bodily boundaries and a reconfiguration of social relations of exchange.[60] In such instances, the body becomes a site of extraction of surplus value and life itself is taken as something that can be calculated and recombined rather than merely represented. At the same time, the same body, or some of its parts or fluids, is mobilized for the purpose of safeguarding the lives of others. It is deployed in the circuits of care work.[61] In the process, the relationship between life, death, and biological individuality is reconfigured.[62]

We simultaneously bear witness today to a bifurcation between life and bodies.[63] For not all bodies are viewed as containing life. Not each life and every breath has supreme value. *Discounted* bodies are dismissed as lifeless. Strictly speaking, these are bodies at the limits of life—vulnerable and porous. Trapped in uninhabitable worlds and inhospitable places, they generate multiple kinds of tumors. The kind of life they bear or contain is not insured, or is *uninsurable*, enclosed as it is in extreme and thin envelopes.[64] Standing in a relation of *radical inequivalence* with insured bodies, they struggle to maintain life while having to endure catastrophic conditions.[65]

Such bodies, tethered, on the precipice, are the most exposed to droughts, storms, and famines, toxic waste, and various experiences of effacement. Their livelihoods made impossible, they are the likeliest to suffer the most crippling wounds and injuries. Often with no means of escape, the earthly lives of these entrapped human subjects bear the brunt of the planet's damage.[66] Yet, despite being seemingly static entities, they outdo all attempts to contain them.[67] These bodies are not simply in motion. They are, as interactive and generative, *movements and events*. The inside of such bodies is not separated from their outward environments. From the perspective of discounted bodies, to be alive is always and already to breach boundaries or to be exposed to the risk of the outside entering the inside. [68]

This disentanglement of life from discounted bodies, this redistribution of life on differential scales of insurability and non-insurability, is a key dimension of contemporary migration and labor regimes.[69] These latter regimes aim to slow down people's interactive dynamics, create distances, and shatter serial links between people so as to institute new patterns of separation. Contemporary restrictions on movement are not limited to national boundaries. They are at work on a global scale.

Such restrictions deepen the space and time asymmetries between different categories of humanity, leading to entire regions of the world becoming more or less ghettoized.[70] The restriction of movement does not necessarily aim, says Cédric Parizot, "to confine unwanted people territorially or to dissociate their movements from those of citizens, but to inscribe them into temporalities and spatialities that are disjointed to the point of giving these populations the illusion of being territorially separated."[71]

Furthermore, at a time when the material components and the body's biological organization can be reengineered and redesigned, these restrictions are based more than ever on ideas of repressive selection, reproduction, and species rejuvenation. Only that which can potentially generate value counts as life and can be allowed to move. In this context, borders are meant to concretize the principle of dissimilarity rather than that of affinity. Not only do they present obstacles to free movement, but they are boundaries between species and varieties of the human.[72] As such, borders play a crucial

role in contemporary modes of production of human difference and relatedness.

Human bodies are increasingly divided between those that matter and those that do not, those that can move and those that cannot or ought not to, or ought to but under very strict conditions only.[73] The bodies that ought not to move are the uninsured ones, which instead must be tracked, captured, and dispensed with. Such bodies are kept shifting between invisibility, waiting, and effacement. They are trapped in fragmented spaces, dilated time, and indefinite waiting.[74] As for the dream of perfect security, it requires not only complete systematic surveillance but also a policy of cleansing. This dream is symptomatic of the structural tensions that, for decades now, have accompanied our transition into a new technical system of increased automation—one that is increasingly complex yet also increasingly abstract.

One of the major contradictions of the liberal order has always been the tension between freedom and security. Today this question appears split into two. Security now matters more than freedom. A society of security is not necessarily a society of freedom. A society of security is a society dominated by the irrepressible need to adhere to a set of certainties. It is a society fearful of probes into the unknown, of unearthing the risks that most certainly lie in wait within it. This is why the priority in a security society is to identify at all costs what lurks behind each new arrival—who is who, who lives where, with whom and since when, who does what, who comes from where, who is going where, when, how, why, and so on and so forth. It is also to ascertain who plans to carry out which acts, wittingly or not. The aim of a security society is not to affirm freedom, but to control and govern modes of arrival.

Current myths maintain that technology is the best tool for governing these arrivals, that it alone allows for a resolution to the problem, this problem of order, but also of awareness, identifiers, anticipation, and predictions. The fear is that the dream of a self-transparent humanity, entirely stripped of mystery, might prove a catastrophic illusion. For the moment, migrants and refugees are bearing the brunt of it. In the long run, however, it is by no means certain that they will be the only ones to do so.

Perhaps more than at any other moment in our recent past, the question that increasingly confronts the system is what to do with those whose very existence seems inessential for our reproduction; that is, those whose mere existence or proximity is deemed to represent a physical or biological threat to our own life. Throughout history, and in response to this foundational question, various paradigms of rules have been designed for such unwanted, illegal, dispensable, superfluous human bodies, bodies deemed an excess.

One historical response has been to spatialize exclusionary setups. This is what happened, for instance, during the early phases of modern settler or genocidal colonialism through Native American reservations in the United States, island prisons, camps, penal colonies such as Australia, and Bantustan in South Africa. In late modern models of colonial occupation, a combination of tactics were used to control vulnerable, unwanted, surplus, or racialized people, key among them being confinement and modulated blockade. A blockade prohibits, obstructs, and limits who and what can enter or leave a confined space.

The goal might not be to sever a certain confined space entirely from supply lines, infrastructural grids, or trade routes. But this space will nevertheless become sealed off in a way that effectively turns it into a more or less imprisoned territory. Comprehensive confinement or relative closure is accompanied by periodic military escalations and the generalized use of extrajudicial assassinations. Spatial violence, humanitarian strategies, and a peculiar biopolitics of punishment combine to produce, in turn, a peculiar carceral space in which people deemed surplus, unwanted, or illegal are governed by the abdication of responsibility for their lives or welfare.[75]

But the early twentieth-first century affords a further example—new forms of war that we might refer to as wars on speed and mobility.[76] These wars aim to turn the means of existence and survival of vulnerable people deemed enemies to dust. They are wars of attrition, methodically calculated and programmed, and implemented with new methods, waged against the very ideas of mobility, circulation, and speed, while the age we live in is precisely one of velocity, acceleration, and increasing abstraction and algorithms. Moreover, the targets of this kind of warfare are by no means singular bod-

ies, but rather the great swathes of humanity discarded as worthless and superfluous.

All of the above are part the current practice of remote borderization, carried out from afar, in the name of freedom and security.[77] This battle, waged against certain undesirables in order to reduce them to mounds of human flesh, is rolled out on a global scale. It is on the verge of defining the times in which we live. At a time when belonging is being weaponized, wars on mobility constitute peculiar wars on bodies. Many states are engaging in a systematic effort to target superfluous populations. Since genuine belonging is accorded only to those who come from the same stock, the right to brutalize others with near impunity is extended in some instances to organized mobs, the police, and the bureaucracy. As Arjun Appadurai notes, poor marginalized men, jobless or precariously employed youth, slum-confined casual laborers are often mobilized and seduced by this type of violence and other dreams of national, ethnic, racial, or religious purity.[78]

chapter four

crossing the mirror

The question has long been raised about what we should attribute the origin of tools and artefacts to. What might be the difference between the world of tools, the world of language, and the world of symbols? Generally speaking, everything is thought to have played out with the freeing up of the brain. But the hand is argued to have been a decisive factor in this freeing up, to the point that some have argued that "man" originates from the hand. Or, perhaps, from the eye. Or from both at the same time. The hand, in this debate, appears not only as a part of the body located at the end of the arm, but as the organ *par excellence* of touch and prehension.

grasping

Accordingly, the hand is essentially conceived as the first tool, or—better—weapon, that is to say, ultimately as an instrument that serves to protect oneself, or to injure and, if need be, to kill others, in a world governed by relationships of enmity and predation. Contrary to the beak, the paw, the horns, or the teeth, the hand is that through which it is believed that "man" entered the world of free movement. But the world of free movement is primarily that of the *struggle for life*. This struggle is conducted not only against other animals and against nature, but also against fellow human beings.

The organ of sight, the eye, is also an organ of prehension and capture. For, to see is to apprehend the world, its distances, its lights, and its colors. It is also, in a way, to possess the world, that is if we suppose that the world can be possessed only by being able to see it in the first place. But to see,

one must start by looking. If one can look without seeing, nevertheless one cannot see without looking. There is scarcely any form of domination, in the most basic sense, that does not pass through the eye. The eye is like a mirror in which the will is reflected in movement. Where the nose allows us to sniff, the eye enables us to spy, to detect positions, to measure distances, to scan the horizon, and to gain a panoramic idea of that which surrounds us and to which we belong. The eye, first and foremost, allows us to identify prey.

There is in the eye, then, something of a spark, an incandescent parcel, a shining point, and fragment of brightness all at once, which makes it possible to exert, if only for a moment, a certain hold on things beyond the opacity of the world. Maurice Merleau-Ponty, who took the eye—and, in a general way, the visible and perception—as a privileged object of his reflection, does not say anything else.[1] All things considered, it is the eye, perhaps more than the hand, that is the other mother of technological reason. We tend to forget that every technical object, every artefact, is the product of a gaze. The same is true of any human creation or any machine. To find the "fabric of brute sense" that they possess, we must look to the eye, to the regimes of the visible produced by each culture.[2]

Yet, we can hardly speak about either the eye or the hand without relation to a bodily machine. What is distinctive about the body is its being in movement. There is no body that is not mobile. "What would vision be without eye movement?" wonders Merleau-Ponty.[3] The same question arises with regard to the human body. What would the human body be without mobility, if not inanimate, in a state of inanition? There is a human body only insofar as it sees and moves. And because it sees and moves, "it holds things in a circle around itself." Things are, says Merleau-Ponty, "an annex or prolongation of itself." The same is true of technology.[4]

For a long time, the technological imagination was considered to be the mere product of the manipulation of things. The characteristic feature of our artifices, it was thought, was that we did not haunt them. Our constructions were part of a brute and sensible world, and relatively blind. Devoid of all "power of looking," objects, it was thought, were not and were not meant to be our congeners.[5] The difference between them and us lay in the

fact that our body could see itself seeing, and even touch itself touching, something objects were unable to do.[6] However, the time has perhaps come to turn our backs on this idea. From the beginning, objects have been more than an appendage to our bodies. More than an extension of our body, they have been embedded in our flesh. Today, they are part of what Merleau-Ponty calls "its full definition."[7] They are made of the very stuff and the tissue of our body—the double of our flesh.

