SuN Soziologie und Nachhaltigkeit
Beiträge zur sozial-ökologischen Transformationsforschung
2024

Sustainability and its Limits

Arne Johan Vetlesen

I. "Sustainable development": the Brundtland Report

The term «sustainable development» was introduced to the general public in the 1987 report of the "World Commission on Environment and Development", commonly referred to as the "Brundtland Report", since it was chaired by the Norwegian then-Prime Minister Gro Harlem Brundtland. Like the Club of Rome's landmark study of 1972, *Limits to Growth*, authored by Donella H. Meadows et al., the Brundtland Report focused on the possibility that modern industrial society is using up its source materials at an alarming rate, which cannot be maintained for much longer without major change. How to meet this challenge?

The Brundtland Report gives a twofold response. On the one hand, it recognizes that economic growth is necessary in order to bring greater prosperity to the developing world, i.e., to the countries that historically have not enjoyed the growth in prosperity, measured in gross domestic product (GDP), that the leading industrial nations in the world have done, especially since World War II. In this way, continued economic growth of a kind that will benefit the countries hitherto lagging behind as well as those already most affluent is tied to a sense of entitlement and so to a notion of justice: growth would be unjust if it does not correct the historical imbalance between the poor and the rich, taken globally.

On the other hand, the development facilitated by continued economic growth "overall" has to become sustainable. In stating that this constitutes a "must", the Report clearly tries to tackle the problem concerning the "using up" of (limited) source materials (non-renewable natural resources) that the Club of Rome raised with such alarm in 1972, finding considerable public resonance (Meadows et al., 1972). The ecological imbalance caused by taking more from nature than nature is allowed to regenerate and replenish – that is, systemic overshoot – must be contained before it is too late and the consequences become irreversible and beyond human control. What is required is that development be "sustainable": it must be such as to "meet the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987: 326). Again, a notion of justice is being appealed to, if largely implicitly – namely, the idea that it would be unjust to future (not-yet-born) generations if present ones were to "use up" resources to an extent that leaves less for future humans than has been enjoyed by those now living. The injustice would that of generational egoism, if you like (a moral term not employed by Brundtland). Of course, the preference for the present over the future, giving more weight to a desire that can be fulfilled now than one that can only be fulfilled later, is well known in economics and psychology alike as the problem of discounting, and is viewed as a profound propensity in human nature. What is novel is the context: the ways in which future human beings will likely suffer as a result (however unintended) of the tendency of living humans to put their interests first.

As far as UN-initiated reports go, the Brundtland Report was soon to inspire a number of important declarations about policy changes, nationally as well

as globally. Thus, the high-profile 1992 UN Rio Earth summit endorsed a declaration setting out 27 principles of "sustainable development" and recommended that every country produce a national strategy to achieve these results. In the same spirit, a few years later the Treaty of Amsterdam embraced sustainable development as integral to the aims of the EU, and a comprehensive Sustainable Development Strategy was established in 2001.

Academically no less than institutionally, the notion of "sustainable development" has enjoyed almost unprecedented success, being cited by scientists, politicians, and business leaders all around the world. Nevertheless, the notion and the thinking behind it has had a number of detractors ever since it was launched. They argue that its popularity is in large part due to its vagueness, coupled with a have-your-cake-and-eat-it quality. It is difficult to come out against the goals endorsed in the two prime terms, "sustainability" and "development". What is more, it has the ring of good news to all concerned – future as well as present-day humans, the poor as well as the affluent, environmentalists as well as investors – that one can reach both goals at the same time, indeed (to put it more strongly) that the one goal presupposes the other, and vice versa.

