

DEGROWTH: TECHNOSCIENCE AND THE EXISTENTIAL STAKES OF A POLITICAL HERESY

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ABSTRACT: Three main questions are in order to probe the issue of degrowth. First, we have to make clear that, in the current political context, degrowth is nothing less than a complete heresy. Meadows and Whitehead are precious to specify its weak and strong concepts. On the one hand, degrowth is shown to be inevitable on a finite planet; on the other, technoscience lured by capitalism is necessarily alienating, as it prevents individuation, solidarity, and culture. Second, two forgotten political exemplifications are helpful to picture the critical practicalities: Cuba's "special period," and the Mansholt Commission. Third, the status of technoscience being, arguably, at the very core of the (obvious) vices and (alleged) virtues of the growth religion, a brief Huxleyan speculation on its axiological neutrality helps us to conclude.

KEYWORDS: Capitalism; Growth; Degrowth; Club of Rome; A.N. Whitehead; Hannah Arendt; Ivan Illich; Mansholt; Cuba

o. INTRODUCTION

To sort out complex conceptual histories, one needs to use short-cuts - but we should never forget the price to pay to obtain applicable concepts. As Whitehead wrote, we have to seek simplicity and to distrust it.¹

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¹ Alfred North Whitehead, *The Concept of Nature*: The Turner Lectures Delivered in Trinity College, November 1919, Cambridge, Cambridge University Press, 1920. Reprint: Cambridge University Press, 1964, p.163.

complete heresy. Meadows and Whitehead are precious to specify its weak and strong concepts. On the one hand, degrowth is shown to be inevitable on a finite planet; on the other, technoscience lured by capitalism is necessarily alienating, as it prevents individuation, solidarity, and culture. Second, two forgotten political exemplifications are helpful to picture the critical practicalities: Cuba's "special period," and the Mansholt Commission. Third, the status of technoscience being, arguably, at the very core of the (obvious) vices and (alleged) virtues of the growth religion, a brief Huxleyan speculation on its axiological neutrality helps us to conclude.

1. DEFINING DEMOCRACY, GROWTH, AND DEGROWTH

Experience shows that, unless the concepts of democracy and growth are clarified, even concerned citizens and scholars have difficulties to understand the stakes of degrowth. The immediate reaction is indeed, on the one hand, to argue that market democracy is the best possible political system and the only rampart against totalitarianism; and that, on the other, technoscience will, of course save us from itself and ourselves... Hence the following three brief introductory steps.

1.1. *Democracy*

The very first thing to realize is that the democratic ideal was still-born. (Never mind that Greeks themselves considered it as one of the worst political systems.) Let us focus on the Athenian Age of Pericles (462–429) —although Sparta and Lycurgus are historically and conceptually equally important— in order to contrast direct and representative democracies.²

1.1.1. What does direct democracy basically mean? Citizens themselves rule the city: "democracy is the government of the people, by the people, for the people" (Lincoln, 1863). How is this possible? Through a culture ("paideia") worthy of that name, and especially thanks to the reign of law ("eunomia"), guaranteeing that what is best for one is best for all. Three main institutions are created with that aim: the popular assembly, open to all citizens ("Ekklesia"); the senate, drawn by lot to run the daily affairs of the city ("Boule"); and the supreme court ("Heliaia"). What are the basic principles that should be enforced? On the one hand, the equality of political rights ("isonomia"); and, on the other, the equal right to address the political assemblies

² See Michel Weber, *Éduquer (à) l'anarchie. Essai sur les conséquences de la praxis philosophique*, Louvain-la-Neuve, Les Éditions Chromatika, 2008. For complementary musings on the Epic of Gilgamesh, the Laws of Hammurabi, or the Declaration of Cyrus, see Benjamin Isakhan and Stephen Stockwell (eds.), *The Secret History of Democracy*, New York, Palgrave Macmillan, 2011.

(“*isegoria*”). All citizens have the same rights, which means, in practice, that there is no limitation to the freedom of speech, and so forth.

So far so good, but who are the citizens? Citizens are males, born of Athenian parents, who did two years of military service (“*ephebeia*”). Slaves, metics,³ and aliens are excluded from citizenship and public life (“*koinonia*”), as well as women and children, who belong to the private sphere (“*oikia*”). In other words, citizens were a minority. Exact figures are not easy to guess. During the Age of Pericles, there were perhaps 50 000 citizens, 100 000 women and children, 300 000 slaves, and 50 000 metics in Athens. In practice, only 10 pc of the population did qualify to rule the city. Moreover, since it was not easy for every citizen to travel to attend the *Ekklesia*, it could be that there were rarely more than 3000 citizens to contribute to the debates. Last but not least, only the most gifted speakers could efficiently argue during these stormy meetings.

In sum, the Greek golden age invented both political freedom and political slavery. The conditions of possibility of the former do not amount only to a strong cultural context emphasizing education and leisure —all citizens could accept any political position simply because they were properly educated and had the time to do so—, they required the availability of a huge workpower, whose status got equally formalized, e.g., by Aristotle in his *Politics* (1254b16 sq.).

1.1.2. With representative democracy, the *kratos* is severed from the *demos*. A Nation-state cannot be ruled like a City, a community, or an extended family. New enlightened institutions are required; and they were created by the US-American and the French revolutions. To simplify the issue, let us claim that the equality of political rights is still foundational, but limited in practice to the plutocracy, while the right to address the political assemblies belongs now to the representatives, who are elected in order to make the voice of their base heard. It is however impossible to claim that the representatives do their jobs unless exceptional circumstances require them to do so; whether people vote or not, for whom they vote, and for what option they vote, appear more and more like shadows on Plato’s cave. To use a recent example: referendums, when they are possible, display the gap that exists between the policies that are actually enforced and the will of the people. What happens when the Danes refuse the Maastricht Treaty, and the Irish the Nice Treaty, or when the French and the Dutch refuse the European Constitution? At best, they are kindly asked to vote again.