Life, in this first sense, is thus confounded with one's self-perpetuation amid the species and the surrounding environment. As the dominant mythology has it, "man" is originally born as a beast of prey. Man's nature, then, like all other animals of prey, is essentially predatory. The world in which he breathes, feeds, and reproduces is a battlefield. Man survives only at the expense of other beasts of prey; life for man thus consists in hitting targets, killing. The understanding is nonetheless that there are several *species, varieties, or types of life*. There is, for example, a life typical of natural environmental processes, recognizable by such brute facts as the shift from day to night, or soil respiration. Such cases present neither will nor choice. In this respect, Oswald Spengler refers to the life of a plant: "Everything takes place with it and in it. It selects neither its position, nor its nourishment, not the other plants with which it produces offspring."[8]

There is, moreover, another degree of life that is called animal. For Spengler, again, this type of life is characterized by its free mobility. In the regime of freely moving life, one animal's survival is won at the expense of other animals on a battlefield with indeterminate limits. In this regime, the other is primarily a target, a prey and, possibly, a victim. And then there is a third level of life, borne through the belief that "man," or the human, has a destiny, that is, a project. The human's destiny is not only to be there, as an integral part of that which exists in its facticity. The human is also a potential power in becoming, whose distinctiveness lies in rising above what is contingent, and whose essential mark is its duration. The human being, in other words, is destined for duration. The human's destiny—and, consequently, project—is to last, that is to say to overcome the fatality of time.

In reality, everything has always been related back to this primordial desire—the victory over time, the desire for immortality. This desire stands at

the foundation of the technological imagination. In technology, the human will finds its most efficient means of realization. As such, technology is not a pure accident. It is the means by which humanity professes its self-construction as as a totally autonomous, self-created entity, independent of fate or destiny. Through technology, the human would thus strive to cast tragedy aside and trace a future that is simultaneously also a vocation. At the foundation of the technological principle, then, there can be said to reside an intense faith in the human being and its capacity to modify its own image, to become other than itself. To become other would be, in return, the mark of power and progress, two realities by definition infinite, the signature of the subject's accomplishment.

The classical critique of the modern technological imagination has taken several paths. The first consists in opposing the postulate of neutrality according to which *technē* and technologies are the metaphors par excellence of indifference, since they have nothing to do with consciousness. The second one consists in seeing in them the instruments of the Apocalypse, "the Beast rising from the abyss" and "the prodrome of the world's end."[9] The third amounts to inserting them in the debate on the opposition between means and ends, or quality in relation to quantity, or *doing* in opposition to *creating* as such. From this viewpoint, technology is an instrument and not an end. "The ends always belong to another domain, that of spirit."[10] *Technē* constitutes a danger for "man" if, instead of being the instrument, it sets itself up as the goal, that is to say, it diverts the meaning of life to its own advantage, and masks its own scope to the point of erasing man's consciousness. This eclipse or *erasure of consciousness* (as specific to the human) would represent the ultimate danger of *technē*.

As we see, in this tradition of thought, the only subject is a human subject. Everything starts from and leads back to this subject. However, the question of technology can be considered from a perspective where humans are taken as part of a larger category, that of living beings in contact with *animate and inanimate objects*, that is, as part of a universe composed of a multiplicity of environments and habitats. In this framework, objects or tools can certainly be considered as means. But they would not be alone in

this. Humans were also be regarded as means and tools. None of these entities was seen as sufficient unto itself.

All things considered, Jakob von Uexküll distinguishes between two kinds of "means for man." On the one hand, there are means to act, "which we call tools, a class to which all the big machines belong, such as those in our factories that process natural products and furthermore all trains, automobiles, and aircraft." On the other, there are means to perceive, "which we can call perception tools, like telescopes, eye-glasses, microphones, radio devices, and so on."[11] But perception and action are not exclusively human faculties. Animals, whether they are considered as simple things or not, also use means, both for perceiving and for acting.

When it comes to the exercise of vital functions, perceiving and acting are essential activities. But because perceiving and acting are not our exclusive prerogative, it may be deduced that other entities are not simple mechanical structures. Animals, in particular, are not simple assemblies of tools, including perception tools. In other words, the exercise of the vital function is not the property of humans. They share it with other beings and entities endowed with sensory organs or motor organs.

Each being or entity is, moreover, a doorway onto a particular world, or, to use Uexküll's phrase, to "new lands."[12] These beings and entities do not see the same thing. They do not act in a uniform manner. But each of their perceptual gestures and each of their acts opens the way to the creation of new relationships. And if, in fact, "each and every living thing is a subject that lives in a world of its own and of which it forms the center,"[13] then not only is there a plurality of worlds, there is also a plurality of centers. Technology, strictly speaking, is an arc that links these worlds and centers. At the end of this linking/delinking, it transforms each being or living entity into a subject and/or a potential object. It inscribes each being and each entity within a potential *subject-object becoming*. According to whether this becoming unfolds on one side or the other, the object will respond as a subject and the subject as an object, an animal-machine here, a machine-animal there, a human-animal here, a human-object there, and so on, along a ridgeline that is by definition always provisional and revisable.

Technology's power derives from its capacity to maintain this logic of permutation and metamorphosis in permanence. In addition, the distinctiveness of a technical object is not only to respond to external stimuli. Each technical object has its own physiology and can indeed be considered an organ, to the point where we can legitimately speak of *technological organs, or even of technology itself as an organism or an organic apparatus.* As organs, technical objects have the openness of cells. Some of them act as sensory organs, as actantial organs, and others as motor cells. Just as they set themselves in motion, they also impel movement. Just as they excite the senses, they also serve as transmission parts whose function is to channel waves of bodily excitation. And just as they are connected to control centers, they can also act as control devices. Technical objects are no longer able to be seen as things that are external to us. *They are central elements of the nervous systems of contemporary humanity, the doubles of its flesh.*

Henceforth, the fundamental unit is no longer the human subject before the technical object, but the living in its animate, as well as in its apparently inert, form. This being so, and with regard to the last utopia of a possible earthly community, the decisive question is to know how to articulate a *democracy of the living* that takes *multiplicity* and *sustainability* as the starting points for a new project of liberation not of the human subject alone, but of the living subject in all its extent. Such a politics would necessarily be based on the common. Its scene would no longer be only a human scene, but an enlarged scene situated at the heart of a history at once social, technological, geological, and molecular.

The anchor point for this politics would reside in caring for the body in its dimensions of individuality and earthliness (the body of the Earth). We are indeed witnessing a return of the body in its viral form. This body is no longer necessarily the body that loves itself, the narcissistic body of neoliberalism, caught in the vertigo of self-contemplation and showing itself. Instead, it is the body of which we must be wary—that of others, but also our own. We listen into it constantly, fearing that it will all of a sudden turn against us and betray us. We interpret the slightest internal movement, the smallest noise or emission, whether a sneeze, fever, itch, or cough, whether muscular atrophy or nerve failure. It is this potentially lethal body of am-

bivalences and uncertainties that has returned to center stage—contaminated, destined to rot, reborn from an old funeral mask.

This putrescible body is rediscovered as a shock. Especially so in the world's North, where there have been many ongoing efforts to de-realize the body, dematerialize it, or transfer it to artificial, even spectral objects. Ought we thus to deduce that we are ultimately condemned to the body, our own and that of other beings and things? Indeed, any community presupposes a body. In fact, a community is such only insofar as it knows how to form a body. It is the same for the earthly community. But for this to happen, its human branch must learn how to die. It must learn not to commit suicide, not to delegate its death to others, and to take care of all the lives in abeyance and all the dead, in an equal way to its own.

For death and life are linked to each other in an essential twinship, embedded in each other as the inseparability of the living and that which irreparably denies it. This twinship is very well accounted for in the ancient African myths and animistic devices, in which the Earth itself is before all a theater of resonances and vibrations. In them, the Earth is populated by a multiplicity of beings endowed with different properties and qualities. The singularity of these beings notwithstanding, they all evolve in a general field where metamorphoses are possible, where the order of things is the conversion of humans into animals, animals into plants, plants into humans, and humans into microbes. Not only is this energetic circulation presented as possible, but indeed as necessary to renewing life cycles.

Indeed, today we must re-open all the world's archives and draw on them for inspiration. With the potential metaphysical shift of the world now at stake, the task is to recompose the living not according to the logic of the calculable, the quantifiable, and the codifiable, but from the implacable reality of the incalculable, of that which has no "price," which is beyond measure. After this ordeal, assuming we get through it, the old definition of the living will no longer be valid. The relationship to life, to one's own body and those of others; the idea of death, rituals of accompaniment, funerals; the fact of spending a lot of time or not with one's loved ones and on screens—all this is reconfiguring existence. Today there is an ongoing and almost ex-

haustive renegotiation of our identities, of the why of our lives, and notably of humanity's general relationship to other species.

a planetary weave

Each human body, however singular, bears on itself and in itself, in its essential porosity, the marks of the universal. Many believe that the universal is diaphanous, that it is without marks or traces. In reality, however, the only universality is that which bears the mark of its species. Our bodies are fragile envelopes that can only be cared for insofar as we take proper care of the air, water, and fire, without which they can by no means breathe. The status and position of the human species in the immensity of the universe should in principle not be a matter of contention. We are neither the only inhabitants of the Earth, nor are we placed above other beings. We are horizontally traversed by fundamental interactions with them. These other beings (microbes, viruses, plant, mineral, and organic forces) make us up. But they also decompose and recompose us. They make and unmake us, starting with our bodies, our habitats, and our ways of existing.

In so doing, they not only reveal the complexity and eminent fragility of the foundations upon which the structure and content of technical and industrial civilization rest. The living itself is also vulnerable—in its anarchy and in all its forms—starting with the bodies that shelter it, the breath that spreads it, and all the sustenance without which it eventually withers. This vulnerability is a key characteristic of the human species. But all that populates this planet shares it to varying degrees—a planet that powerful forces threaten to make, if not uninhabitable, at least inhospitable to the greatest number.

Heedless of state borders, or paradoxically reliant on them, a *planetary system* is emerging and consolidating itself that is *very different from official cartographies*. Made up of interweavings and interdependencies, it is not the equivalent of "globalization," at least in the sense that this term has been used since the fall of the Soviet Union. It is rather a fragmented *Whole*, an interweaving of networks, flows and circuits that are constantly being re-

composed at varying speeds and on multiple scales. This Whole is the result of various entanglements, starting with human territories, the wilderness, and the borders between them. It draws a *weave of the world* made of multiple extremities and a multitude of big and small cores. None of them is *separate*. All of them serve, at some point or other, as relays for the rapid circulation of all sorts of flows.