Whether that is really so, or simply too good to be true, is a question I will return to below. For now, consider one example showing how the elusive nature of the concept has been sought tackled by avoiding to define it and instead to substitute a set of goals in its place. So, in their book *Implementing Sustainable Development*, William Lafferty and James Meadowcroft argue: "Sustainable development indicates an interdependent concern with: promoting human welfare; satisfying basic needs; protecting the environment; considering the fate of future generations; achieving equity between rich and poor; and participating on a broad basis in decision-making" (Lafferty/Meadowcroft 2000: 19). It is easy to agree with critics who point out that in amounting to such an all-encompassing list of policy goals acceptable to everyone and offending nobody, the concept is made into a slogan emptied of analytical precision and political bite.

A striking feature of the policy goals adopted on a worldwide basis since the Brundtland Report is the axiom that development and sustainability are compatible: to succeed, development needs to be sustainable; the requirements for sustainability are such as to facilitate development, not slow it down, let alone forbid it.

To render "development" more concrete, we need to see that it has two different meanings. Development can simply mean economic growth, as measured by GDP, in which case it applies in principle to all countries. But it can also be taken in a more restricted sense, referring to the economic processes that help take people out of poverty. As Anthony Giddens (the prominent British sociologist known for his affiliation with Tony Blair's "Third Way" policies in the 1990s) points out in his 2011 book *The Politics of Climate Change*, this is the sense in which we contrast the "developing" countries with the "developed" ones, adding that in the first sense of the term, considered simply as GDP-measured economic growth, "development" never stops (Giddens 2011: 62): the more economic growth, the better as far as development is concerned.

The argument of the Brundtland Report is premised on the all-important distinction between so-called "developed" and "developing countries". Giddens remarks that "growth is much less important to the former than the latter", holding that "developed" countries "may continue to expand their economies, but the need for growth is much less pressing" (Giddens 2011: 62). By contrast, Giddens states, "for the poor countries there is a *development imperative*": "It is not only that they have the right to become richer, but that such a process has direct implications for sustainability. Poverty is closely associated with population expansion, one of the root causes of the pressure that is now threatening resources" (Giddens 2011: 62). The poorer countries must be allowed to reach a "certain level of wealth", the more exact definition of which "has to be negotiated politically". What is clear, though, Giddens continues, is that "wherever possible, such as through technology transfer, reduc-

tions in emissions – at least relative to past practices in the developed countries – should be sought" (Giddens 2011: 63). Indeed, the dangers involved in climate change as caused to a large extent by the burning of fossil fuels "will determine in large part how far "development" today can mimic the trajectories followed by the existing industrial countries". Despite the fact that the outcome of those trajectories is today "under immense pressure", Giddens maintains that "a certain "licence to pollute" has to be acknowledged" (Giddens 2011: 63).

II. Economic growth: problem or solution?

I have quoted Giddens so extensively because his views are representative of the political and academic consensus: the problems posed by climate change can be, and should be, solved within the framework provided by "sustainable development", politically and economically so as well as analytically. It is not only that "development" and "sustainability" are perfectly compatible, indeed mutually dependent; it is also that the sort of policies that the goal of "sustainable development" recommends will allow us to tackle climate change. This being so, whatever changes the problem of climate change forces upon us, they will not be such as to undermine what the poorer countries are morally entitled to: the "right to become richer" and "a license to pollute".

I see Giddens' highly representative position – though perhaps more so in political circles than in academic ones – as a case of wishful thinking. The compatibility between sustainable development and the need to tackle climate change does not stand up to closer scrutiny; it does not survive a reality check.

To be sure, Giddens himself declares that he will avoid using the notion of "sustainable development" in the remainder of *The Politics of Climate Change*. However, his reasons for doing so have nothing to do with the reality check I have in mind. Rather, Giddens' dissatisfaction is to do with the notion being "more of a slogan than an analytical concept"; indeed, it is "something of an oxymoron" (Giddens 2011: 71). Nevertheless, "sustainability" is regarded by Giddens as a useful notion, "although itself a little slippery to define, since it concerns an indefinite future. We don't know what technological innovations will occur down the line, and hence assessments of the limits of the earth's resources usually operate under a question-mark" (Giddens 2011: 61).

