

# Degrowth, or deconstruction of the economy: Towards a sustainable world

*Enrique Leff*

## *The degrowth wager*

The 1960s were a period of turbulence in the modern world. At the same time as emancipatory and countercultural movements (labour, youth, students, gender) irrupted, an alarmist discourse emerged that warned of the ‘detonation’ of a so-called ‘population bomb’, and suggested that rapid demographic growth was the main cause of the ecological crisis. For the first time since a nascent capitalism in the Renaissance set in motion the machinery of production and market mechanisms, since the West had opened history to a modernity guided by the ideals of freedom and enlightened reason, one of the pillars of Western civilisation cracked: the myth of progress impelled by the power of science and technology, converted into the most servile – and servicable – tools of capital accumulation, and of unlimited economic growth.

The environmental crisis thus questioned some of our most ingrained beliefs: not only human supremacy over all other creatures on the planet and the right to dominate and exploit nature for the profit of ‘man’, but the very meaning of human existence, grounded in economic growth and technological progress. This progress was forged



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in economic rationality, shaped by the tools of classical science, and set up a structure, a model, that established the conditions for a notion that progress was no longer based on the co-evolution of cultures with their environments, but on an economic development based on a mode of production that carried in its genetic code an imperative of growth – of limitless growth!

The pioneers of the bio- and ecological economy raised the problem of the relationship between economic process and the degradation of nature, the necessity of internalising ecological costs and deploying distributive countermeasures to the market's unbalanced machinations. In 1972, a study by MIT and the Club of Rome for the first time highlighted the *Limits to Growth*. This is where proposals for 'zero growth' and a 'steady-state economy' first appeared. At the same time, Georgescu-Roegen (1971) established the fundamental link between economic growth and natural limits in his book, *The Entropy Law and the Economic Process*. The process of production generated by the economic rationality that nests in the machinery of the Industrial Revolution is defined by an impulse to grow or die (unlike living beings, who are born, develop and die, and human populations, which usually stabilise their growth). Economic growth, industrial metabolism and exosomatic consumption imply a permanently growing consumption of nature (matter and energy), which not only runs up against the limits of the planet's resources, but also becomes degraded in the process of production and consumption, following the second law of thermodynamics.

More than four decades after the eye-opening book *Silent Spring* by Rachel Carson

(1962) on the effects of the insecticide DDT, ecological destruction has increased dramatically, accentuating global warming caused by greenhouse gases and by the inescapable laws of thermodynamics, which have set in motion the planet's entropic death. The remedies generated by critical thought and technological ingenuity have been shown to be hard to integrate into the economic system. Sustainable development has been shown to be short-lived, because it is not ecologically sustainable (Park et al. 2008).

In its globalising drive, the economic system has continued to obscure the fundamental problem. Thus, rather than internalising the ecological conditions for genuinely sustainable development, the geopolitics of 'sustainable development' ended up commodifying nature and over-economising the world: 'mechanisms' for 'clean development' were put in place, alongside economic instruments for environmental management that have gone a long way towards establishing (private) property rights over and the monetary value of environmental goods and services (Brand/Görg 2008). Free nature and natural commons (water, oil) have been progressively privatised, while an entire market has been created around buying and selling pollution rights (carbon trading) and giving a price to nature (carbon offsetting).

Today, confronted with the failure of all efforts to mitigate global warming, awareness of the limits to growth returns and, with it, a clamour for degrowth. The degrowth wager is not a merely critical and reactive moral position; resistance to an oppressive, destructive, unequal and unfair power structure; a manifestation of alternative beliefs, tastes and lifestyles. Degrowth

is more than a simple loss of faith, it is the active awareness of the existence of a force right at the heart of the civilising process that puts the quality of human life and life on the planet as a whole at risk. The call for degrowth should not be a rhetorical recourse in the arsenal of the critique of the present model's unsustainability, it must be grounded in solid theoretical argument and political strategy.