Naturally, everything does not move at the same rhythm. But mobility and velocity now govern planetary existence in its many forms (land, sea, air, satellite, or wire). Capital flows, certainly, but humans, animals, pathogens and objects as well. Mobility affects all kinds of goods, data, and information. Raw materials are extracted here, but undergo a first processing there. The components are then assembled in yet another place. As discontinuous as they may seem, however, the processes are often the same, starting at the most concrete level and going to most ethereal abstraction. In short, it is a question of emergent complexes whose characteristic is to vary scales and operate in more or less spatially discontinuous networks. The chaotic appearance of these chains and planetary complexes risks accelerating the brutality and setting off an irremediable crisis in relations between humanity, its instruments, and the rest of the living. Another ordering of the world and other relations of force are being established. New geopolitical fault lines will soon crystallize.

transmigration of times

The Earth is now going through a multiple series of dramatic large and small shifts. These shifts are not merely political in the sense that, for example, the triumph of neoliberalism might herald the powerful return of tyrannical or even fascist potentials in societies that were—hitherto—deemed "open societies." Nor are they only economic, in the sense that financial capitalism now tends to merge with algorithmic reasoning, and economics itself fuses with the biological and neurological sciences. They are also climatic insofar as the Earth seems inexorably drawn into a process of combustion that threatens many species in their very survival. They are

also technological, if we are willing to recognize the extent to which technology now rhymes with eschatology. Imaginaries are boiling over, which is why our impression is one of great acceleration and great contraction, as if we were caught in an enormous whirlpool and its dispersing effects.

Let us add, for good measure, that the shifts may be occurring on scales that are immeasurable, yet the speed of the shifts is changing and unequalled each time. One of the major effects of these multiple changes of speed, of this multiple speed regime, is our feeling of epistemological disorientation, our impression that we no longer have a base from which to articulate the work of organizing and expressing intelligence—or ought we to say the intelligible. Even more seriously, these shifts profoundly question the sum of knowledge inherited from the distant and recent past, cruelly exposing its limits, and, increasingly also, its obsolescence. Hence the need not only for an unprecedented renewal of our tools of analysis, languages and discourses, and for their pluralization. Above all, we may well need to dream up different theoretical imaginaries. Thus, my conviction is that, if humanity is to face the new situations and trials that confront it today, the re-founding of knowledge must be carried out with recourse to the *archives of the All-World*. Though for so long one has been content with the archives of only one of the Earth's provinces.

I have just evoked the impression that we have in this day and age of undergoing a "great acceleration," accompanied by sudden contractions. Let us return for a moment to what I just referred to as the *boiling over of imaginaries*. This is one of the consequences of a phenomenon to which we have perhaps not paid enough attention, namely the *transmigration of times*. For, assuming that we can still speak of History, then this History is no longer limited to human beings, who have never been its exclusive protagonists, and will never be. To mean anything, the time of human beings, or the time of human societies, must now be arranged with geological and climatic time, the time of plants and animals, of microbes, bacteria and viruses, the time of the biosphere and the time of the technosphere. In short, we are now summoned by all the *forms of the living*, forms now recognized as co-actors of the Earth's pasts and futures and of all those who are inhabitants of these pasts and futures.

In view of this imbrication of times and the regimes of sedimentation of times, we are entitled to query the use of the standard distinctions between past, present, and future, between history and memory, between unconscious and subconscious. The same is true of common categories such as rupture or continuity. At bottom, the name of the game will have always been entanglement, together with phenomena of co-constitution and co-action, or, in political language, phenomena of mutuality, that is to say, ultimately, of *reciprocal debt*. For a long time now the idea that time progresses or flows linearly has been questioned. But have we really drawn all the consequences from the fact that the present owes a debt to the future, the future, a debt to the past, and the past, a debt to the present? Outside this circle of *uninterrupted and unpayable debt*, time does not exist, or at least the consciousness of time does not exist.

What founds time and the community is debt or, precisely, this awareness of unpayable debt, which, because it is unpayable, must be able to be claimed at any time. The same is true of the debt owed to the Earth. Just as there is an expropriating and destituent dimension to debt, there is another, which is constitutive of *the common because it is based on the—permanent—possibility of reclamation*. We are all therefore both debtors and potential creditors. Without the possibility of this permutation, there is no commonality, no earthly community. The clinic of time requires, moreover, that we take seriously the phenomena of return, reversion, or reversibility that, as we can see all around us, are constantly multiplying. But what is a return, what is a revenant, what precisely "returns"? Is what "comes back" exactly the same as what had once happened and then *disappeared*? Is there any connection between *disappearance* and *coming back?*

Let's leave aside the phenomenon of traces, marks, and erasure. Can anything really be erased? What of the ineffaceable, that which sleeps under the fabric, or lies under the ashes, ready for reactivation? It is clear that these phenomena cannot be confused with simply forgetting, remembering, or reworking. The concatenation of times leads to inevitable frictions and collisions. The same is true of collusions. The question is no longer one of acceleration, of acceleration and contraction as such, or even of time with multiple speeds, but of *time in migrancy, of the transmigration of times*—as

others spoke of a transmigration of souls and minds—which more than ever requires a diagnosis that is psychoanalytic and properly political. It is a matter of regimes of time that envelop one another, provoking *effects of an encoiling of experience*. From this point of view, what is most striking today, especially in the West and its dependencies or close neighbors, is the coming to prominence of theologies of extinction, of what could be described as the aging of the solar star. Here is a world at the top of its technological and military power, but that, more than ever, is dominated by the obsessive fear of its own end.

This end is sometimes imagined as some generalized radioactivity or creeping toxicity, and sometimes as self-combustion. But there is more. There is also the unmissable panic occasioned by fear about a "great replacement," that is the notion that the Whites, a "declining and dying race," are undergoing bio-racial substitution by the "hordes" from elsewhere, so-called colored peoples. It might be referred to as a *eugenics in reverse*, which is triggered both by phenomena of denatality and a view of others as having excessive vitality. The retreat of the great hopes for radical transformation and the eclipse of yesterday's great revolutionary myths, seem to be returning us to the roots. Pack mentality is back. With it, raw and instinctive phenomena are emerging, to begin with the struggle of the species and survivalism. Some still believe in the idea of a happy end. Many others are convinced that it will all end badly. But the *desire for mythology* persists. As a result, cynical fictions and beliefs of all sorts are proliferating, backdropped by the powerful return of phenomena of bewitchment, even of rampant cretinization.

Today, an eschato-apocalyptic line of thinking is unfolding that urges us to contemplate collapse and prepare for the end. Other lines of thinking are attempting to reconceive utopia and the future in terms of technological messianism, or even a possible expatriation to other planets. Humanity's atonement, they all hold, will paradoxically pass through a technological escalation and a new round of colonialism, this time a techno-molecular and extra-terrestrial form of it. Under these conditions, the question is to know if *time can be repoliticized*, that is to say, how can we learn to inhabit the Earth beyond the desire for apocalypse and the impulses of nihilism and

technolatry? If this is possible, in what terms and for what purpose?[14] Doesn't a project of re-inhabiting require that this very Earth be minimally repaired, or even that all its inhabitants, human and non-human, are reinvested with what might be seen as a sort of land right, a sort of birth right, namely *the right to breathe*? This takes us far from an abstract or bird's-eye view universalism, wherein one seeks to form the world against others or in spite of them.[15] It also sets us apart from the dreams of disembodied cosmopolitanism. Rather, this project enjoins us to participate in the emergence of a new, truly planetary consciousness, and to develop a democracy open to all living beings, beyond species and races.

Our times are characterized by the existence, objective in my eyes, of what must be called a *planetary weave*. A distinctive feature of this weave is that it is currently, to use Hegelian language, devoid of self-consciousness, that is, of planetary consciousness. At issue is a "weave" in sense—or of the Earth. This weave is indeed subject to partitioning and delimitation, but it is fundamentally indivisible. It is not possible, for example, to take one of its sections and expatriate it to other planets of the galaxy. As a principle, the Earth resists all subduction. We cannot make one of the plates slide under others or go in the opposite direction. It is like a fabric, something that is susceptible to being knotted and unknotted. Its weave does not take the form of a conspiracy (*complot*) but of an intrigue, something that constantly demands deciphering and unraveling.

But it bears mentioning because, apart from this dimension of inseparability, three core elements of the age's architecture have to be emphasized. First, for those who tend to forget, the fundamental forces that continue to structure our world are violence, inequity and, increasingly also, disorder and organized chaos, that is to say, a radical and non-spontaneous form of uncertainty and instability. For, despite the progress made here and there, the "perpetual peace" evoked by the German philosopher Immanuel Kant, remains a mirage for many peoples. Today, as in the past, many nations ultimately use the mechanism of war—the ever-present possibility of disproportionate violence—to protect and guarantee their sovereignty and independence. This is what we timidly mean by the "balance of power." We are indeed far from having established a solidarity-based international order

that is endowed with an organized power and transcends national sovereignties. At the same time, any return to autarkic empires is an illusion.

As it goes, a new cycle of redistribution of power, resources, and value is taking place and crystallizing on a global scale. Another partition of the world is taking shape, and with it other geographies of the Earth, as well as emerging geographies concerning extra-terrestrial domains, those related to the orbital. In various places, this cycle is raising the hope that for many human groups the possibilities of life can be deepened. At the same time, and almost everywhere, the implementation of this new *nomos* of the Earth leads to a concertina effect, to an unequal redistribution of vulnerability, and to forms of violence that are as futuristic as they are archaic. Wars are certainly the most significant of these processes, but key are the metamorphoses of capital and technology, and the way in which the media and finance—in short, a constellation of forces as abstract as they are physical, as natural as they are organic and mechanical—are weaving meshes and fractures among the world's regions. All these forces, thanks to their disregard and paradoxical reliance on state borders, are contributing majorly to creating the new planetary weave that, as said, differs from official cartographies.

Made of interweavings and interdependencies, this weave must not, to reiterate, be confounded with "globalization" as it has been understood since the fall of the Soviet Union. This weave is rather a *Whole*, but a *fragmented Whole*, or, if you will, an interweaving of networks, flows, and circuits that are constantly recomposed at variable speeds and on multiple scales. This *fragmented Whole,* we have said, is the result of various juxtapositions and entanglements, starting with human territories, the wilderness, and the borders between them. But what about the digital realm and computation, the world of screens, the technosphere? The *weave of the world* that thereby emerges is made of multiple extremities and a multitude of large and small cores, in such a way that not even the most closed off is separate, and that each serves at one point or another as a relay to enable the rapid circulation of flows of all sorts.