In sum, citizens are *not* expected to rule, and they are certainly *not* informed or

³ A metic was a foreign resident of Athens, who did not have citizen rights. Aristotle was the most famous of the “*métōikos*.”

educated to. What remains of the Greek democratic ideal is the Monotheistic translation of the natural *isonomia*: the self-evident truth that “all men are created equal” (Thomas Jefferson’s *Declaration of Independence*, 1776). If they happen to have the economic means to do so, they can go wherever they please; and if they have the intellectual capacity to express themselves, they can argue for whatever politically correct claim they fancy. But all this will remain politically irrelevant.

The Greek democratic ideal was one of adulthood, duties and responsibility; the Modern ideal is one of juvenile rights and voluntary servitude. Is it not plain obvious that freedom of movement, freedom of speech, freedom of religion, etc. are useless cosmetics if the exercise of power does not belong to citizens? Of course, the life of most Westerners is more comfortable than it used to be since slaves have been swiftly replaced by thermo-machines and delocalized specialized proles. The democratic ideal has thus been betrayed twice, and the only thing that is left of it is a Manichean ideology. Either you embrace market democracy or you are evil. More than ever, it is a thoughtcrime to try to think outside of the box. And this is precisely what the concept of degrowth fosters but rarely achieves.

1.2. The issue of growth is intimately correlated with the one of progress. Here also there has been a recent major twist in the narrative.

1.2.1. Personal growth or progress is an ideal as old as humanity. It means that, if the basic or vital needs are provided, everyone is working toward his/her own individuation. This is an existential quest that involves, when pushed to the hilt, some form of asceticism taking place within a stable, or cyclic world. In other words, until the Renaissance, progress was understood only as a personal matter, not a social one. With Ficino (1482), Pico (1486), Agrippa (1510), More (1516) and their kins—who echo Aristophanes and Plato of course—, individuation gets correlated with social progress in a pantheistic atmosphere. The moral ideal of human perfectibility became political and cosmological.

1.2.2. When Luther (1517) and Calvin (1536) reform Christian monotheism, they introduce two important changes that open both the path for a renewed asceticism and for a pure, Comtian, materialism: on the one hand, the accumulation of capital is a divine sign of sorts, the tangible proof of a spiritual progress; on the other, transforming the material world is only an economic and a political goal. The thermo-industrial age will champion this narrative. Either you are a Christian and you believe in market-powered technoscience; or you are a Free-thinker and you know that democracy and

science are one.

1.3. *Degrowth*

In a nutshell, degrowth is the negation of growth, and growth is nothing short of the current political dogma. It claims that, as long as the economy is growing, society is blossoming: economic and social progress are strictly correlated. Hayek's (1944) argument for a market democracy has, however, to be understood from the perspective of the alliance sealed, in the late XVIIIth century, between capitalists and technoscientists, thanks to the availability of cheap energy. Its key is ambiguously anthropocentric: on the one hand, the goal is to make "man" the master of nature; on the other, the means used—a hybrid between the Malthusian struggle for scarce supplies and the Spencerian survival of the fittest—are seen as natural ones, whereas they constitute the retroprojection, within the natural realm, of the ethos of the industrial revolution.

Hence, degrowth either draws the conclusion of the inevitable divorce between "the market" and "democracy," or seeks to destroy that alliance to boost direct democracy. Let us specify this with the two main argumental threads available: the systemic approach and the existential one. Degrowth, like tea, can indeed be taken weak or strong—the problem being that the weakest brew is not the one most scholars think.

1.3.1. *Meadows' legacy*

Meadows' legacy offers the most well-known argument and, apparently, the strongest, not only because it is well-documented, quantified and systematized by academics from the highest ranking universities: it sprang out of the concern of industrialists themselves for the *sustainability* of their profit-making schemes. In other words, it should not come as a surprise that the latest twist the oligarchs are putting on the global political narrative should obtain such a visibility, however brief and marginal it has been.

The Club of Rome's official founding date is April 7th, 1968, the *Report* was ordered to the MIT in July 1970, and the *The Limits to Growth* was published on March 1st, 1972. The argument is simple: overpopulation and the limitation of the available natural resources will necessarily occasion the collapse of the current "market democracy." It is the product of its *Zeitgeist*, which was made of three main threads: Malthusianism, Peak-awareness, and environmentalism *lato sensu*.

First, the neo-Malthusian debate on population and environment, that was both scholarly with, e.g., Fairfield Osborn's *Our Plundered Planet* (1948), William Vogt's *Road to Survival* (1948) and Paul Ehrlich's *The Population Bomb* (1968), and also popular with

novels such as *Make Room! Make Room!* (1966), that fostered *Soylent Green* (1973), a film showing very straightforwardly the political consequences of overpopulation, green house effect and dying oceans. Could the battle to feed all of humanity really be over? Actually, as long as energy is plentiful, it is feasible to manufacture proteins for the masses. Three possibilities are available: GMO, bioreactors, and entomophagy. Primo, using the GMO technology in order, for instance, to cope with climate change, is the black mirror since Paul Berg (1972), Herbert Boyer and Stanley Cohen (1972). Whereas the first transgenic animal goes back to 1973, genetically modified plants were christened in 1983 (while conservatory measures were immediately taken with the creation of the “Nordic Gene Bank” in 1984, and intensified in 2006 with the “Svalbard Global Seed Vault”). Secundo, bioreactors are the late consequence of Miller-Urey 1953 experiment; they assemble proteins out of fungus, atmospheric elements, or whatever. LED and hydroponic agriculture belong to a parallel field. Tertio, entomophagy (see the Guangdong Entomological Institute or the PROteINSECT), is always a possibility.

Second, the idea that all resources will eventually peak is nothing but new. One usually worries about petrol, but water, rare earths etc. could become more problematic (even) faster. Anyway, although Meadows is here of course following the lead of King Hubbert (1956), let us not forget that industrial societies—or, at least, its oligarchs—had just coped at the time with peak coal, and that it happened very fast, causing, interestingly enough, the collapse of the British Empire. To clarify the time-scale: the industrial revolution really kicks in, not with James Watt’s sophistication of the steam engine (1784 and 1788), but with the generalization of the use of coal in the 1830s, that makes ironworks striving. Amazingly, the question of the depletion of coal was promptly raised (Jevons, *The Coal Question: An Inquiry Concerning the Progress of the Nation and the Probable Exhaustion of Our Coal Mines*, 1865) and it occurred equally fast: 1913 in the UK.