I shall come back to the role played by technology in a moment. Before I do so, we should note that Giddens pays some attention to what he calls "over-development", a problem presumably corresponding to that of the "under-development" (my term, not Giddens') seen in poor countries. "Over-development" as understood by Giddens, then, must be acknowledged as a "possibility in the affluent societies". His reasoning is that "the continued expansion of the economy may well bring benefits, but at the same time the problems of affluence tend to pile up". The implication, Giddens goes on to observe, is "not that economic growth has to stop, but that it should not be pursued irrespective of its wider consequences" (Giddens 2011: 63).

Given this summary of Giddens' view, one thing seems clear: economic growth should continue. It should do so as a matter of moral right in "developing" countries, and it should do so in the "developed" ones with a concern for "the wider consequences", although what exactly these are remains unspecified in Giddens' discussion.

What I find "slippery" and lacking in analytical as well as political bite is not so much the notion of "sustainable development" as such, but Giddens' own position, especially concerning the pivotal issue of the relationship between economic growth and climate change. It all boils down to a very simple question: is economic growth part of the solution to climate change, or is it part of the problem causing it, even reinforcing it?

To see what is at issue here, recall Giddens' statement that "assessments of the limits of the earth's resources usually operate under a question-mark", the reason being that "we don't know what technological innovations will occur down the line". Characteristically, Giddens does not talk about the limits of the earth's

resources as something absolute, that is, as constituting a condition whose primacy over all others needs to be recognized. Instead of focusing head-on on the ecological limits as such, Giddens relativizes them in a twofold manner: by connecting them with our assessments of them, and by making the validity of those assessments conditional on future technologies, the when, where and what of whose impacts we in principle cannot know or predict with much certainty. The effect is that a cloud of relativity and uncertainty is made to hang over any mention of the limits of the earth's resources.

Yet there is no denying that "growing the economy" means putting natural resources under more stress, exploiting them to meet the demands of the world's poor and rich alike, enabling the former to adopt the lifestyle and the patterns of consumption enjoyed by the latter, this being their right, one whose lack of realization would amount to injustice and hence be morally unacceptable (to recall Giddens' statement). Now, goes the argument that I take Giddens to implicitly rely on, if the exploitation of the earth's resources may intensify so as to meet the demands of the poor and the rich alike without harming sustainability, this is so because new technologies will be much less environmentally harmful than the ones deployed in the era of fossil-fuels driven industrialism. In other words, technological innovation is the key to the promise of continued, never-ending economic growth on a finite planet; it will allow us to produce, consume, and distribute ever-more goods, for ever-more people, without inducing the unacceptable cost of ruining the planet humans depend upon.

Although Giddens refrains from going into this issue in any detail, his view appears to rely heavily on the idea that technologically driven de-materialisation – whereby production and consumption become less resource-intensive per unit of output – is required for the world economy to enjoy constant growth in the foreseeable future. If only technology will help us change *how* we go about using natural resources for human purposes, talk about there being "intrinsic" and absolute limits to that use will prove groundless, proof of misguided techno-pessimism the very moment its opposite is what may save us.

To be sure, the notion of "decoupling" in play here is intriguing: as economic output by way of new, non-fossil-based technologies becomes progressively less dependent on material throughput, the economy can continue to grow without crossing ecological limits or running out of resources. The idea that technological progress will resolve environmental problems is attractive for all sorts of reasons, not least psychological ones: it provides welcome reassurance in rejecting system-related critique and so-called "alarmism" out of hand, since if technological innovations are the solution there is no need to engage in any serious changes in our individual lifestyles and collective practices. Indeed, the constellation "more economic activity – less environmental damage" suggests a win-win situation. It therefore fits nicely with the idea we looked at above: rather than being contradictory and in conflict, development and sustainability are mutually dependent – you cannot have the one without presupposing the other. Crucially, both elements – taken as goals, even matters of entitlement for those concerned – are made possible by continued economic growth (to recall Giddens' argument).