Certainly, the rhythm of movement is not the same for everything or everyone. The anti-migration policies of the powerful states of the North manifest this difference clearly, since they contribute persistently to multi-

plying the wretched *of the Earth*, and increasingly also the new *wretched of the Sea*. It is significant, from this point of view, that most contemporary forms of wretchedness play out at the intersection of mobility and immobilization, of incarceration and velocity. For the wretched, the share of fire and, today, of water (and risk of death by drowning) proper to wretchedness necessarily refer to the image of an Earth transformed not only into a prison, but precisely into a hell. It is this *satanic course of the world* that is the whole point of the Fanonian clinic.[16]

the tragic community

Every community rests on tragic underpinnings that it always strives to conceal. The key question runs as follows: Which lives may be sacrificed to ensure the continuity of the political community? By whom, at what moment, why and under what conditions? For there is no community whose foundation does not rest on one conception or another of "shed blood" or "forbidden blood." A community is actually made up not of similarities but of dissimilarities, whether of origin, religion, or race. The blood ban functions to ward off internal division. It functions to prevent situations in which members of the same community split up and kill each other.

It thus turns out that human communities are distinguished by the ways in which they respond to this dilemma when threatened in their existence. The dilemma may be put as follows: Who can be done away with so that life's course does not grind to a halt, so that the greatest number of lives is spared? Can such a sacrifice be performed in a way that does not lead to a worsening of internal conflicts, the dissolution of the social bond, or the outright destruction of political unity?

In the recent past, epidemics and famines have put this dilemma at the forefront of sovereign decision-making. Wars have notably formed the very prototype of historical events that were thought to require the sacrifice of some lives in order that others may be protected and even flourish. These devastating conflicts have required the ruthless use of force, the point being to inflict death on enemies accused of endangering the existence of the com-

munity and its continuity over time. But war being what it is, that is to say a generalized exchange of death, whoever sets out in pursuit of an enemy is exposed to the possibility of being cut down by the weapons of others.

Since the nineteenth century, the counting, enumerating, and weighing of lives—and the ensuing redistribution of sacrificial potentialities—has essentially taken place through the economy. Karl Polanyi reminds us that the economy, in particular trade, has not always been linked to peace. In the past, he specifies,

> the organization of trade had been military and warlike; it is an adjunct of the pirate, the rover, the armed caravan, the hunter and trapper, the sword-bearing merchant, the armed burgesses of the towns, the adventurers and explorers, the planters and conquistadores, the man-hunters and slave-traders, and the colonial armies of the chartered companies.[17]

In pre-colonial African systems, money did not epitomize everything. There were moneyless exchanges. In other words, debt was not preceded by money. And some social exchanges, despite involving forms of monetary circulation, could not be compared to relations of debt. There was an extensive range of exchanges and gifts, which were not only enacted between humans. They could occur between humans and deities, humans and ancestors, humans and tutelary objects, humans and cosmic powers and other life forces. Moreover, there was a diversity of debts and claims.

These debts and claims were enacted by transferring possessions as much as by dividing properties and goods. They sometimes involved symbolic goods, and there were many instruments available to measure the value of, or to quantify, such goods. The *social link* was made of the whole, as that which fundamentally escaped all measurement and quantification. Various sorts of mediations, interdependences, obligations, more or less reciprocal rights, communal institutions, and rituals all went into forming it. Sometimes singular objects could also manifest it. The ultimate unit of account and unit of payment was life itself. The debt of life was also the supreme debt, the original and primordial form of debt.

What characterizes the debt of life is its inability to be abolished and its circulation, since it was passed along from generation to generation. Thanks to this circulation, the community was able to face the ever-present danger of its potential disappearance and its members' mortality. At stake in this debt was the community's longevity. All social links had as their origin the fact of being born, of *begetting* and dying, or of receiving, giving, and returning life. The debt of life linked all the members of a society or a community with one another. However, this debt could be transformed into a sacrificial debt under certain circumstances. A chain of payments thus linked members to one another and these payments made it possible to honor the social debt. And in honoring such the members of the community constantly revived social reproduction. Life itself combined the properties of a unit of account and a unit of payment. It was understood to pre-exist everything and everyone taken individually. Bruno Theret's study of money, albeit undertaken in a very different context, identifies a similar process, for which each being is—in line with animist conceptions—recognized as socially endowed with a more or less important reserve of life, more or less valued according to social status. This reserve, he adds, can be appropriated in various ways. It can also be "the object of various transactions leading to the creation and circulation of debts."[18]

Nowadays, lives are weighed not according to the share of debt, justice, or moral obligation that represents the belonging of each person to society. They are weighed on the basis of a series of calculations, which are themselves based on the one and the same faith or belief, namely that society is a mere appendage of the market. This is today's great gamble. According to it, the prevailing motive of all human action regardless of circumstance is the gain and profit afforded by exchange relations (and sometimes also by conquest). All gain is thus supposedly the result of the sale of one thing or another. Market prices govern existence. Every human life is a probability, and the calculation of lives resembles a calculation of probabilities, whereby the only requirement is validity. Moreover, this view of things posits that a life exists only if it can be consumed. And that the life of the multitude can be assured only if it is accepted that some lives can be done away with. Insofar as the Anthropocene signals our entry into a new viral and pathogenic

age, the question of knowing which lives to jettison so that the life of the multitude can be assured risks becoming the very object of politics.

right to the future

Given the state of the Earth today, life-threatening events risk recurring in the relatively near future. And new generations of pandemics are bound to happen again soon thanks to the expansion of monoculture, the industrialization of meat markets, the intensification of the relationship between the human species and other species, and the climate catastrophe. As each such event will ultimately refer to the possibility of our destruction, great fears will be aroused. Additionally, each such event will raise, in an acute way, the question of the right to exist and the right to a future.

However, the right to exist will become increasingly inseparable from its opposite: the right to detect who is a carrier of germs, or even who can be eliminated to ensure the survival of the multitude. That seeming health decisions end up threatening the survival of undesirables is indeed the great risk of the moment we are going through. This risk underlies two things: the novel forms taken by the economy and the new techniques of government enabled by the epidemic. As necessary as they may be, the technologies deployed in the current crisis do not in themselves eliminate this danger. On the contrary, in the name of the health argument, they may be easily turned against any human defined as a biological risk. The state apparatus has already outsourced many of the essential functions it has historically performed. These functions are increasingly devolved to mega-firms and private technology companies working at the forefront of fields such as artificial intelligence, quantum science, hypersonics, and tracking and tracing techniques.

If numbers and abstract codes alone must be used to describe and represent reality, and if they increasingly take on the dimension of a cosmogony, how can we ensure that the prevailing logic for counting and weighing lives is not transformed into a logic of elimination and erasure? When dealing in numbers, are we dealing with rigid certainties or with probabilities and,

therefore, with wagers? What does immune resistance mean if measuring risk is the same as quantifying chance? How do we recognize a state that, instead of "defending society," turns against its population?

During the ongoing major Covid epidemic, many countries have decided in the name of protecting and caring for the population to enforce lockdowns and prevent contagion. Prima facie the issue seemed to be about saving lives and avoiding unnecessary sacrifice. In reality, however, it was necessary to pay *en gros et en détail*. While the bulk of economic activity may have slowed, many sweatshops continued to operate. Warehouses, factory farms, meat processing plants, data centers, and other devices of digital capitalism did not shut down. So not everything ground to a halt. Meanwhile many people lost their livelihoods or were reduced to unemployment. The public purses have been drained. Recession has been declared. International debts have been incurred. We were forced to borrow from the future, to mortgage a part of it, that is to say, to deprive future generations of a part of their *right to a future*. Moreover, to say that this virus attests to the equality of all in the face of death remains no more than a simple myth. The same goes for the *right to exist* and its corollary, the *right to subsist*.

In many regions on Earth, insufficient insurance or care in situations of temporary or prolonged destitution is a structural fact of daily struggles for survival. For their means of subsistence people need to leave the house and often travel far away, sometimes at greater and greater cost (unpredictable transportation, endless walking throughout the day, permits and authorizations of all kinds). In these places you have to walk, canvass, negotiate, and bargain constantly, sometimes you have to migrate, and even seize these means of subsistence, illegally if necessary.

In a lockdown, the most vulnerable categories of the population are faced with a simple choice: either obey the restraining order and respect the law or starve. Food, supplies, and access to subsistence depend on the ability to move, travel, and circulate. They also depend on the capacity to integrate into social networks of solidarity, multiply allegiances and belongings, and convert provisional arrangements into a resource necessary for basic services. Without the meeting of bodies, their accumulation, their proximity, without

direct contact with other humans, even in overcrowded conditions, the daily struggle for survival is lost in advance.

Winning this struggle is not possible in physical isolation, but only by entering into close contact. You must always be able to move to survive. Under these conditions, forced immobilization is not only a sentence. It is also a way of exposing a significant part of the population to enormous risks. The poorest part of the population is left in a situation without any safety net; this part that no one looks after and that is no longer able to look after itself.

As lockdowns are lifted, the dilemmas remain no less acute. The alternative is no longer between the virus and hunger. From the purview of market forces, the gamble is simply to reboot the economy at all costs. In any case, death will strike only an insignificant percentage of the total population. This fraction of the population, which is inactive, would have been struck anyway, sooner or later. If it dies immediately, this will reduce the burden it would represent were it to die later on. The cost to the economy (and therefore to the community) of trying to keep this fraction alive at all costs is higher than the cost of allowing it to perish now.

Indeed, from a free-market perspective, the right to exist or the right to subsist is a matter of speculation and therefore of market fluctuations, pure and simple. Just like subsistence, life must be earned and no one earns it by doing nothing. Working for a wage is one way to earn it. Only those who can earn a living with their salary, their job or their work have a concrete right to live. Yet many people are actually unable to find a job even though they want to. They ride out making their livelihoods amid chance, hazard, and uncertainty.

In the age of digital capitalism, you do not have to sell only your labor power on the market. Labor still has market value. But there is less and less wage labor for everyone. This is especially the case in regions of the world where the virus has hit already vulnerable or fragmenting societies, in regions where government by neglect and abandonment is the rule. It is here, at the crossroads of the living and the non-living, that the most brutal experiments (including medical) are taking place. This is where, moreover, the

market economy tends to function in the mode of expenditure, waste, and decluttering.

Sacrifice, in this context, does not refer to gratuitous murder. It has, at the root, almost nothing sacred about it. It does not aim at attaining the graces of any deity. It requires that you get yourself counted, that you engage in counting, that you measure, that you weigh lives and dispense with those who do not count. Sacrifice does not solicit either the gaze or the word *a priori*; it is supposed to be part of the normal order of things, of things that we no longer question because they are so self-evident.