Third, Rachel Carson’s *Silent Spring* (1962) made clear, for those who could read of course, the biocidal dimension of market democracies. Additionally, there were landmarks such as Georgescu-Roegen’s *Entropy Law and the Economic Process* (1971), H.T. Odum, *Energy, Power and Society* (1971), and Barry Commoner, *The Closing Circle* (1971).

In sum, the argument is quite simple: there cannot be an infinite growth in a finite world. Scientific expertise and common sense are, at last, reconciled. Meadows’ own conclusion was unequivocal: either we reform the growth dogma, or we are heading for a social collapse. This meant two different things: on the one hand, capitalism aka “the market” might be in danger, or, at the very least, industrial capitalism clearly is; on the other, “democracy,” whatever that actually means in practice, will not survive

the perfect storm.

If it never deflected the incriminated policies, the Meadows report accompanied, or perhaps created, new ones. Interestingly enough, the creation of the Club of Rome and the publication of its first Report coincided indeed with the end of the Bretton Woods system (1971), the oil embargo (1973), and the official return of fascism — acclaimed by the international community— with the Pinochet coup (1973). This being said, the Meadows argument appears flawed as soon as you take a standpoint that is neither the one of the old-fashioned industrialists, or of plain common-sense. Remember that the growth in question has one pilot and one engine, and that neither are impressed by the idea of a limit. The pilot is the market, i.e., the investors. From their perspective, there is no end to the amount of money they can treasure in their bank accounts. Furthermore, the very practice of compound interest rates gives rise to a financial growth that, in turn, requires a growth in the real economy. From the perspective of the unwashed, this looks like a Ponzi scheme. Anyhow, this is why capitalists are worse than the aristocrats, who knew about the earthly limits of their greed, and usually feared its spiritual consequences. The engine is technoscience, and it does not acknowledge either a limit to its progress, or even to our world, neither the nano- nor the macro-world being finite. On the one hand, the (bio) nano-technological world (theoretically named by Feynman in 1959, then by Drexler in 1986, and practically implemented in 2000 with the work of Gardner and Collins on controllable bacteria by switch) cancels the first time this intuition of common sense. On the other, the cosmological world (the infinite universe “discovered” by Tycho Brahe in 1572, and by Galileo, roundabout 1605) is in demand for territorialization since the space conquest has become a reality (Gagarin, 1961). The calls for the terraforming of planets of the solar system, or even exoplanets (e.g., by Carl Sagan), and the colonization of the galaxy (by Stephen Hawking) has now been made, precisely in the name of our doomed world. The universe bears witness, as Neil Armstrong reminded us in July 1999, thirty years after his landing, of the infinity of opportunities.

1.3.2. *The Emersonian spirit*

If the depletion argument is weak in the sense that it can be undermined, the existential one is radical. It is quite old —say it goes back to Diogenes the Cynic— but it was applied to the consequences of the industrial revolution by figures such as Ned Ludd (1779), Emerson (1836), and Thoreau (1854). As the latter wrote, “men have become the tools of their tools,” “we do not ride on the railroad; it rides upon us.” Basically, it amounts to underline that technique, in general, and technoscience, in particular, tend to dehumanize and alienate its users. In the seventies, Illich has offered

analyses that have aged very well; *Tools for conviviality* (1973) are best introduced with the spirit of Whitehead hovering over its legacy.

The question here is, most definitively, philosophical. What are the conditions of possibility of authentic life and how are they bypassed in contemporary market democracies? Dewey would argue that anyone who is blessed with a meaningful life is necessarily living in a democracy. This claim is however not acceptable as such, because representative democracy has proven to be a bankrupt concept, while participatory democracy was historically built upon slavery. It is however possible to localize the conditions of possibility of authentic life in smaller structures: communities.⁴ Three dimensions have to be taken into account in order to think the possible socio-political landscapes. They reflect the three characteristics of the creative advance of nature, Whitehead's core idea: creativity, efficacy and vision. Whitehead argues (i) that the world of humans, as well as the natural world (there is only a difference of degree of complexity between them), is primarily a creative, eventful one; (ii) that these events take place in a context that usually bridle them, and that is always modified by them; (iii) that the interplay between creativity and contextual efficacy is orientated towards a better future because of the divine agency. There can be a creative advance only if these three conditions are fulfilled. How does this impact sociology?

1.3.2.1. The individual is without doubt the basic social component —but it is neither a static nor an immortal one. Human life, from birth to death, is a growth process that can be depicted with the concept of individuation: through life, each and every one of us seeks, willy nilly, his or her own destiny. Autonomy or independence is the key-word here; and it involves creativity and freedom.

Creativity means the irruption of the unheard, of the unexpected and the unforeseeable. When an event happens, it involves the ending of a past causal chain, and the beginning of a new one. In common philosophical parlance, creativity refers to process and becoming, and also to natality, birth, and death. Arendt's equation of the *principle of beginning* with the *principle of freedom* is straightforward. This is what Greeks

⁴ Cf. Ferdinand Tönnies's concepts in his *Gemeinschaft und Gesellschaft* (1887), that has been translated and edited by Charles P. Loomis (The Michigan State University Press, 1957). For all this, see Michel Weber, "Paradoxes et contradictions de la pensée de la décroissance," in Paul Ariès (sous la direction de), *Décroissance ou récession. Pour une décroissance de gauche*, Lyon, Éditions Parangon, 2011, pp. 83-88, and *The Political Vindication of Radical Empiricism. With Application to the Global Systemic Crisis*, Anoka, Mn., Process Century Press, 2016.

called *archein*.⁵ Here dwells the present *qua* present: “reality appears as a ceaseless upspringing of something new, which has no sooner arisen to make the present than it has already fallen back into the past.”⁶ Liberty, conceived broadly, amounts more to spontaneity than to free-choice. The point is to distinguish with Bergson liberty *qua* option-picking from liberty *qua* creation. We are free when we are creative. If freedom consists only of choosing between pre-existing alternatives, we are actually not free at all since we are strictly bound by these options. The *liberium arbitrium* is ultimately a *servum arbitrium*.