Economist Tim Jackson comments on the promise of "decoupling" in his book *Prosperity without Growth* (published one year prior to Giddens' book yet conspicuously ignored there). Jackson points out that there is as yet no credible, socially just, ecologically sustainable scenario of continually growing incomes for a world of seven, eight or nine billion people. It is entirely fanciful to suppose that "deep" emission and resource cuts can be achieved without confronting the structure of market economies – the very confrontation that the Brundtland Report, followed through the years by scholars such as Giddens, sought to avoid. Nowhere, argues Jackson, is there any evidence that *efficiency can outrun scale* in the way it must do if is to be compatible with sustainability. Far from acting to reduce the throughput of goods, technological progress serves to increase productivity

input by reducing factor costs. The phenomenon of "rebound" attests to this: money saved through energy efficiency gets spent on other goods and services (see Jackson 2010: 86, 88, 95).

What prevents "enough is enough" from happening is not lack of knowledge or moral character in the individual consumer. It is the structural reliance of the market system itself on continued growth: on investments continuing to bring profit, on profits continuing to grow. The twin objectives of growth and profit – whereby profit is both growth-dependent and growth-driving – are the system-immanent key characteristics of a capitalist economy; and they happen to be exactly the traits resulting in capitalism's incompatibility with the planetary key characteristics of limits and finiteness. The fact of this incompatibility is denied as long as the idea of social progress is wedded to the promise that there will always be more and more for everyone. The fatal misconception, Jackson points out in his recent book *Post Growth*, lies in assuming that "more" is always "better". Growth matters in a positive sense when there is a material insufficiency; that it to say, *up to a point*, and not beyond it. "One of the two critical flaws at the heart of capitalism is its inability to know where this point is. The other is not knowing how to stop when we get there" (Jackson 2021: 13, 89).

Recent decades have taught us that, as capitalism goes global, all human needs are directed towards the market and all cultures are forced to strive for the very instrument – the market – that relentlessly robs humans of their ability to survive by their own efforts and skills and to live lives that do not in total lead to an overload of the global carrying capacity – the limit that is threatened by the limitlessness of the market and the insatiability of commercialized needs spread by 24/7 advertising. The cycles of creative destruction attest to this, giving the lie to the rhetoric of a win-win alliance between capitalist economy and sustainability, between what is good for the market and what is good for the planet. The harsh reality is that product lifetimes plummet as durability is systematically designed out of consumer goods and obsolescence is designed in. It's not only that everybody has to have a smartphone; you also have to buy a new one ever-more often – what is ideologically sold as consumer choice is instead a matter of sheer technological compulsion, there being no option to keeping up with the newest technology and the newest model. In a word, quality is sacrificed to volume throughput. As Jackson observes, the throw-away society is not so much a consequence of consumer greed as a structural prerequisite for survival – survival of the capitalist system, that is. To an ever greater – not smaller – extent, "the institutions of consumer society are designed to favour a particularly materialistic individualism and to encourage the relentless pursuit of consumer novelty because it is exactly what's needed to keep the economy growing" (Jackson 2010: 163).

The impossibility of infinite exponential growth on a finite planet may appear obvious to most people. But it is has failed to gain traction in neoclassical economic theory, contradicting as it does its very foundation. Herman Daly, perhaps the world's most prominent ecological economist, has noted that economics will remain "autistic" as long as it ignores the fact that "the economy is a subsystem of the ecosystem", and that the containing ecosystem is finite, non-growing and materially closed" (Daly 2007: 2). The fact is that the pattern of scarcity has changed: Manmade capital (labour, technologies) has become relatively plentiful, and remaining natural capital is becoming more and more scarce, subject to over-efficient exploitation to the point of depletion. Manmade and natural capital are complements, not substitutes (as the dominant theoretical paradigm informing and helping justify current practice would have it). As Daly insists, "when factors are complements then the one in short supply is limiting", i.e., natural capital with its flow of natural resources and flux of natural services. To illustrate: the fish catch used to be limited by number of fishing boats and fishermen, now it is limited by remaining stocks of fish and their reproductive capacity; cut timber is no longer limited by saw mills, but by standing forests" (Daly 2007: 28, 252). The upshot is as unambiguous as it is anathema to the advocates of business-as-usual coupled with techno-optimism: Any attempt, by way of decoupling