All kinds of technological hybridizations notwithstanding, we will never entirely shed our biological envelope. In this case, the body that recalls itself to us is a dangerous body, a body exposed to contagion and decay. This is certainly not the first time in history that we have to deal with this viral dimension of the body, but this epidemic has occurred in a different context. Digitization has enabled some of our bodily functions to be transferred to material and immaterial supports. As the body is "not-all," it presents technology and other artifacts with an opening to suggest themselves as a solution. This descent into the depths of the digital is irreversible. Many authorities are using this experience as a laboratory to test out forms of government or relationship that will stay in place once the calamity ends. A diaphanous mode of government is being charted that operates through capture. We are already surrounded by sensors, detectors, cameras and screens, where the point is to collect as much data as possible on who we are, what we do, what we aspire to. Algorithms will be increasingly used to process these massive amounts of data with a view to establishing robotic control over all the living.

For the rest, life involves a large share of chance. The living is by definition infinite opening, chance, and probabilities. Determinisms exist, but they do not ultimately govern History. For History is fundamentally made of the unforeseen, of surprises, of that which escapes systematic quantification. History is going to be increasingly the outcome of how we treat nature, of the way we weave "ecocidal" relationships, for example, with wild animals. Implicated in this outcome are deforestation, which uproots previously lo-

calized animal life, our food traditions, and the market networks into which these products are inserted. We have helped to create some of the 600,000 viruses that circulate in the universe, which are the result of metabolic cooperation between humans, other living things, and our shared environment.

From a physiological point of view, that some viruses challenge our ability to breathe is not without significance. There is nothing more equalizing and shared than the respiratory function. All living beings have it, plants included. To rethink the common, we could thus start from the act of breathing, from the fact of our all sharing the same need for air, of there being no market for air that would enable this resource to be monopolized. This would allow us to redefine what, being priceless, escapes all calculation. From this idea of the common, of that which constitutes a right that in principle escapes any form of territorial, state, or market sovereignty, we can rethink the world.

chapter five

the last utopia

All along this journey, we have endeavored to grasp the Earth and its becoming(s) in terms of the future of technology and vice versa. By no means has this been yet another call to "return to the Earth." Through a series of tableaus and mirrors, we have instead pondered whether, among the living on Earth, a genuine sojourn is possible that would contribute to making this Earth habitable for all. It has become clear that neither the Earth nor technology can be grasped in isolation from one another. The one is now the double of the other. Amid enormous tumult, each one of them now participates in a great *process of reciprocal incorporation*. The historical development of each leads inevitably to the other. The advent of the world is henceforth carried out at their interface; they are no longer separated by an impassable distance.

This process of reciprocal incorporation, even of co-belonging, is the result of the great movement of domestication and appropriation that, since the invention of fire, has endowed technology with cosmic attributes. As a result, another configuration of beings and truth is gradually asserting itself. What, then, is coming to a close are manifold possibilities of creation, decision, and action, such that humanity and the world are undergoing mutations. Thanks to technology, humanity could not simply satisfy itself with dominating nature for the purpose of transforming it. Technology has shown itself for what it is, namely, a set of powers whose final destiny is to escape humanity and enjoy unfettered sovereignty. In its essence, technology was never reducible to a set of means determined by an end. Technology is clearly always a particular technology. But its fundamental characteristic is

that it was never simply satisfied with completing what nature could not carry out. It has always wanted to be something else, to be another nature in itself, standing independently of any purpose other than its own, remaining ever irreducible to a neutral set of means and mediations.

Under the impetus of technology, it can thus be said that calculation has become essential to what Martin Heidegger called "being-man."[1] By "calculation" he intended not only the process of producing that which has practical utility value, but also that of determining the very essence of truth. In other words, in his eyes, technology is not simply a matter of tools. It is the form that metaphysics has taken, first in Western history, and then in the general history of the Earth. It is because it has always been a particular figure of metaphysics that it has become a form of godless idolatry. It has always wanted to objectify itself cosmically by releasing powers that are by definition inappropriable, by trying to calculate predictively not merely a single region of being, but the living itself. And it is because we are at the point of this project's completion that the question of technology's future(s) is inseparable from that of the becoming(s) of the Earth and the living.

At the end of this journey, this question is thus unavoidable. The Earth and humanity, technology, and the living form one and the same bundle. Thanks to the escalation of technology, the Earth in its spatial structure is not simply being captured and measured once again. Rather, the living as a whole has now become raw material for the major complexes of power. Under these conditions, how, and in what terms, should we think of our common belonging to the *orbis*? Can working towards the emergence of a new planetary consciousness be limited to the sole problem of the "law of nations" insofar as it is rooted in "land grabs," which is to say, relations of conquest, possession, and ownership? What if the question of a new *nomos* of the Earth was posed in terms of an order that embraces all living beings? In this putative global unity, if it is the "right of the living" and no longer the "law of nations" that determines the degrees and conditions of *belonging*, must we not go all the way and openly take up the call for *disappropriation*?

The "right of the living" is indeed the exact opposite of the "law of nations." Where the former goes against the logic of the barrier and the enclosure, the latter rests on the circle that encloses, the fence that delimits,

the seizure of lands, on acts of conquest, submission, occupation, and annexation. "In the beginning," Jost Trier claims, "was the fence. Fence, enclosure, and border are deeply interwoven in the world formed by men, determining its concepts. The enclosure gave birth to the shrine by removing it from the ordinary, placing it under its own laws, and entrusting it to the divine."[2]

Today we bear witness to the constitution of a new horizon without firm ground, without fences or enclosures, boundaries or walls, unless immaterial ones. This new horizon is tied to the law only incompletely, if, as Carl Schmitt suggested, law is first and foremost "bound to the earth and related to the earth."[3] It encompasses and exceeds state territories, spanning the seas and oceans, and spreading through the atmosphere. Its advent is the result of the work done by different types of computation on a planetary scale. These include smart grids, cloud computing, mobile and urban software, universal addressing systems, computer science, robotics, and so on. This megastructure is not accidental.[4] It is less an architecture than an architectonics. Not only does it divide the world into new spaces; it also announces the advent of a new geometry where technology becomes space and space becomes technology. In theory, there is an equal right to its free use, but we know that barriers and borders are readily deployed to cut off such use, that it is not within the reach of all. A draconian property regime prevails upon it.

Tomorrow, the great founding acts of law may not only be localizations tied to the soil, its partitioning, or the establishing of private property. To be sure, the "land grabs" will continue. All major transformations will now play out on a planetary scale. One such, as aforementioned, is the intensified use of the most productive soils and the increased exploitation of the Earth. The aim, since the industrial revolution, has been to subordinate the surface of the planet to the needs of a now synthetic society. This aim required a shift that entailed the commercialization not only of the soil but of the Earth itself. In return, making the Earth into a market has implied a shift to intensive technological models and a new cycle of "grabbing" and monopolizing still available lands. But this new cycle of land grabs is warranted only insofar as the lands thus taken are repositories of the living. Jurisdiction

over the land therefore remains significant. But it is jurisdiction over the living that will come to govern all forms of final possession. The living and not only ground will now determine the order of property and law. "Seizing the living" (or "life grabs") is our great historical event, and the conflict between public power, private property, and the in-common will play out around it.

Added to this terrestrial and maritime existence, there is another, a pluriscalar existence, by means of screens. With this "third existence" another nomos of the Earth is being delineated. The Earth is no longer solely captured and measured by the consciousness of European peoples alone. This does not mean that Europe no longer exerts an influence over the course of the world, or that it must be reckoned without. But no longer can it entertain the illusion that it, and it alone, can dictate its course. This is true not only for the economy or military and technological power; it is also valid in the field of culture, the arts, and ideas. The danger is that this historical downgrading, this eclipse, tempts some to respond with nihilism, or ideological one-upmanship (or both), that is, with a late Eurocentrism that is even more rancid and virulent, that is even deafer and blinder and more vindictive than in the past.

Late Eurocentrism corresponds to a twofold thrust. Initially, there was the primitive Eurocentrism that accompanied the imperial conquests, military occupations, and the exploitation of colonial territories.[5] During these first "land grabs," the dream was universal domination. The "natives," "savages," and "barbarians" were pointedly stripped of all rights on the pretext that they engaged in the worship of idols, in human sacrifice, and in cannibalism. The goal was to establish a superior humanity, that of the conquerors. This latter humanity was opposed, in fact and in law, to another humanity whose paradox is that it was foreign to the human condition, that it was outside of humanity and consequently without any rights. This first Eurocentrism thus worked through dividing the species into a race of superior men and a race of "inhuman men." This division (and the entailed difference in status) was established to authorize the territorial capture of distant worlds. The resulting international order left little room for universal equal-

ity among humans. Within it, Europe constituted the Earth's center of reference.[6]

Yet China's entry into orbit spells the objective end of this illusion of supremacy.[7] The key now is to draw all the consequences. The first involves opening up new paths for art and thinking. The second consists in multiplying bridges and passages so that encounters can take place, and that together we can finally free ourselves from the univocal visions of history and, even more, from the colonial temptation always to want to hierarchize beings and things. What our times really call for is an opening onto other ways of experiencing time and space. In this era of combustion of the planet, while "radioactive contamination does not cease to continue and to extend its hold on the planet beyond national borders,"[8] it is crucial to invent different ways of living on the Earth in the hope of making this Earth a true refuge for humans and non-humans alike—for all and not just for some.

How can we fail to recall in this context that, across the Atlantic Basin from about 1619 on, the greatest obstacle to any project of common habitation of the Earth has been race? Originally, race was a merely spectral reality. It has never in essence existed as natural fact. At the beginning of the modern period, however, we discover, perhaps for the first time, that precisely as a spectral reality, this resource is inexhaustible, that it is a formidable technology of power. For this to be the case, race had to be produced, manufactured, and put into circulation. We call this historical process racialization. Racialization must be understood as the capture and conscious deployment of a set of techniques of power (legal techniques, instrumental techniques, techniques of representation, social conventions, habits, customs and habitus) that aim at producing a reality, namely race, that there is then a concerted attempt to naturalize. It was necessary to mask the *manufactured* character of race, then, so that it could be represented as a natural fact although it is not.

In the Atlantic Triangle, this production of reality according to a principle of partition, differentiation, separation, and hierarchization has been in effect since the seventeenth century.[9] Moreover, along the axis that connects Europe to Africa, Africa to the Americas, and the Americas to Europe, the so-called Age of Enlightenment culminated in the production of the

Black Codes (*Codes Noirs*). Through these codes, race—as a spectral now hypostasized category—was taken up in a number of legal devices, especially in the colonial and slave regimes.[10] These regimes created an almost timeless space in which, as a technique of power, racism—in fact a historically datable power relationship—came to be the principle and end of its own functioning.