The call for degrowth is not a mere ideological slogan against a myth, a *mot d'ordre* to mobilise society against the evils of growth, or its deadly conclusion. It is not a counter-order that flees from growth, in the way the hippies could extract themselves from dominant culture, nor a celebration of communities marginalised by 'development'. Today, not even the most isolated indigenous cultures are safe from or can unlink themselves from the effects of a globalisation driven forward by the engine of economic growth. But how to defuse growth in a process that has in its original structure and genetic code a force that impels it to grow or die? How to do it without generating an economic recession with disastrous social and environmental consequences on a planetary scale? For if the economy itself, through its internal crises, cannot arrive at the level of growth desired by heads of state and entrepreneurs, then to deliberately brake growth would amount to willingly kicking off a crisis with incalculable effects. It is for this reason that we must think not only about degrowth, but also about a transition towards a sustainable economy. The latter must be more than a mere ecologisation of existing economic rationality, it has to be another economy, grounded in other productive principles. Degrowth thus implies a deconstruction of the economy, together

with the construction of today's productive rationality (Leff 1995).

Degrowth implies not only downshifting or unlinking from the economy. It is not synonymous with de-materialising production, since that would not prevent a growing economy from going on consuming and transforming nature until it reaches the very limits of the planet's own sustainability. Abstinence and frugality on the part of some responsible consumers do not defuse the mania for growth at the centre of economic rationality, which has inscribed in itself the impulse towards capital accumulation, economies of scale, urban agglomeration, globalisation of the market and concentration of wealth. To jump from a moving train is not to change track. Degrowth does not entail moving down in the economy's wheel of fortune – it is not enough to wish to make it smaller or to stop it. Beyond the refusal of the commodification of nature, it is necessary to deconstruct the economy.

### *From degrowth to deconstruction*

The economic strategy that purports to contain the overflowing of nature by constraining it in the cage of modern rationality, restraining it within economic instruments and market mechanisms, submitting it to dominant forms of calculation and valuation, has failed. From anxiety in the face of ecological disaster and disbelief in the efficacy and morality of the capitalist market, the restlessness that demands degrowth is born. However, the solution to the problem of growth is not degrowth, but the deconstruction of the economy and the transition towards a new rationality that can guide the construction of sustainability.

The deconstruction of the economy implies more than a mental exercise in order to unravel and identify the ideas and social forces that came together in giving birth to the modern economy, daughter of the Enlightenment and of the commercial exchanges of nascent capitalism. It entails a much more complex philosophical, political and social exercise. The economy exists not only as theory, as supposed science. The economy is a rationality – a form of interpreting and acting in the world – that has become institutionalised and incorporated into our subjectivity. The drive for ‘having’, ‘controlling’, ‘accumulating’ is in itself a reflection of a subjectivity constituted within modernity’s rationality and economic structure.

Deconstructing the unsustainable economy means questioning the thought, science, technology and institutions that create the cage of rationality of modernity. Economic rationality is not merely a superstructure to be investigated and deconstructed in thought, it is a mode of production of knowledges and commodities. It is the nature-swallowing monster whose jaws exhale Faustian fumes into the atmosphere, contaminating the environment and warming the planet.

It is not possible to maintain an infinitely growing economy that feeds on a finite nature: especially not an economy based on oil and coal, which the metabolism of industry, transport and the family economy transform into CO<sub>2</sub>, the main culprit in global warming. The problem with the oil economy is not fundamentally that of its management as a public or private good. It is not the increase in its supply, exploiting protected reserves and submarine fields, so as to bring

fuel costs down again. The end of the oil era will not be the result of oil’s growing scarcity, but of its abundance in relation to nature’s capacity of absorption and dilution, of its transmutation into CO<sub>2</sub>. The search for economic balance by way of the overproduction of hydrocarbons in order to continue feeding the machinery of industry (and the production of agro-fuels) puts at risk not only the sustainability of the planet, but that of the economy itself. To free the economy from its dependence on oil is imperative in light of the catastrophic risks of climate change.

Degrowth of the economy implies not only the theoretical deconstruction of its scientific paradigms, but also of its social institutionalisation and the subjectivisation of the principles that try to legitimate economic rationality as the ultimate, inevitable mode of being in the world. Nevertheless, the various reasons for deconstructing economic rationality do not directly translate into strategic thought and actions that can defuse the capitalist machinery. It is not simply a matter of ‘greening’ the economy, moderating consumption or enhancing alternative and renewable sources of energy within the niches of opportunity that appear profitable in the context of the increase in energy costs. These principles, even if converted into social movements, do not in and of themselves effect a defusing of production. Rather, they constitute a mere normativity and a flight from the system, a counter-current that fails to arrest the overflowing torrent of the machinery of growth. This is why we need to deconstruct economic reasons by legitimating other principles, values and non-economic potentials. We must forge a strategic thought and a political programme

that allow us to deconstruct economic rationality at the same time as an environmental rationality is constructed.