or otherwise, to marry economic growth and environmental sustainability will fail because premised on an unrealistically high degree of eco-technological efficiency increase. Regrettably, Daly's well-taken criticisms of neoclassical economic theory's autistic separation from any material content and thus from limits – unchallenged in the Brundtland Report – stop short of a fundamental rejection of capitalism, relying instead on the feeble hope for "a broad moral awakening among capitalists".

As yet, there is no sign of such a thing. To give an example, as the world is receiving the one wake-up call after the other concerning the ecological disaster caused by the ever-increasing global plastic binge, corporations like Exxon-Mobile Chemical and Shell Chemical have just decided to invest more than 180 billion dollars to build new facilities that will help fuel a 40 % rise in plastic production in the next decade, exacerbating a plastic pollution crisis that scientists warn already risks "near permanent pollution of the earth", affecting the entire marine food chain. In June 2017, an investigation carried out by *The Guardian* revealed that a million plastic bottles are bought around the world every minute, with the large majority ending up in landfill or the sea; globally, only 10 % of plastics are being recycled (see Taylor 2018: 12). Plastic is a telling example of what happens when scientists, based on their most recent findings, sound the alarm bell, with business leaders and politicians responding with statements expressing their "deep concern" with the "serious problems" that have been documented: the problem gets worse. With a few exceptions, this holds for the various problems – designated as so many "challenges" – identified in the Brundtland Report thirty years ago: since then, they have become worse.

III. Questioning technology optimism

Giddens and Brundtland share the kind of routine technology optimism that is characteristic of political and business elites around the world. It is an axiom of faith that humanity will manage the planet – and itself – toward the required transition to sustainability. The mentality in question is captured with great precision in a book written forty years ago by David Ehrenfeld, *The Arrogance of Humanism*. I take it the key assumptions Ehrenfeld listed then ring familiar today as well: that all problems are soluble; that they are so by people; that many problems are soluble by technology, and if not be technology alone, then by politics or economics; that whenever a catastrophe is threatening to happen, knowledge of that fact will motivate people to work together for a solution before it is too late; that while some resources are finite, all finite or limited resources have substitutes such as will be found and developed in time to avert a catastrophic outcome; and that, no matter what sort of danger or risk humanity will be confronted with, human civilization will survive (see Ehrenfeld 1978: 16-17).

Ehrenfeld is especially concerned with the dialectical process whereby a solution to one problem generates a set of problems that eventually preclude solutions. His conclusion, based on a number of case studies in a wide range of fields, is that a technological solution is never complete and hence is a quasi-solution. Each quasi-solution generates a residue of new techno-social problems arising from incompleteness, augmentation, and secondary effects. The new problems will proliferate at a faster rate than solutions can be found to meet them. The resulting increased complexity will in its turn increase costs, decreased resources, require even greater control, and lead to the inertia of social institutions (Ehrenfeld 1978: 107). More than thirty years before the notion of "ecosystem services" gained traction outside the circle of economists, holding that "you cannot manage what you do not measure" and that therefore the way to ensure that endangered ecosystems, habitats, and species be saved is to put a price tag on them, Ehrenfeld observed that "finding a value for some part of nature is no guarantee that it will be *rational* for us to preserve it – the reverse may hold" (Ehrenfeld 1978: 202). Anticipating every argument currently employed in the case for ecosystem services, Ehrenfeld writes:

"It does not occur to us that nothing forces us to confront the process of destruction by using its own uncouth and self-destructive premises and terminology. It does not occur to us that by assigning only instrumental value to diversity we merely legitimize the process that is wiping it out, the process that says, "The first thing that matters in any important decision is the magnitude of the dollar costs and tangible benefits". [...] I am referring not just to the effort to put an actual price on biological diversity but also to the attempt to rephrase the price in terms of a nebulous survival value." (Ehrenfeld 1993: 118)

Allow me to mention here just one of many concrete examples that corroborate Ehrenfeld's argument. In 1973 the applied mathematician Colin Clark wrote a paper about the economics of killing blue whales. The question examined was whether it was economically advisable to halt the Japanese whaling of this species to give blue whale time to recover to the point where they could become a sustained economic resource. The conclusion Clark arrived at was that in fact it was economically preferable to kill every blue whale left in the oceans as fast as possible and reinvest the profits in growth industries rather than to wait for the species to recover to the point where it could sustain an annual catch. To take a more recent example, consider the fate of the rhino is Africa, being one of the "iconic" animals (alongside the polar bear, the tiger, and the orangutang) whose dramatic decline in numbers has received world-wide attention in the last decade. Having reached an all-time-high price in the international market – and be it a black one – poaching of the rhino has tripled in several areas. The market mechanism of supply and demand operates to the effect that as poaching increases, the numbers of rhinos plummet; and the fewer rhinos there are, the more money will be paid for each exemplar being killed, the endpoint being that the very last rhino will command the highest price ever paid for one. In other words, allowing the market to set the price yields the opposite result of that defended by the advocates of putting a price tag on endangered wild animals: the speeding up of the process of extinction. Whether one wants to call this unintended consequence proof of the sometime perversity of the free-market mechanism, or simply the way it works, run-of-the-mill like, yet for the most part inconspicuously so, is a moot question. The fact of the matter is that it's simply how the market works.

IV. The Anthropocene as a challenge to sustainability

As Christophe Bonneuil and Jean-Baptiste Fressoz remind us in their recent book *The Shock of the Anthropocene*, the concept of sustainable development derives from the notion of "maximal sustainable yield" conceived by (ecological) fishery science in the 1950s, which in its turn was inspired by the notion of "sustainable (*nachhaltig*) management" developed by German forestry science in the eighteenth century. As Bonneuil and Fressoz point out, all three notions are based on presuppositions that today are proven wrong in that they no longer obtain: "The Anthropocene cancels the peaceful and reassuring project of sustainable development" (Bonneuil/Fressoz 2016: 22).

I for one think that the point can be put even more strongly: the success of the notion of sustainable development, measured in terms of its world-wide impact on policies adopted (and those not adopted) during the last three decades, is partly responsible for having led us into the Anthropocene, understood as a danger zone of unprecedented magnitude as far as multi-dimensional ecological catastrophe is concerned. In keeping with Daly's critique, the notion of "sustainable development" has helped maintain belief in the possibility of perpetuating economic growth by means of a bit more "conservation" of the environment, conveniently neglecting the warnings over the impossibility of indefinite growth on a finite planet that not only stemmed from the famous *Limits to Growth* report published by the club of Rome in 1972, but also the work dating back to the 1960s by the economist Nicholas Georgescu-Roegen on entropy and degrowth, captured in what he called "the fallacy of endless substitution", i.e., the fallacy found in the neoclassical school (on which the Brundtland

Report tacitly relies) as well as in Marxist economics, failing to recognize the way in which an economy driven by the twin imperatives of growth and profit is bound to undermine resources for which this planet has no substitutes – the fallacy of (mis)treating as mere means, as perfectly replaceable, what is in fact indispensable (see Georgescu-Roegen 1971).