Even if the process of individuation is not encouraged or valued in a given culture, it is an inescapable fact linked with our finitude and social existence. In market democracies, however, creative autonomy is replaced by conformism. Instead of seeking to individualize themselves, to dare to be free, people nowadays have a purely opinative worldview. Plato, as usual, identified the problem, but it was left to La Boétie to pin point it (1574), and to Tocqueville to show the consequences of conformism (1835).

1.3.2.2. Although it makes sense to understand community from the perspective of the interactive aggregation of individuals in the making, the argument can be made that community always comes first, that no individual was ever born in a social vacuum (although s/he can die of course in a social void). There is no pre-social individual but one can imagine a pre-contractual one. Solidarity, or heteronomy, is what matters here, i.e., some form of efficacy and determinism.

Efficacy basically means the power of the past, the stubborn reproduction of existing patterns, of previous events. In common philosophical parlance, it refers to being. It necessitates the concepts of continuity and determinism: the efficacy of the past fosters the same patterns for ever. In other words, repetition involves blind continuity.

When solidarity breaks, as it obviously the case in market democracy, it paves the way to atomism and individualism. The trick here is to make sure that people love their individualistic servitude (La Boétie, Spinoza, Rousseau, Huxley, ...) and to blur the essential complementarity between individuation and community.

1.3.2.3. The double tension between the individual and the community, between

⁵ Hannah Arendt, *The Human Condition* [1958]. Second Edition. Introduction by Margaret Canovan, Chicago, The University of Chicago Press, 1958, p. 177; see p. 189.

⁶ Henri Bergson, *Creative Evolution* [1907], Authorized translation by Arthur Mitchell, New York, Henry Holt and Co., 1911, p. 53.

independence and interdependence, is at the root of Jamesian pluralism: there are genuine individuals endowed with an existential trajectory incommensurable with any other and, yet, they all belong to the one same community that benefits from their idiosyncrasies, reinforces them *and* bends them toward the common interest. In a nutshell: “The community stagnates without the impulse of the individual. The impulse dies away without the sympathy of the community.”⁷ A strong community requires—and fosters—strong individuals. Culture *qua* imaginary institution of society, or “*paideia*,” conditions personal growth so that it is likely to contribute to social growth—while the imaginary institution of individuals seeks to bring social progress. (Growth and progress are used here in their original existential meaning as inspired by their biological meaning. Econometrics is totally irrelevant.) There is, in other words, a *common sense* that inspires the best definition of culture: culture embodies the grand narrative that allows the merging of the conditions of possibility of individuation *and* of socialization. When a philosophical school demands renunciation of common sense, it undermines solidarity; when it doubts sense-perception, it puts a damper on individuation; and when it claims scientificity by rejecting all forms of political concern, it paves the way to the unquestioned acceptance of a big narrative that is not worthy of that name anymore. Taken together, the three requirements seal the divorce between philosophy and life and lead the philosopher to compartmentalize his professional activities.

Vision basically designates an eschatological horizon, a melioristic open trend—not a teleological one. To offer an anthropomorphic exemplification: creativity refers to natural novelty, cultural invention; efficacy to causation, i.e., the repercussion of past actions; and vision to horizon and the projection of oneself in a more or less imaginary future. In a community where a genuine vision, or culture, prevails, all citizens are animated with a sense of social duty that takes the form of a sacerdotal citizenship: the personal (spiritual) quest and the enforcement of the common good do coincide. This was at the very least plain in Athenian participatory democracy. France’s Third Republic motto—*liberté, égalité et fraternité*—and the *Bildungsroman* offer, respectively, a global and a local instance that seems more likely to be universally adopted. Culture is thus more than an Antique form of leisure—although leisure was neither idleness or

⁷ William James, *The Will to Believe, And Other Essays in Popular Philosophy*, New York, London, Bombay, and Calcuta, Longmans, Green & Co, 1897, p. 231. Dewey has also seen this very clearly, e.g., in “Creative democracy: The task before us,” in J. Boydston (Ed.), *John Dewey: The later works, 1925–1953*, Carbondale: Southern Illinois University Press, volume 14, pp. 224–230.

acedia.⁸

We have seen that creativity is wild and efficacy, blind. Only some vision can orientate the gearing of creativity and efficacy towards the best possible world. Traditionally, the political “right” insists on the individual and on the necessity to give as much elbow-room to free will as possible, whereas the “left” argues that community values should come first. The two dimensions, properly defined, are required. To sum up, culture allows individuals to be at unison within the society. It allows everyone to engage fully and responsibly with oneself and the world. To use a metaphor that has become quite common: culture factually acts in communities just as the so-called invisible hand is supposed to act in markets (Adam Smith, 1759 and 1776).

In market democracies, the complementarity between individuation and community is replaced by a synergy between, respectively, conformism and atomization. Furthermore, denizens mistake their atomization for individuation and their conformism for solidarity. This is the sure sign that culture is gone, that only a “small” narrative is at work—the one of anxiety, hate, terror... Instead of communal growth, market democracies foster thus a clone war: all denizens seek the same consumption goods through interpersonal conflict, usually symbolized (Veblen, Bourdieu). Of special interest is that chiasm, or inversion, between the two main poles: individuation is replaced by atomism, whereas solidarity is replaced by conformity. In other words, while people think they have some individuality, they are simply crippled by atomism and loneliness. They also believe they still enjoy some solidarity, but they are actually only soaked in conformal patterns of thought and behaviour.

2. POLITICS

So far, we can conclude that degrowth is likely to spring from a depletion (sudden and catastrophic, or not) of resources. The much needed political reform that should anticipate and ease the process seems improbable without such event—even though the actual quality of life in “market democracies” is extremely low if one takes into account the existential stakes: individuation and solidarity are discouraged. To put it differently: neither the basic needs (from clean air and water to creativity⁹), nor the archetypal fears (pain, suffering, solitariness, madness and death) are acknowledged. The life of man is now solitary, poor, nasty, brutish, and long.¹⁰ To compensate, market

⁸ Josef Pieper, *Muße und Kult*, München, Kösel-Verlag, 1948: *Leisure, the Basis of Culture*. Translated by Alexander Dru. With an introduction by T. S. Eliot. London: Faber and Faber, 1952.