On a legal level, the Black Codes transformed people of African descent into "Negroes," that is to say, into exploitable raw material, the material of wealth. As a product of a relationship of power and domination, "the Negro," a racialized person, is both an exchange value and a use value. The Negro has the value of a movable good or a commodity. He refers to the utility of a thing. At the same time, he is himself a creator of things and values. But unlike the proletarian, neither his labor power, nor his energy resources, nor the product of his labor, is exchanged for a wage.[11] This form of original expropriation is objectively irreducible to class alienation. It certainly shares with wage labor the fact of being an operation for the capturing of time, energy, and labor power. But it differs from it in that racial alienation is a form of *native alienation*—unquantifiable, and without objective equivalent.[12] This *alienation* adds to the capture of bodies, energies, and vital flows an original discredit and dishonor, a degradation, and a hereditary abjection that is transmitted from generation to generation and is thus unbearable by definition. It is what sociologist Orlando Patterson refers to as "social death."[13]

That race and the principle of racial hierarchy have been privileged motors of colonial thought is beyond doubt.[14] But colonial thinking, it must be said, does not encapsulate all of European thinking, the core of which has over the centuries developed the terms of its own repudiation. By colonial thinking, we must therefore understand all the techniques and sciences, myths, knowledge and know-how that, since the fifteenth century, have made possible the destruction of the conditions for life's renewal on Earth. Moreover, for over nearly four centuries now, the deployment of this assembly (myths, sciences, technology, knowledge, and know-how) has led to a profound destabilization of many remote societies as well as of natural processes in general.[15] Notwithstanding, the colonial gesture fundamentally

refers to the capture of forces and autonomous bodies, of vital flows that are split up, expended, recoded (racialization) so as to transform them into immediate energy able to be manipulated, sold, and bought.

Thus understood, colonial thinking has as a major characteristic the place it gives to abstraction. Indeed, from the colonial viewpoint, to know something did not necessarily amount to a *sojourn among* things themselves, and even less among Others. For the most part, colonial knowledge has been about giving form to and quantifying relations of distance—relations of distance between units seized in isolation; units held separate from one another in what Bartoli and Gosselin, writing in another context, call "a relation of reciprocal distance." This capacity to give form to, codify, and institutionalize relations of separation is not simply a construct of the mind. In many cases, it has led to the destruction of the conditions of sensible experience, which, as we realize better today, is absolutely necessary for any ethics of co-habitation, whether it is a matter of coexistence among humans or among species.

Close to techniques and sciences, there is the functioning of infrastructures such as *race*. For who can deny that colonial racism has been consubstantial with liberalism, and that racial violence has been necessary to constituting the world order?[16] Who can deny the role that race plays in the dynamics of global dispossession and exploitation, and in the mechanisms of power and social institution in Western societies?[17] Racism has also served as a pillar of capitalism, which has constantly relied for its planetary expansion on what must be called racial subsidies.[18]

Racism is also a response to European decline. This racism takes the form of a virulent, nativist Eurocentrism with an aim of eradication. Fixated on a fictitious past and oblivious to traditions of dissent in the European canon proper, it delights in a mortifying melancholy, despite the world's now needing new ways of thinking about the living.[19] Where primitive Eurocentrism sought to establish European conquest and world domination, the late Eurocentrism of the twenty-first century seeks to justify Europe's withdrawal into itself, its withdrawal from the world (*askêsis*), and its eclipse

by calling for exterminatory violence against currents of ideas that contest it.

Contrary to received wisdom, the critique of Eurocentrism and its metamorphoses is not new. In Afro-diasporic traditions in particular, this critique has crystallized around a few key concepts, notably those of abolition and decolonization, which have always been the subject of bitter debates in Afrocentrist, Afropessimist, and Afrofuturist lines of thinking. To a large extent, abolitionism does not only precede the Enlightenment but actually guarantees its universality.[20]

This vast movement of ideas, which was multinational and multiracial in nature, spanned three centuries. It prefigured what is now called "intersectionality," tying together concerns about race and gender (*the race of classes and its gender*),[21] the history of capitalism itself (*the class of races and its gender*), and universal justice.[22] It had two great moments.

The first coincided with the emerging criticism of the slave trade and the slave system in the Americas around the sixteenth century (Bartolomeo de las Casas). It reached its peak among Quakers and other Protestant dissidents and in revolutionary and anti-colonial circles between the 1770s and 1820s.[23] The peak of the anti-slavery cause was the Haitian Revolution of 1791–1804. The second wave of abolitionism ran from the 1820s to the American Civil War. It demanded an immediate end to all slavery.[24]

If the concept of abolition is opposed in principle to any regime of capture and is equivalent to a radical demand for justice against anything that jeopardizes the conditions for renewing life, the concept of anticolonialism is no less trenchant. Indeed, the anticolonial movement extends the original intuitions of the abolitionist movement. In its principle, anticolonialism aims at self-determination, that is to say the liberation of power, the power of those who, in the colonial paradigm, are reduced to a raw material.[25] Like the abolitionist project, anticolonialism seeks to reinvent the forms of the common and foster new appearances.[26]

At the time of Negritude, after the war against fascism and Hitlerism, anti-colonialism was identified with the quest for a self-founding *logos*.[27] Today, much more than a provocation, "decolonize" has become a summons, an unstoppable movement. Then as now, this quest has always carried its

own ambiguities and contradictions.[28] At once an act of defiance, a *coup de force* and a power grab, the power of self-institution, this decolonial summons, nonetheless appeals to many minds in the North and the South of our world.

the all-world

"Decolonize" is a summons of limited interest, however, if it does not lead to genuine disappropriation, just as the late Édouard Glissant had recently outlined it. Glissant spoke about the great gesture of disappropriation as the All-World. The concept of the All-World has three distinctive features. First, it stands in total rupture with all forms of closure onto a self, whether that form is territorial, national, ethno-racial, or religious in nature. Second, it is opposed to the kind of authoritarian universalism that underpinned the colonial enterprise—a universalism of conquest that sought to actualize itself not in a multiplicity of bodies and extants, but in a single body that is arbitrarily held to be the one and only truly significant body. Third, in the spirit of the All-World, the call to know is initially an invitation to emerge from willful ignorance, to discover our own limits. Above all, it is a question of learning how to be born-with-others, that is to say, how in uncompromising fashion to break the mirrors that we inevitably expect to reflect back an image of ourselves.

The world of the All-World, as Glissant conceived it, is woven and hatched from the entanglement and relations of a multiplicity of centers. For Glissant, the greatest obstacle to its advent is an ignorance so unaware of itself that it winds up turning into a pure and simple nativism trying to pass itself off as science and as universalism. The struggle against this venal form of ignorance requires that you step outside yourself and intentionally open up the possibility of multiple passages and multiple crossings. Indeed, it is the test of passage and crossing that permits us not to talk incessantly about ourselves, or about other worlds, and often in their place, as if they did not already exist for themselves, but instead to look together and eventually to see, but from several worlds each time.

The same can be said, *mutatis mutandis*, of disappropriation itself. Sharing or repairing the Earth means striving to listen, look, and see the real from several worlds and centers at once; it means reading and interpreting history on the basis of a multiplicity of archives. This project requires that a renewed critique of difference and segregation be urgently undertaken. For without this resolute critique of difference, what V. Y. Mudimbe called "the colonial library," as the cornerstone of Eurocentrism, cannot be dismantled.[29] Sharing the Earth also means learning to be born together (co-birth). Moreover, being born together is the only way to overcome the double desire, specific to colonial thinking, of abstraction and segregation—the separation of humans from one another, and of humans from other species, nature, and the multiple forces of the living.

The colonial illusion has thus come to an end. On its ashes we see new lines of thinking that are commensurate with the planet emerge in the North as well as in the South and East. Most of these lines of thinking concern not simply humans, but also the Earth, fire, air, water, and winds, in short all the living.[30] They are all anti-colonial by definition, if by "colonial" we mean a refusal to "be born together," a determination to separate, erect walls of all kinds and fortresses, to transform paths into borders, identity into an enclosure, and freedom itself into private property.[31] These anti-colonial and post-Eurocentric lines of thinking privilege not essences or compact and homogeneous blocks, but porosities. They are not tied to a nationalistic heritage. Where Eurocentrism used to cut time, space, and history into discrete elements, marked by supposedly irreducible and unassimilable differences, these lines of thinking concern entanglements.

In art, music, film, and other forms of writing, these lines of thinking are multiplying passages and building bridges. Where late Eurocentrism everywhere sees only lines of occupation, bridges that require burning, walls and prisons that need building, and points of arrival that ought always to remain unconnected to points of departure, the All-World posits that we are all traversed by multiple genealogies and wrought by sinuous and interconnected lines. We clearly bear witness today to the rise of these anti-colonial and post-Eurocentric lines of thinking, and not only in the South. Their burgeoning extends even into the heart of Europe. But at a time when peo-

ple are withdrawing into their, often fantasized, identities; at a time when conspiracy and the deliberate production of falsehood and discord reigns, this flourishing and the echo they have among the younger generations arouse anxiety, fear, and panic, especially but not only in the old centers of the world.[32]

necrosis

We come now, by way of explanation, to the new quasi-religious war gripping the planet. Waged on a global scale by the global alt-right against an assortment of real or imagined enemies (liberals, leftists, Marxists, minority activists, immigration activists, queer activists, decolonial feminists, Islamo-leftists), this war aims to subvert the very terms of reality and its modes of appearance and unveiling. Studying how it is being waged allows us to throw a raw light on some of our time's great fantasies.[33] The first is the fantasy of (en)closure and its corollary, eradicative and exterminatory violence. Fueling this desire to mete out brutality, especially on the losers, the weakest and most vulnerable among us, especially on those who were once subjugated, is the rise of theologies of necrosis. These new fables preach impossibility and incompatibility—impossible encounters, impossible sharing, in short, the impossibility of a multiplicity of worlds—and, on the contrary, everywhere display a drive for totalization.[34]

The second is the fantasy of extinction and replacement.[35] Part of a war waged by means of demonization and delegitimization, and which stages the specter of fundamentally incompatible narratives, it posits a white race under siege, threatened with extinction, a victim of pernicious counter-racism. It sees the West and "its civilization" as a full and self-sufficient body that, over the centuries, has developed out of its own fabric. This West thus owes no one any debt, let alone reparation, at all. On the other hand, it is alleged that some internal groups readily make pacts with ungrateful and malicious enemies, thus presenting serious threats from the inside.[36] Hence the obligation to engage in self-defense.[37]

The theology of necrosis used to justify this war distinguishes two antagonistic categories of human beings: the good and the bad, friends and enemies, the majority and the minority. Dualist and Manichean, it rejects outright the possibility of any common dwelling.[38] Yet, unable to be stifled, cries continue to rise to the heavens from almost everywhere in the world. The old problem of how we can grasp the singularity of others in the irreducibility of their suffering thus re-emerges with acuteness, at the same time as the planet's capture in a movement of accelerated combustion demands that a truly planetary thinking, beyond the local or regional, could not be more pressing.