In other words, only by refusing to seriously consider the implications of these insights was it possible to go on pretending that the three crucial dimensions could be mutually negotiated within a growth-driven capitalist economy: namely the economic, the social and the environmental. The failure is a two-fold: the economy is not placed within the social, which in itself is framed by a thousand feedback loops within the biosphere and the Earth system. Indeed, the related notions of a "green economy" and of "ecosystem services", in vogue since the 1990s, demonstrate the unwillingness to take on board the bad news: that we have to do with limits, not opportunities; with systemic problems such as require overturning the entire economic framework, not business challenges of a kind wedded to sustaining what has become unsustainable. To the extent that "ecosystem services" – those yielded for humans by, say, bees active in pollination – now are singled out as object of markets, the biosphere, the hydrosphere and the atmosphere are made to appear as mere subsystems of the financial and commodity sphere, thus turning the actual ecological order of primacy on its head: regarding as fixed and unchangeable the current capitalist economic system and the imperatives inseparable from it, and as perfectly elastic and manipulable for human purposes (as expressed in insatiable needs and desires) the material substratum on which all economic activities rely, called "nature". In effect, the social system that desperately needs to change is placed beyond critique, whereas what can only be further changed at the cost of degradation, depletion, and extinction, is subject to ever-intensifying exploitation, rendering the current trajectory self-destructive.

That said, it is easy to see why "green growth" and "ecosystem services" became buzzwords in the wake of the Brundtland Report. Both concepts hold the promise of using the market to solve whatever problems the market has failed to solve thus far – recalling Sir Nicholas Stern's oft-cited statement that climate change is a matter of the biggest "market failure" in history. To be sure, the market economy was for a long time criticized for externalizing its true costs as far as the values provided by nature are concerned, so that a problem like deforestation failed to be accounted for within the given cost/benefit calculus - i.e., the more rapidly and comprehensively deforestation takes place, the better economically speaking, with supply meeting demand, GDP increasing, etc., tacitly presupposing that there will always be "more for the taking". Thus, the thinking behind ecosystem services may be said to change the situation radically in declaring everything affected in/by the economy an "internal" aspect of it and so needing to be accounted for in a manner doing justice to its true importance for the system as a whole. And indeed, this is the logic that allowed the pioneering economist in the field, Robert Costanza, to assess the annual value of the services rendered by the biosphere at about $ 33 billion, or twice the world's GDP. The point about ecosystem services being that they are valuable, the only way to demonstrate the value in question is to measure it qua monetary value, allowing for the perfect commensurability that market transactions crave, in effect subjecting nature *in toto*, in all its qualitative and life-(re)generating dimensions and processes, to quantification. As Bonneuil and Fressoz remark, all values of nature, even those far upstream from production and including the most spiritual (renamed "cultural services"), thus enter into an accounting logic, as illustrated by the adopted policy of International Union for Conservation of Nature to present nature as "the largest company on Earth" (see Bonneuil/Fressoz 2016: 55).

V. Conclusion: the need to abandon the growth paradigm

Given my argument that sustainable development is a highly flawed notion, not the solution to the problem but part of the problem and so helping perpetua-

te and amplify it, what would be the alternative?

There is no simple solution, in large part because the reliance on false ones such as "sustainable development" means that the world has wasted the last three decades seeking for truly efficient ways of tackling the multidimensional ecocrisis. Moreover, what started out as a tacit premise is now becoming visible as a clearly – and invalidly – normative such: talk about "sustainable development" always took for granted that the present economic order is one *worth* sustaining, deserving the contributions, big and small, of each of us to ensure its preservation into the future, thus preventing alternatives involving radical systemic change from being explored. This anti-change bias is built into the concept from its inception.

Thirty years after Brundtland, one thing we do know is that the growth paradigm must be abandoned, in theory and in practice. The fossil fuels driven model of development that has characterized the industrialized Western world for the last three centuries has run its course; it cannot and should not serve as a model to be copied by the currently "emerging" economies of countries like China, India and Brazil. To the contrary, the growth-oriented capitalist model must be recognized for what it is: a warning saying "Don't you do what we have done, lest you cause ecological damage beyond repair, a predicted damage for which no future humans will forgive you.