⁹ Cf. Abraham H. Maslow, “A Theory of Human Motivation,” *Psychological Review*, 50, 1943, pp. 370-396.

¹⁰ “During the time men live without a common power to keep them all in awe, they are in that condition which is called war; and such a war, as is of every man, against every man. [...] [there is] continual fear,

democracies are not only oiled by petroleum derivatives, they are also drugged by the pharmaceutical industry, and distracted by various forms of tittytainment.¹¹

Interestingly enough, there are two important exemplifications of these much needed political anticipations. On the one hand, Cuba's "special period," (1991–2000) and, on the other, the Mansholt Commission (1972–1973).

2.1. *Democracy in special times: the Cuban factor*

Most debates on degrowth ignore, or choose to ignore, Cuba's "periodo especial," although it provides extremely potent clues on the contingencies involved. Why? Because, according to the current vulgate in the international community, i.e., the NATO sphere, Cuba's grassroots democracy, or revolutionary democracy, is an appalling tyranny that, by definition, cannot teach us anything besides the nuisance of ideology. (The implicit equation between ideology and leftist agenda is usually not addressed, whereas the equation between liberalism and science is always explicitly claimed.) On the contrary, it is easy to show that Cuba's experience is highly relevant.

The facts are simple: after the fall of Berlin's wall (1989), the USSR and the Comecon were dissolved (1991), thereby depriving Cuba, almost overnight, of both its main imports and exports. Following the termination of the Comecon's support, the Cuban economy shrank and the quality of life indicators were greatly affected; starvation was looming and the independence of the country threatened. Even Davidoff products made in Cuba were officially discontinued in 1991. Of the greatest concern at the time was the availability of oil and of its derivatives. Fossil fuels are not only needed for transportation, the production of electricity, petrochemistry (e.g., plastics) and heating/cooling devices; they are essential for agriculture, that requires tractors and harvesters, powered by oil, and fertilizers and pesticides, synthesized from oil. Food shortages and power outages (that could initially last up to sixteen hours) were especially problematic. Starvation was avoided, but not persistent hunger, or malnutrition in children under five.

In other words, the disappearance of the USSR perfectly mimicked peak oil, paralyzing the entire Cuban economy. Without strong political measures, famine, riots and perhaps even a civil war was inevitable —as it has always been in the human history. Moreover, the USAmerican economic sanctions (1960–), that have caused major difficulties in the life of the Republic since the revolution (1959), were

and danger of violent death; and the life of man [is] solitary, poor, nasty, brutish, and short." (Hobbes, *Leviathan* [1651], Oxford UP, 1996, p. 84)

¹¹ This is Zbigniew Brzezinski's 1995 concept, taking into account Jeremy Rifkin's concern expressed in *The End of Work. The decline of the global labor force and the dawn of the Post-market era*, New York, Putnam, 1995.

aggravated, in March 1996, by the Helms-Burton Act, that imposed further penalties on foreign companies doing business in Cuba. The extraterritoriality and the retroactivity (*ex post facto* law) of the USAmerican law are sure signs of its imperialism. The Helms-Burton Act was actually a landmark: the law was deemed applicable everywhere in the world, and to everybody (not only in the USA and to USAmerican citizens and corporations). Moreover, it made acts that took place *before* the law was adopted, illegal! It is unclear what was thereafter left of the foundation of law in general, and of the international order in particular.

Anyway, despite all these events, the country survived. How, and at what price? Basically thanks to its strong government, and to its capacity to communicate meaningfully with its citizens. If the threat is clearly identified, and the strategy to cope with it not only rational but reasonable, most responsible adults do choose to actively cope with the challenge. Of course, in societies where the threat is hidden, where anxiety is engineered, where citizens are systematically infantilized, none of this is possible. Let us pinpoint three specifications.

First, it would have been impossible to deal with the “peak” without a centralized policy involving the relocalization of production when possible, urban permaculture, and innovative modes of mass transit. On the one hand, bicycles were distributed, camel bus-trailers and horse-drawn taxis were created. On the other, organic urban agriculture (“organopónicos”) was developed, first thanks to the local expertise, and later with the help of Australian permaculturists.

Second, that centralization was not total: Cubans realized that they “must decentralize only up to a point where control is not lost, and centralize only up to a point where initiative is not killed.”¹²

Third, Cuban culture made the transition feasible. What are its main threads? A strong political vision that fosters the common good. The constant pressure of the US sanctions and the danger of a remotely controlled coup. (U.S. governments have never stopped sanctioning, even embargoing Cuba; invasion was always an option, just like the assassination of political figures such as Fidel Castro.) The solidarity of the Cuban people; its public-spiritedness. The existence of a social security worthy of that name, involving free health care and free education for all. Of course, the social ceiling has always been pretty low by Western standards—but its social floor has also remained exceptionally high given the circumstances. Hence people accept to fight within, and even for, a system that brings them security and meaning.

¹² Eugenio Fuster Chepe, “Diseño de la Agricultura Urbana Cubana,” *Agricultura Orgánica* 12, no. 2 (2006), 6, quoted by Sinan Koont, “The Urban Agriculture of Havana,” monthlyreview.org/2009/01/01/the-urban-agriculture-of-havana/.

Despite all the achievements of these policies, the “special period” ended only with the new synergies made possible by the Chavez presidency (1999–2013) —one of his main capital sins— and especially by the creation of the Alba (2004–). Whatever your political inclination, the conclusion is, however, straightforward: on the one hand, Western-style democracies cannot survive peak oil. This was immediately foreseen by scholars such as Heilbroner: the transition to economic decline needs a highly authoritarian regime to avoid a complete civilizational collapse.¹³ On the other, it is not because the standard of living drops that the actual quality of life is aggravated. Econometrics does not measure the counterbalance that exists between needs, desires and fears.