Beyond the task of dismantling the dominant economic model, it is a matter of unravelling economic rationality while weaving new matrices of rationality to fertilise new territories of life. This leads to a strategy of deconstruction and reconstruction; not making the system crumble, but reorganising production and consumption based on the principles of environmental rationality; unlinking from the cogs of capitalist market mechanisms and economic valuation of environmental goods and services as the dominating principle that organises the global economy; incorporating what would be the waste product into new ecological cycles through 'clean technologies', as promoted by an emergent geopolitics of sustainable development (Leff 2002). This reconstruction, however, is not only guided by an 'ecological rationality', but by cultural forms and processes of resignification of nature. In this sense, the construction of an environmental rationality capable of deconstructing economic rationality implies processes of reappropriation of nature and re-territorialisation of cultures.

Economic growth carries with it the problem of its measure. The omnipresent measure of GDP, by which national economies are evaluated in their success or failure, does not measure negative externalities. But the fundamental problem cannot be solved with a multiple scale or multi-criteria methods, or with 'green accounts', the calculation of the hidden costs of growth, a 'human development index' or an 'indicator of genuine progress'. The point is to defuse the internal

device (the genetic code) of the economy, and to do it without provoking a recession of such magnitude that it would bring about yet more poverty and environmental destruction.

The decolonisation of the imaginary sustaining the dominant economy will not emerge from responsible consumption or a pedagogy of socio-environmental catastrophes, as Latouche suggested when focusing on the degrowth wager. Economic rationality has become institutionalised and incorporated into our way of being in the world, *homo oeconomicus*. What is needed then is a change of skin. The really-existing economy cannot be deconstructed by an ideological reaction or a revolutionary social movement. It is not enough to moderate it by incorporating other values and social imperatives. Deconstruction entails practical measures, or we will forever stay at the purely theoretical level, striking blindly in the dark with our desires for a better and more sustainable world.

### *The limit to growth, the resignification of production and the construction of a sustainable future*

The limit is the end-point from which life is constructed. It is from death that we reorganise our existence. The law of the limits of nature has refounded the sciences and the human world is sustained by the recognition of its cultural and genetic limits in the prohibition of incest. In the face of this panorama of culture and knowledge of the world, one should ask by which strange design the economy has managed to bypass the question of limits, as it attempts to rule the

world as a system of mechanical equilibrium among factors of production and circulation of value and market prices. The limit to this unbridled process of accumulation has not been the 'law of value', nor the cyclical crisis of overproduction or under-consumption of capital.

The limit is marked by the law of entropy, which, as indicated by Georgescu-Roegen, functions as the limit-law of production. The law of entropy reminds us that every economic process, as productive process, is trapped in an ineluctable process of degradation that advances towards *entropic death*. What does this mean? That every productive process (like every metabolic process in living organisms) feeds on matter and low-entropy energy; that in its process of transformation it produces consumer goods with a residue of degraded energy, which finally expresses itself as heat; and that this process is irreversible. The advance of recycling technologies notwithstanding, pollutant residues are only partially reconvertible into useful matter and energy. And this is what manifests itself as the limit to the accumulation of capital and economic growth: the de-structuring of productive ecosystems, and their saturation with regard to their capacity to dilute contaminants in common environments (seas, lakes, air and soils), which ultimately appears as a process of global warming and the possibility of an ecological collapse that crosses the thresholds of the planet's ecological equilibrium.

While the bioeconomy takes the material conditions of nature as the root of production, the 'economy' searches for a way out through the dematerialisation of production. The economy flees towards the ficti-

tious and the speculation of financial capital. Nonetheless, for as long as the economic process must produce material goods (houses, means of transportation, clothes, food) it cannot escape the law of entropy. This is the ultimate limit of economic growth. The only antidote to this inevitable trajectory towards entropic death is the process of *negentropic production* (from: negative entropy) of living matter, which translates into renewable natural resources.

The transition towards *this* bioeconomy would mean a decrease in the rate of economic growth as it is measured today, and a negative rate in time, while indicators for a sustainable, negentropic eco-technological production are developed. In this sense, the new economy is based on ecological potentials, technological innovation and cultural creativity. In this way a post-growth society and an economy in balance with the planet's conditions of sustainability could begin to appear. And yet, from environmental rationality emerges not only a new mode of production, but a new way of being in the world, new processes of signification of nature and new existential meanings in the construction of a sustainable future.

*Translated from Spanish  
by Rodrigo Nunes.*

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