Elements of this sort of global thinking can be found in the archives of the All-World. It was once customary, we may recall, for anyone who took a stance on universal struggles for equality, justice, and human emancipation to criticize racial slavery and colonialism and denounce anti-Semitism.[39] At this time, there was a concern to affirm that there were not two types of humanity. The conviction was that, though scattered to all points of the globe, the innumerable mass of the living converged on a single humanity, itself largely open to all the forces of the living.[40] In this, the neighbor—far from designating a simple relative, compatriot, or member of one's own people—was by definition someone with a human face, regardless of whether this face bore the features of one's own ethnicity, religion, or nationality.[41]

For all that, categories like freedom, otherness, universality, and the right to self-determination became, as it were, *"flesh" for all*. They acquired their political and philosophical density during the slave revolts on Haiti and in other places, during the great abolitionist campaigns of the nineteenth century, and during the anti-colonial insurrections. It was during these latter struggles that the reality of our common participation in humanity was reaffirmed. The belief was that through this "community of participation" a meaning could finally be given to the human adventure on Earth. Each face in its uniqueness could finally be preserved from inhumanity. The suffering of the vast majority of the human race could finally be brought to an end.[42]

Today, ultra-nationalism as a social force and cultural sensibility, as well as ideologies of racial supremacy, are enjoying an undeniable revival in the world. The growing xenophobic and openly racist hard right accompanying

this revival has some figures who sit in high institutions in Western democracies, allowing its influence to reach right into upper echelons of the techno-structure itself. As the environment is marked by the segregation and privatization of memory, as well as by discourses on the incommensurability and incomparability of suffering, the strictly ethical concept of the neighbor as another self no longer compels.

Thus, overlaying the idea of essential human resemblance is that of difference understood as anathema and as ban. This is what makes it so difficult to argue now that, in each of the countless places of defeat and dispossession, of trauma and abandonment, that modern history has bequeathed to us, it is, each time, the face of humanity as a whole that is being torn apart. In this context, concepts such as "humanity," "the human race," "humankind" or "the human species" are almost meaningless, though contemporary pandemics—the result of the continual combustion of the planet—do not cease to reinject them with weight and signification.

Apart from this, we are witnessing new forms of racism rise that could be described as paroxysmal, and not only in the West but also in other parts of the world. Paroxysmal racism has as a characteristic that it infiltrates in a metabolic way the operations of power, technology, culture, language, and even the atmosphere we breathe. Racism's twofold techno-algorithmic and eco-atmospheric turn increasingly makes it a lethal weapon in itself, something viral. This form of racism can be called viral because it produces an outbreak of heightened fears, including and especially the fear of extinction, which seems to have become one of the driving forces of white supremacist currents around the world. But the virulence of contemporary racism is matched only by its denial. Late Eurocentrism is a malignant form of this denial.

Effecting a spectacular reversal, this Eurocentrism blames anti-racist struggles themselves for the rise in racism. It offloads the most heinous historical crimes committed in the heart of Europe by Europe itself onto others, starting with the descendants of victims of European imperialism. This is the case of anti-Semitism. At the same time, due to the rapid process of technological escalation and the crisis of neo-liberalism, we are bearing witness to an illiberal turn in liberal democracies.

Yet, to repair the Earth we have to stay as close as we can to its remains, to its waste, to bodies in agony, and to every degraded form of the living. At a time when digital services are being generalized and humanity is being forcibly returned within the reign of nature, nation-states are not disappearing. They continue to exist, and most of them still aspire to economic, technological, military, and even demographic sovereignty. Contrary to what is often said, by no means have they been emptied of all substance. Thanks to what passes today as "globalization," they have in fact benefited from a transfusion of "substance." This "substance" is identity, and it takes a hypostasized form.

It is indeed first and foremost understood as that which does not suffer any mixture or comparison, as a substance that is incompatible with other identities. Difference is a right in the name of which everyone has to stay at home. The complete figure of every true community thus becomes the mono-ethnic community, while ecology relates to populations rooted in a territory that is passed on from generation to generation, preferably through blood ties. But this "substance" is also a pathogenic relationship to memory, including that of atrocities.

That a category of irreparable wrongs has existed in history is a truth that the modern conscience tends to forget. In principle, the authors of irreparable wrongs should be condemned to assume responsibility for them *ad aeternam*. But what happens when they are no longer alive? Do their descendants inherit the wrongs of which they were not the direct authors? What is meant by "irreparable"? Does irreparable mean that no damage, however great, can restore to the victim or his descendants what they have lost? Or that the crime is immeasurable, incalculable, inestimable, and therefore unpayable by definition? And yet, the fact that it is unpayable does not, in itself, eliminate the legitimacy, or even the necessity, of reparation. But in these conditions what does it mean in practice to ask for reparation for an irreparable crime?

Moreover, what does it mean to be guilty when no punishment allows the fault to be expiated? What is the maximum penalty for an unpayable crime? Is one guilty once and for all? Does guilt have no relation with time, to the point where, once convicted, one remains guilty in perpetuity? Are

the perpetrator and the victim linked forever? Are we to understand that once a crime has been committed, this negative bond cannot be broken, and that the perpetrator and victim cannot be untied from each other until justice is done? But what does justice, or doing justice, mean when the crime is of such immensity that no form of justice will ever be able to serve as its compensation? And if, on the other hand, one cannot inherit the crimes of one's ancestors, does that mean that only contemporaries are guilty of the crimes committed in their era? What does it mean, in this case, to be responsible for past crimes of which one was neither a direct actor, nor an immediate witness?

The truth is that most of these questions brook no answer. The temptation to offload them onto foreign or domestic scapegoats haunts many nations that have proven unable to live with such intractable dilemmas and neuroses of guilt. Yet, despite what is often said, guilt has a prominent place in efforts to right historical wrongs. Feelings of guilt can, under certain circumstances, lead not only to the recognition of wrongs, but also to an eventual healing process for the perpetrator himself. Without recognition of the damage inflicted on the victim, there can be no reparation.

However, can guilt be intergenerational, that is, transmitted from generation to generation? On another level, to what extent does the stubborn refusal to accept the wrongs of history accord with, or belong to, contemporary metamorphoses of racism? The desire to purge oneself of this feeling and the bad conscience that comes with it stands in steadfast opposition to an acceptance to live with a crime and recognize that acceptance requires a kind of work on yourself that cannot be offloaded onto scapegoats and is by definition always both insufficient and interminable. These are some of the questions that bear with unprecedented weight on contemporary consciousness.

the biotope state

Where the concepts of "people" or "nation" were tending to wither away objectively, they have suddenly received a boost. The identity state has been

redefined in two directions. First, as a *biotope* that is defended against invasive species. Second, as an immune system that is used to delimit the border between a healthy and virtuous "self," on the one hand, and a contagious "non-self" against which one must protect oneself at all costs, on the other. This line of protection is both physical and imaginary. But it is also ethnic, cultural, and racial.

Whereas *a planetary body* is gradually taking shape, the state and democracy are increasingly fulfilling imaginary functions. For all that, they will not disappear. Instead, they will appear increasingly as a base and serve as a defense against potential—real or fictitious—enemies. These enemies are not only other states, other "national populations," but also all kinds of parasites, viruses, microbes, and other bacteria. This microbial and viral turn of the nation-state operates in two directions—inwards against internal enemies and outwards against foreigners. It is dominated by the obsessive fear of civil war.

In particular, the state seems ineluctably summoned to guarantee the permanence of a social order taken as natural, in which inequality brooks no questioning, human rights are reserved for the natives, equality between men and women is replaced by the ideology of the complementarity of the sexes, and insurmountable differences oppose populations among themselves, the sexes against each other, as well as peoples and races purportedly endowed with distinct genes. The biotope state is ecofascist by definition. It is obsessed with population control and environmental control. It thrives on biological determinism and believes strongly in an unchanging social order in which hierarchies between peoples, races, ethnicities, and sexes are taken for granted.

In opposition to this biotope state, we ought to affirm the earthly community. To the technological revolution we owe the slow appearance of *a novel planetary body that opens the possibility that the Earth can be conceived anew*. This appearing constitutes the notable event of the beginning of this century. It coincides with an acceleration in the combustion of the Earth. One of the major effects of this accelerated combustion is that there is no longer an outside, nor can there be. There can be no refuge. There can be no immunity. The boundary now lies everywhere. *We will gradually shift from*

the All-World to the All-Planetary. But what exactly does this planetary body consist of?

This body is primarily a *body of risks* against which we must allegedly protect ourselves by all means. Hence the re-legitimization of sacrifice, the sacrifice of certain lives as a condition for the survival of the great number. There are all sorts of risks involved and the bulk of the work called governing now consists in their permanent evaluation in real time. Calculating risk in turn requires the deployment of a large number of devices. These devices implement a form of knowledge whose core is—from start to finish—mathematical and computer science. But both risk prevention and management require the control of, and placing of new constraints on, entire classes of populations in the name of security. This control is established via the proliferation of satellites and the generalized use of surveillance cameras, drones, and various other interconnected objects.

This body of risks is not composed of human subjects only. It is not simply a social body, at least in the classical sense of the term. It seeks to emerge as a *techno-organism*. As such, it includes non-living systems as well as all forms of life, all species and their respective environments. The human species is part of it. The individuals that compose it are, however, fundamentally decomposable. As sequences of information and data, they are redistributed inside anthropo-technical chains and reticular devices, the peculiarity of which involves reconciling technology, biology, and neuro-biology.

Here, technology does not simply aim to extend the human body through artificial instruments or tools. Nor does it go about generating behaviors. As many observers have pointed out, it aims to re-model the human being as such by submitting it to generic norms that digital technologies are used to objectify.[43] But technology is also involved in reformatting the various dimensions of existence, including the nervous system. Nature is not spared this process of artificializing of existence. Indeed, the shift strives to be all-encompassing and concerns the material, mineral, and psycho-sensorial organization of the world in its generality.

The last characteristic feature is that this planetary body also aims to be a body-in-circulation. It circulates as a language code. It is made of multiple

connections. It also appears as an automated system whose main vectors communicate with each other. This circulation is both virtual and real. It is fundamental as, due to this circulation, the general equivalence of beings is made possible, whereby each being, living or not, functions as an exchange currency in a series of multiple trade operations.