2.2. *Europe: the Mansholt Commission*

Ignoring the Cuban venture is unforgivable in political philosophy, especially if degrowth matters. But there is a second event that has also become, over the years, totally invisible, and that equally needs more scholarly interest: the political development of the late Sicco Mansholt (1908–1995), who was the fourth President of the European Commission (1972–1973). Some research is needed in order to sort his biographical imprecisions, contradictions and apparent ambiguities, and to understand his post-Commission agenda. For instance, he claimed in 1974 that he was going to work hard during the rest of his life to promote degrowth and to battle the economists toe to toe, and he basically disappeared of the political scene after his nine months tenure.¹⁴

Mansholt’s political life has been triple, with two main watersheds: in the years 1945–1958, he was minister of Agriculture, Fishery and Food Distribution in the Netherlands; in 1958–1972 he was European Commissioner for Agriculture; and in 1972–1973, he was, during nine months, the fourth President of the European Commission. The breaking points were: the second World War, during which he joined the Resistance; and, end of December 1971, the reading an advance copy of the Meadows report. Between 1945 and 1971, he considered that agriculture cannot avoid high productivity and intensive farming. Hence his expansionist agricultural policy

¹³ Robert Heilbroner, *An Inquiry into the Human Prospect*, New York, W. W. Norton & Company, Inc., 1974.

¹⁴ His biography is made of interviews weaved by Delaunay, who has also worked on the Meadows report: Sicco Mansholt, *La Crise, Conversations avec Janine Delaunay*, Paris, Éditions Stock, 1974 (see, for instance, p. 125); cf. Donella H. Meadows *et al.*, *Halte à la croissance? Enquête sur le Club de Rome & Rapport sur les limites de la croissance*. Préface de Robert Lattes, Paris, Librairie Arthème Fayard, Écologie, 1972. Besides, Mansholt adopted the use of French at the Commission because it allowed him more freedom of speech during negotiations: when there was a disagreement, he could always claim, this time in English; “well, this is not exactly what I meant...”

pushing for the modernization and consolidation of farms.

After 1972, he argued, on the contrary, that agriculture should go back to its roots, so to speak. That poisoning the Earth and its inhabitants does little to improve their lives. In January 1972, Goldsmith had published his *Blueprint for survival*, and in February, Mansholt wrote a letter to Franco Maria Malfatti, who was the third President of the Commission. He argued that growth is not an option anymore: European economies were, as a matter of fact, already slowing down (the exceptional growth of the Glorious Thirty was of course due to exceptional circumstances); that this outcome is inevitable in light of the data gathered by the Meadows Report; and that this impending crisis is welcome since it will oblige us to go beyond the contradictions and shortcuts of capitalism. He added with a sense of urgency that “as State socialism, etc. do not provide the solution, [...]. I shall consider only two aspects of the problem: 1. A rigorously planned economy which would ensure that for each person the minimum requirements for existence are met. 2. A nonpolluting production system and the creation of a recycling economy.”¹⁵ Instead of blindly relying upon the Gross National Product to assess the state of an economy, Mansholt proposed using the Gross National Happiness, an idea that seems to have been picked only by the King of Bhutan. The consumption of material goods needs to be drastically curtailed and replaced by cultural goods (culture, happiness, well-being...). Programed obsolescence, and all other forms of waste, need to be dissuaded. Transforming the existing system will not do; a revolution is urgent: it's not even about zero growth, but degrowth, or growth below zero as it is too often pictured. In addition, Mansholt was especially critical of mixed economy, which is a hybrid of market economy with planned economy. Although nothing beats a rigorously planned economy, even a market freed of all state interventionism would be better. Mansholt also praises Allende's reforms, considering that his leadership is superior to Tito. Unfortunately, it is unclear how he saw the Cuban democracy.

When the letter to Malfatti was made public in France in the context of local elections, he found against him all politicians, from the right to the left of the spectrum. President Georges Pompidou, Raymond Barre (who had translated Hayek), and Valéry Giscard d'Estaing (who refused to become “objecteur de croissance”) were eager to denounce the heresy—but so was Georges Marchais, who was at the head of the communist party. A society of scarcity and rationing, as well as the sharp decline in the standards of living, was totally unacceptable, even for the men behind the Club of Rome, such as Alexander King.

¹⁵ Letter of Feb., 9th, 1972, p. 5 —archived at the International Institute of Social History, Amsterdam.

In June 1972, a bifurcation occurred between, on the one hand, those who nevertheless sought to promote degrowth, and, on the other, those who were trying to nip the degrowth heresy in the bud. On the one hand, a United Nations Conference on the Human Environment was held in Stockholm, from June 5–16 in 1972. It fostered ideas such as environmental management, the need to assist developing countries (while officially condemning colonialism), the necessity to eliminate weapons of mass destruction, etc. In sum, it paved the way to the Brundtland Commission Report (1983) and the now (in-)famous *Our Common Future* (1987), that substituted the rhetorics of “sustainable development,” or “socially inclusive and environmentally sustainable economic growth,” for common sense and the practicalities of “degrowth.” On the other, the weekly French news magazine *Le Nouvel Observateur* organized at the same time, the 13th of June 1972, a conference about the Meadows Report. Its conclusions can be found in its special issue “Earth’s last chance.”¹⁶ On that occasion, Mansholt and Gorz seriously questioned the future of capitalism in a non-growing economy. Mansholt wanted to tax polluting industrial processes and products. Gorz, who used at this meeting the word “décroissance” for the first time, is likely to have coined the term in the economic context. Their point was not a blind opposition to progress, but an opposition to blind progress.

In conclusion, Mansholt’s epiphany is quite exceptional for three main reasons.

First, he understood very clearly that the entire political system needed to be deeply and rapidly changed. An “ecological Europe” was necessary: “either we work in that direction or we prepare to die.”¹⁷ Meadows does not reveal anything new, he quantifies and systematizes common sense. It brings proofs. This political necessity should be clear to everyone, especially to farmers. Mansholt, who comes from a farming family, always knew the stakes, but he was obviously for a long time seduced by the promises of technoscience. He knew that using arsenic and mercury to treat the soil makes no sense whatsoever, but he nevertheless did. He moreover insists that there is no strict correlation between the growth of the economy and the growth of happiness.