The simple fact is that the 8,1 billion people now living on planet Earth cannot on average enjoy the material standard of living, with the ecological footprint implied, reached by nations like USA or Norway. Justice demands that those who are worst off in today's world must be allowed to rise to a standard of living such as meets their basic needs. For that rise to happen in a truly sustainable manner, however, those who today enjoy so much more than their basic needs require, will need to have their standard of living reduced, considerably and urgently so. In the total picture, the reduction part is just as crucial as the rise one. And for that very reason, the break with an economic system driven by the twin-imperatives of profit and growth that is imperative both as far as distributive justice and ecological limits are concerned, will be an ugly affair: based on their culturally induced sense of entitlement to have it all, to have more, always more, with no increase in consumption and possessions being regarded as enough, as sufficient, those privileged within the current arrangement will certainly resist systemic change as strongly as their power permits them to (see Kempf 2008). To the extent that that happens, however, such resistance against losing privileges never actually earned will have the one advantage – in the midst of the many downsides and dangers – of bringing the fact of the matter so long kept under the carpet out into the open: that the attainment of a just and ecologically sound economic and political global order, one deserving to be called such, is never going to be easy, provoking brutal, class-based conflicts along the way. In other words, a viable path forward can only be sought by means completely at odds with those advocated by the proponents of "sustainable development", having deemed it a proof of virtue to evade conflict and sell their model as one allowing for a "win-win" situation, requiring nobody to change their ways in any fundamental manner and to abandon their positions of privilege. As we have learned in the decades since the Brundtland Report was launched and its proposals made the rounds, nothing could be further from the truth.

Bibliography

Bonneuil, C./Fressoz, J.-B. (2016): The Shock of the Anthropocene. London: Verso.

Daly, H. (2007): Ecological Economics and Sustainable Development. Cheltenham: Edward Elgar.

Ehrenfeld, D. (1978): The Arrogance of Humanism. Oxford: Oxford University Press.

Ehrenfeld, D. (1993): Beginning Again. Oxford: Oxford University Press.

Georgescu-Roegen, N. (1971): The Entropy Law and the Economic Process. Cambridge, MA: Harvard University Press.

Giddens, A. (2011): The Politics of Climate Change. Cambridge: Polity Press.

Jackson, T. (2010): Prosperity without Growth. London: Earthscan.

Jackson, T. (2021): Post Growth. Life after Capitalism. Cambridge: Polity Press.

Kempf, H. (2008): How the Rich are Destroying the Earth. White River Junction, Vermont: Chelsea Green.

Lafferty, W./Meadowcroft, J. (Eds.) (2000): Implementing Sustainable Development. Oxford: Oxford University Press.

Meadows, D. H./Meadows, D. L./Randers, J./Behrens W. W. (1972): Limits to Growth. New York: New American Library.

Taylor, M. (2018): Warnings of “disastrous” plastic binge. The Guardian Weekly, 5. January 2018.

World Commission on Environment and Developement (WCED) (1987): Our Common Future. Oxford: Oxford University Press.

Author:

***Arne Johan Vetlesen**, Professor of Philosophy, University of Oslo, Norway. Vetlesen is the author of nearly 30 books in ethics, social theory and environmental philosophy. His latest book is Animal Lives and Why They Matter (Routledge 2023).*

Impressum

Soziologie und Nachhaltigkeit
Beiträge zur sozial-ökologischen Transformationsforschung

ISSN 2364-1282

SuN-Blog DOI: 10.17879/sun-2024-5370
Editorial Review

Anschrift: Universität Münster, Institut für Soziologie
Scharnhorststraße 121, 48151 Münster
Telefon: (0251) 83-25440
E-Mail: sunred@uni-muenster.de
Website: www.sun-journal.org

Gefördert durch die Deutsche Forschungsgemeinschaft (DFG) - Projektnummer 490954504