What conclusions can be drawn from these considerations? I see at least two. The first is that in our—in Africa's, in the former colonized world's—encounter with the West, we have experienced an unspeakable spoliation. Some of what was taken from us is of inestimable value and can never be returned; the losses we have suffered can never be compensated. For those who have delved into this history of expropriation without compensation, it is clear that the West owes us a debt that is by definition incalculable. Yet the West refuses to recognize this debt and its duty to make reparations for its crimes. More seriously still, the West now seeks to deny us the right to remember what happened to us at its hands, to remember what happened in our own language and in our own accents. Hence, for example, its growing hostility towards traditions of thought that have accompanied our increase in humanity as a response to the ravages of slavery, colonization, and racism.

The second is that just because what has been taken from us is incalculable, this does not mean we should not demand truth and justice. Wherever historical crimes have been committed, the truth must come first, and the duty of reparation must apply to all, without exception. However, by stigmatizing our thinking, a truth is denied, namely that all collective memories of the Earth are indispensable to the construction of a common world. In reality what is denied is the very possibility of this common world.

Indeed, there are no collective memories that hold greater weight than others. All peoples do not only have the right to memory. All collective memories have an equal right to recognition and narration. From this point of view, reparation and restitution remain a horizon that is always ahead of us. On the other hand, guilt by definition is not a negative feeling. Through the feeling of guilt, as said, a certain responsibility and, possibly, wisdom can begin. Demanding reparation for losses that are essentially incalculable also means reaffirming the duty of solidarity that binds all the collective

memories of human suffering together. It is to assert, beyond differences, even beyond singularities, the universal character of each instance of historical human suffering.

It is precisely in these terms of mutuality, solidarity, and recognition of our common vulnerability that we ought to consider the new us, or what I call the *in-common*. It is a question here of a *we* that includes human beings as well as objects, viruses, plants, animals, oceans, machines—all the forces and energies with which we must henceforth learn to live in bio-symbiosis. The politics of truth invoked here in reference to Africa is therefore not only key for the relationship between Africa and the West. It bears crucially on the future of the world and the future of living beings as a whole. Recalling this fact in no way amounts to minimizing or relativizing other instances of suffering, or implying any value scale on which historical events of different natures would rival with one another. It is simply a reminder of what it will cost for the inherited world order to be transformed for the benefit of all.[44]

conclusion

In the history of life, humanity has been a constant, sometimes blind force. It thought that it had only to conquer the power of water, wind, metals, fuels or radioactive materials to realize, once and for all, its project of universal domination. Salvation on Earth would come through the machine.

Under the leadership of the world's North, we have tirelessly sought to free ourselves from natural and organic environments instead of consciously making room for them. The West, having long ago decided to stamp a Dionysian course on its history and to drag the rest of the world along with it, is now struggling to understand the difference between the beginning and the end, the artificial, the synthetic, and the living. As a result, the world is being dragged into a vast process of cleaving (*dilaceration*) whose consequences no one can predict.

Besides the great scientific and technological conquests, pandemics, plagues, disasters and calamities have often been the most important factors in the shifting of worlds. In this sense, it must be recognized that a fundamental part of the history of the living escapes the human will. Indeed, there is not only a random part of history, but also a part of the unexpected and unforeseen that the modern consciousness finds it hard to admit. This is especially the case in this computational age.

There may not be an electronic apocalypse. But the computational world in which we are now fully absorbed, and which has the fundamental characteristic of being planetary, will not eliminate either chance events, or risks, or calamities. It will produce all kinds of them. Some will come straight from the Earth's bowels, or from beneath the seas and oceans, the beds of which are constantly being drilled, cracked, and weakened. Others will be the direct consequence of our ecocidal relationships with other species, es-

pecially the animal and organic world. Whatever the case, these calamities will each time put at stake, and, each in its own way, our existence on the planet. Some will be local, but most will have a universal expansion coefficient. In this sense, they will know no borders. The paradox, however, is that the less able borders are to protect us from plagues, the more irrepressible the desire for borders will be.

Apart from this, there is a belief today that humanity, or a part of it, will survive if it moves to another stage of its biological evolution and acquires an artificial nervous system, or if it expatriates to some exo-planet. The myth of cosmic transplantation is thus back. A part of the power politics of the great nations now bases itself on the dream of an automated organization of the world thanks to the fabrication of a new subject that would be simultaneously a physiological assembly, a synthetic and electronic assembly, and a neuro-biological assembly. Let's call it techno-libertarianism. It is not unique to the West. China has also embraced it, vertiginously, with less democracy in action.

At the same time, another paradigm of government is gradually being put in place, which can be called *government by capture*—government by the continuous capture of flows of existence. This form of government is the work of *mutant powers*. The paradigm of government by capture, in the light of which history and speech almost no longer exist, comes up against the reality of bodies of flesh and bone, of microbes, viruses, bacteria and liquids of all kinds, including blood. It comes up against the reality of a history that, today, can only be read and interpreted on the scale of mineral, climatological and geological time, of pan-cosmic time, that of the universe.

The eldest daughter of humanity and one of the oldest residents of the Earth, Africa is both *a power in reserve* and a *reserve of power*. By power, we do not mean a relationship of force, and even less the incessant movement of destruction of beings and things, but a vital force, a potential of originality, a flow of energy, and a singular capacity of resonance, resilience, and creativity. In Africa's ancient archives, in fact, dispensing power and knowing how to make an alliance with the other vital forces is the surest way to participate in the realization of the Cosmos, that is to say, in the construction of a dwelling place open to all, that *makes room* for everyone, and in which

everyone is called to become potential ancestors, segments in an uninterrupted chain of links.

Power, in this configuration, is above all a disposition. It consists in *making room* for Others, in freeing links. In this, it is a paradoxical figure of disappropriation. Weaving links requires that one renounce violence; that it be suspended, because violence is a form of inert production that condemns being to exhaustion, whereas disappropriation opens the way to regeneration. The system of becoming is based on this requirement of resonance with all of the living. It saturates human existence, giving it meaning and direction.

This requirement is based on the axiom that there is no limit to the flows of life. Life is constructed and reconstructed from the links that are constantly established between all the figures of being. What counts is that a place is made for all and that no one is excluded. It is our common participation in energies and forces with which alliances are forged, but which exceed each of us taken separately. The relationship between humans and the rest of the living world is therefore not based on a thirst for conquest and appropriation, but on the contrary on an ethic of *disappropriation*. Its fundamental aim is the multiplication of the reserves of life, the sharing of the primordial breath that unites and animates the community insofar as it is composed of the dead, the living and ancestors, of beings and things, of animals, plants, objects and spirits.

In this context, at the heart of the precariousness of life and the ever-present imminence of death, to give birth, to assemble, and to combine in a variable way different lineages and different states that are themselves translated into multiple flows and segments, is to open a horizon, to grow not from oneself but from others, and to exist as a relation. In this conception of life and the Earth, humanity does not occupy a general view from above. Life, as we saw with Amos Tutuola's *The Palm-Wine Drinkard*, consists of a dynamic of positive and often risky exposure to the unknown and the unpredictable. Finally, these archives give a central place to the principle of *animation* and the sharing of vital breath. They differ from other traditions, which, as far as they are concerned, are convinced that there is a fundamental difference between the human subject and the world around it,

between the human universe and the universe of nature and objects; or that nothing is inviolable, inalienable, or imprescriptible. Everything is an effect of power, and there is no worse event than a disarmed power.

In the Anthropocene and the era of techno-libertarianism, another existence is sought, other vital structures and other paradigms of *liberation of the living* are more needed than ever. This double moment coincides with the rise of paranoid and over-armed powers. These powers claim to abolish risk and minimize uncertainty and indeterminacy by protecting their people from all hazards and dangers. They propose a mode of existence dominated by fear, anxiety, the concern for security, and the quest for rest. Behind this quest for a stable life is actually the refusal of a mobile world and a will to preserve life, to stay alive and be biologically safe at any cost. The body that these powers seek to manufacture is a body haunted by the ever-imminent possibility of being no more. One of the properties of such a body is to refuse its imminent death, and permanently disavow its precariousness and its essential fragility.[1]

At the same time, it is a body that ceaselessly seizes the matter of the living for its sole benefit. It seeks to place itself above everything and at the center of everything, to keep the object as far away as possible from the subject, and to subdue and dominate nature through technology and machines. This body has the Earth at its entire disposal and its seek to do with the Earth what it wants. But the question today is how we are to imagine other ways of inhabiting the Earth, sharing it, repairing it, and taking care of it. It is here that African metaphysics of the link are particularly useful. It is often forgotten that ancient African societies were societies in movement, open and plural. They developed a lively awareness of the diversity of forms of the living in equal measure to the large place they made for the diversity of behaviors and the theme of singularity.

If we examine the arts and technologies of ancient African societies, we are struck by the importance that the theme of the *remaking of the world* as a permanent activity held. The quality of exchanges with the environment was one of the conditions for growth, reproduction, and fertility. The latter was not only a question of birth, but of metabolism in the most general sense of the term, that is, a thwarting of the forces of entropy and degener-

ation. The debt of life demanded an extended participation of living beings, of artifacts in action on matter and on bodies. As in the Amerindian world, there were multiple ways of being a human being or a thing in the living world or of the living.[2]

In this world, all living beings and all living forms would cease living at some point. This was held to be one of their fundamental characteristics. At the same time, all such forms were liable to harbor *animist* substances in their bosom. These substances are more or less temporarily housed there, such that life consists in their activation, distribution, and circulation within an eco-technical configuration. As for technical objects, their function is to act and interact with living beings. But they could also have a thanatogenic dimension. If one could make live, one could also make die. Diverse forces influenced the vital processes, but the latter always presented an irreducible dimension of otherness and uncertainty.

Is what is happening to us not, at least in part, the consequence of the work done over the last few centuries to untie humanity from all connections with the living world? As the human being's darkest passions are unlocked, and its bestial and viral parts are unleashed, is history not being reduced, before our very eyes, to a game of biological forces, and is the human race not being narrowed to the zoological and pathogenic part of its nature?

In these conditions, the last utopia consists in coming back to the Earth, the last name of a *we* that would include human beings as well as objects, viruses, plants, animals, oceans, machines—all the forces and energies with which we must now learn to live in *bio-symbiosis*. The greatest obstacle to the idea of a "we" is, however, racism, the ultimate neurosis of separation. As a singular form of the war of the species, racism is indeed the exact opposite of any consciousness of the common.

It must be added that in order to be truly universal, the fight against the various forms of racism must not be put at the service of the power politics of states. It must be put at the service of truth, justice, and reconciliation between all the species of the living. It is precisely in these terms of mutuality, of solidarity, of recognition of our common vulnerability that I imagine the new *we*, or what has been called the *in-common*.

notes

foreword

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