Second, he was in a position that allowed him to make his argument heard. There is no need to claim that he could actually have changed much of the “market democracy,” but simply informing citizens about our predicament could have made a huge difference. After all, sometimes even dogmas are reformed, abandoned to

¹⁶ “La Dernière chance de la Terre,” *Le Nouvel Observateur*, Numéro Hors série, juin/juillet 1972

¹⁷ “L’Europe écologique est devenue une nécessité. [...] Il s’agit de la plus réaliste des prises de position: il faut la comprendre ou se préparer à mourir.” (Sicco Mansholt, “Le chemin du bonheur,” entretien réalisé par Josette Alia, *Le Nouvel Observateur*, 12-18 juin 1972, pp. 71-88, p. 71)

destroyed. Of course, Europe cannot be severed from its geographical surroundings: it is the entire world that needs to follow new rules of development. This is a task for a titan.

Third, it appears that his brief political activities in the degrowth field were without serious consequences whatsoever. Mansholt knew that degrowth was extremely difficult to sell politically, but was nevertheless convinced that, sooner or later, it will happen.¹⁸

3. THE FUTURE OF TECHNOLOGY

Everyone disapproved of the anti-economic growth argument of Mansholt. And indeed we are at pains to conceive another world, one in which the alliance between market democracy and technoscience would be revoked, one in which our comfortable alienation would be replaced by an inconvenient freedom.

In order to obtain a more balanced view of technoscience, one needs eventually to question anew its pilot. It is not far-fetched to claim that technoscience has never known any other pilot than capitalism. To secure the concept, it is enough to define the birth of technoscience with the industrial revolution. In practice, this means that the axiological neutrality of technoscience is preserved, as well as the possibility of another pilot. By way of illustration, we now contrast two major novels of Huxley. *Brave New World* (published in 1932; hereafter BNW)¹⁹ perfectly exemplifies the destructive-eliminative postmodernity that is at our doors; while *Island* (published in 1962) beautifully suggests the main features of a constructive-inclusive postmodernity that could install *the best of all worlds*. Four steps are expedient to sketch the two possible futures. We use the same pattern to display a contrast that makes clear that the difference between the two “utopias” is very thin. An important difference lies in the way hypnosis and eugenics (that were heavily impacting Western culture during Huxley's lifetime) are respectively put into motion: they both share a huge destroying potential as well as a remarkable civilizational one.²⁰ Besides, the respective cores are

¹⁸ Sicco Mansholt, “Le chemin du bonheur,” entretien réalisé par Josette Alia, *Le Nouvel Observateur*, 12-18 juin 1972, pp. 71-88.

¹⁹ Aldous Leonard Huxley, *Brave New World* [1932]. With an introduction by David Bradshaw, Hammersmith, HarperCollins, 1994. See my “Perennial Truth and Perpetual Perishing. A. Huxley's Worldview in the Light of A. N. Whitehead's Process Philosophy of Time,” in Bernfried Nügel, Uwe Rasch and Gerhard Wagner (eds), *Aldous Huxley, Man of Letters: Thinker, Critic and Artist*, Proceedings of the Third International Aldous Huxley Symposium Riga 2004, Münster, LIT, “Human Potentialities,” Band 9, 2007, pp. 31-45.

²⁰ “Eugenics” was labelled by Francis Galton in 1883; it describes any program that attempts to improve human genetic stock —either by limiting the procreation of those with so-called “undesirable/unfavourable” genetic qualities; and/or by encouraging those with “desirable/favourable”

transparent: on the one hand, technoscience is piloted by the market, and the World State is the late outcome of the rule of multinationals; on the other hand, technoscience is piloted by Tantra Buddhism —and so it appears that, properly bridled, technoscience has a role to play in communal life.

3.1. *The Dystopia of the World State*

The four relevant steps to sketch the “ultramodern” landscape *Brave New World* creates are its motto, mass-productivism and mass-consumerism, and the “savage” contrast.

First, the **motto** of the World State: “Community, Identity, Stability.” Community basically means conformism and social utility: “Everyone belongs to everyone else” (BNW 38). Identity is the main keyword: thanks to the bio- and emotional-engineering, each citizen is confined within a very precise social loop; there is (almost—depending on the grade) no elbow-room given to individual action. Stability is the *sine qua non* of civilization; total order is guaranteed by water-tight structures. Even science has to be carefully monitored. Stability is the highest social virtue because it leads to lasting happiness.

Uphill we find three major tools that seal the total order of **mass-production**. Human beings are simple instruments for engineers that have been themselves duly programmed. Everything being artificial, everything belongs to the economic realm: “a love of nature keeps no factory busy” (BNW 19). Eugenics has here two guises: bio-engineering and contraception. Eupaedia means emotional-engineering (hypnopaedia) and (subliminal) conditioning. Soma is the omnipotent drug: besides all sorts of surrogates, omnipresent music, tap-tv, feelies (tactile talkies) and other overwhelming “presences,” the state drug provides peace *ad libitum*—from a punctual stress-relief to a longer “soma-holiday” from reality. Even first-hand religious experiences are destroyed/conditioned (to suppress unwelcome emotions)

Downhill, we find **mass-consumption** and its three major products (obedient consumption, feverish ignorance and mindless promiscuity). Human beings are totally infantilized and thereby made “happy”: they get what they want and want only what

traits to breed. A “weak” (and the quotation marks matter) form of eugenism has been first systematically put into practice by the efficient and democratic American government (in 1896, in the State of Connecticut; outside of any legal frame, it actually occurred *as well* in Switzerland in the years 1880-1890). The “stronger” form of eugenism, concentration camps, was actually instituted during the Boer War (1899-1902) —the Last of the Gentleman’s Wars, as they say— by the very creative Lord Herbert Kitchener (1851-1916), the hero who died stoically with his ship when torpedoed during the first World War. It was designed to complement ideally his scorched-earth policy. Needless to say that reliable statistics are quite scarce here.

they can get; they *love* their servitude.

At the **edges** of this sterilised and sterile paradise, one finds (i) islands populated with “alpha misfits” and, especially, (ii) savage reservations, where marriage, natural birth, family life and religion are still in use.

3.2. *The Utopia of the Kingdom of Pala*

Island is Huxley’s last novel (his last publication being *Literature and Science*, 1963—where he pleads for a rapprochement between literature and science). Let us go through the four steps again.

First, a **specular motto** can be spelled with the same categories. Community now means that everyone and everything belongs to everyone and everything else but not in the utilitarian way. “Elementary ecology leads straight to elementary Buddhism” — and vice-versa. No means but only ends—the ultimate one being the fundamental global harmony. Identity refers to true individuals; maximum elbow room is provided for each person to find peace; however, no complete adjustment is expected: even in a sane society, this would not be sound. Stability names peacefulness harmony, perfectly indifferent transience.

Uphill, we find a **scientific culture of awareness**: both Western science and Buddhist culture contribute to awareness through birth control to avoid Malthusian explosion of misery (viz contraception, artificial insemination and the yoga of love), holistic education (on all fronts, verbal and non-verbal, prevention and cure...), hypnosis (“psychological facts of applied metaphysics”) and spiritual exercises. The State also provides a potent medicine —moshka— as a way of liberation from the prison of yourself and of encounter with the Ultimate.

Downhill, there is a **holistic culture of awareness**: the goal is to provide the possibility to everyone to become a genuine human being. Happiness here means awareness, spiritual growth, liberation, not the satisfaction of bodily desires.

At the **edges** of this utopic kingdom, we find the international community, as Huxley knew it in 1962: mass consumption (e.g., oil-guzzling transport), mass communication, mass advertising, opiates, tv. In sum: militarism, ignorance and breeding. Interestingly enough, Pala could be heuristically mapped to Bhutan, a small kingdom that uses Mansholt’s Gross National Happiness and where Vajrayana Buddhism pilots technoscience. Those who claim that Cuba is totalitarian should inquire about Bhutan.

CONCLUSION

The issue of degrowth is extremely peculiar for three main reasons.

First, it has the status of a heresy and, as such, the question it raises does not even deserve to be discussed in mainstream political debates. Who wants to go back to the Middle Ages? Who can deny that science will conquer darkness? Or that only free markets allow true democratic governance?

Second, the exemplifications that can be invoked are, by definition, suspect. Meadows' data are now obsolete. Illich was a useless utopian. Whitehead was himself extremely shy in politics. Castro has nothing of a visionary, and everything of a tyrant. It is not by chance that Mansholt is totally forgotten, even in Brussels.

Third, technoscience springs from presuppositions and methodologies that are objective. The synergies that are more and more enforced with financial and industrial capitalism do not, and cannot, tarnish its reputation.

Questioning all this amounts to sending sacred cows to the slaughter. The worst being, so to speak, that no highly complex argument is actually needed to deconstruct growth. A slightly sophisticated form of common sense amply suffices. Meadows, read in light of (e.g.) Illich is irrefutable. The experience of Cuba and Mansholt speak for themselves. The possibility of installing a new driver in the technoscientific device, or to let scientists and scholars go back to their dispassionate quest without any interference whatsoever, throws dramatic light on our current predicament. Now, from a Greek perspective, a common-sensical approach to problems is nothing else than the marrow of politics. By definition, politics is what all citizens could—and should—appropriate. If the answer is that common-sense is irrelevant to assess the political and ethical consequences of technoscientific capitalism, that only specialists can speak, we live *ipso facto* in a technocracy of sorts, certainly not in a democracy, representational or not. (The current use of philosophers to manage deontological issues adds a considerable amount of spice to this evidence, because philosophers are—by definition—no experts.)

The need to put the neoliberal fraud into liquidation is more urgent than ever, and perhaps that the only ones who could take up the gauntlet are academics themselves. In Whiteheadian terms, we need the return of duty and reverence. Klemperer, a German Jew who survived the Nazi regime because of his marriage with an “Aryan,” provides a helpful testimony. He has described in detail how the German people had been lured into Nazi totalitarianism by the manipulation of words, propositions, symbols, patterns of thought, and the like. In a nutshell, his interpretation is the following: on the one hand, Klemperer is full of commiseration for the suffering of the German people, and does not condemn them, not even for the fate of the Jews after

1933; on the other hand, he has a deep grudge against the German intelligentsia, that had access to all the relevant data, and were endowed with all the intellectual tools required to understand the storm ahead... If often they simply did nothing, neither taking part nor resisting, sometimes they welcomed it warmly. They are the actual responsible for the cultural collapse orchestrated by Goebbels.²¹

And as long as you do not have the wisdom to understand *die to become*, you will only be a sad guest on this dark earth.²²

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²¹ Klemperer wrote in his August 16, 1936 *Tagebücher's* entry: "If one day the situation was reversed and the fate of the vanquished lay in my hands, then I would let all the ordinary folk go and even some of the leaders, who might perhaps after all have had honourable intentions and not known what they were doing. But I would have all the intellectuals strung up, and the professors three feet higher than the rest; they would be left hanging from the lamp posts for as long as was compatible with hygiene." (*Ich will Zeugnis ablegen bis zum letzten: Tagebücher 1933–1941*, Berlin, Aufbau Taschenbuch Verlag, 1999, p. 126) See Omer Bartov, *Germany's War and the Holocaust. Disputed Histories*, Ithaca, New York, Cornell University Press, 2003, pp. 192 sq. The original reads: "Wenn es einmal anders käme und das Schicksal der Besiegten läge in meiner Hand, so ließe ich alles Volk laufen und sogar etliche von den Führern, die es vielleicht doch ehrlich gemeint haben könnten und nicht wußten, was sie taten. Aber die Intellektuellen ließe ich alle aufhängen, und die Professoren einen Meter höher als die andern; sie müßten an den Laternen hängen bleiben, solange es sich irgend mit der Hygiene vertrüge."

²² "Und so lang' du das nicht hast,

Dieses : Stirb und werde !

Bist du nur ein trüber Gast

Auf der dunklen Erde." (Goethe, "Selige Sehnsucht," 1814, in *West-östlichen Divan*, 1819)