

ANTHROPOCENTRISM

Dr. Helen Kopnina

The Hague University of Applied Sciences

International Business

Johanna Westerdijkplein 75

2521 EN Den Haag

The Netherlands

E-mail: h.kopnina@hhs.nl

Definitions

Anthropocentrism is the belief that value is human-centered and that all other beings are means to human ends. The Oxford English Dictionary defines anthropocentrism as “regarding humankind as the central or most important element of existence”. Anthropocentrism focuses on humanistic values as opposed to values found in non-human beings or ecosystems.

With the popularization of the concept of ecosystem services, the idea of protecting the environment for the sake of human welfare is reflected in the SDGs. Within the SDGs, the instrumental use of the environment for the sake of alleviating poverty, combatting climate change, and addressing a range of other social and economic issues is promoted. Since the conception of the SDGs, there has been a discussion about anthropocentrism in ‘sustainable development’ (e.g., Kopnina 2016a and 2017, Strang 2017, Adelman 2018; Kotzé and French 2018) and how the SDGs can be antithetical to effective responses to sustainability challenges.

The SDGs’ accent on economic growth and social equality as well as environmental protection actually result in ethical as well as practical paradoxes. While central to the SDG’s is ‘sustained and inclusive economic growth’ (UN 2015), the prioritization is on the economy, NOT the planet that nurtures both social and economic systems. Anthropocentrism, in this case, refers to the exclusive focus on short-term human benefits, whereas biodiversity loss is not considered a great moral wrong (Cafaro and Primack 2014).

The three overarching anthropocentric SDG goals, economic growth, resilience, and inclusion, will be critically examined below and ways forward will be proposed.

Introduction

According to the World Wide Fund for Nature report (WWF 2016), our annual demand on the environment has exceeded what the earth can renew in a year since the nineteen seventies. This "ecological overshoot" has been annually increasing since. The overshoot includes key environmental indicators, summarized by Washington and Kopnina (2018:57): i) The Global Ecological Footprint now stands at 1.6 Earths (Global Footprint Network 2017); ii) The Living Planet Index has declined by 58% between 1970 and 2012 (WWF 2016); iii) The species extinction

rate is at least 1000 times normal, with at least 60% of ecosystem services are degrading or being used unsustainably (MEA 2005); iv) Four of nine planetary boundaries have now been exceeded as a result of human activity (Steffen et al. 2015).

The Sustainable Development Goals (SDG), build on the Brundtland Report’ ‘Common Future’ (WCED 1987), intended to address this overshoot. Sustainable development objectives of fighting poverty, promoting better health, reducing mortality, and stimulating equitable economic growth are combined with addressing environmental sustainability challenges, including climate change and biodiversity loss. Of the 17 SDG goals, accompanied by 169 specific targets meant to advance the goals in concrete ways, a common thread is formed by key concepts of economic growth, resilience, and inclusion.

As critics have noted, the achievement of SDGs is intertwined with the hegemonic perception of economic growth as an overarching goal. The economic rationale underlined by the SDGs is likely to condone continuous over-production and over-consumption that has caused environmental problems in the first place, raising ethical issues in regard to the human–nature relationship (Brandi 2015, Strang 2017).

Some scholars have argued that anthropocentric motivation is “natural” as all species are “selfish” in looking after themselves (Hayward 1997). Indeed, as humans, we need to have shelter, clothes, eat, drink, and reproduce, and we are thus (per default) concerned about human welfare. In this context, the sustainable development goals (SDGs) that extend welfare concerns with poor people across the globe seem noble and altruistic. Yet, anthropocentrism is not the same as being humane or compassionate. Yet, while in some cases anthropocentrism can be related to legitimate concern about human welfare, what is objected to is a "concern with human interests to the exclusion, or at the expense, of interests of other species" (Hayward 1997:52). This concern with the exclusion of nonhumans has played little role in forming the underlying ethics of the SDGs.

From an ethical perspective, the subordination of environment to economic needs of humanity leads to the objectification of environment making elements of, which cannot be directly translated in human benefits, expandable (Katz 1999). From a pragmatic perspective, the SDGs seem too optimistic in discounting the evidence of ecological limits that require drastic measures such as a radical reduction in population and consumption (MEA 2005, Global Footprint Network 2017). The planetary boundaries framework, based on the “safe operating space for humanity” (Steffen et al. 2015), suggests that exclusive focus on human industrial and economic development disrupts and fundamentally endangers earth systems (Brandi 2015). Processes and features of earth systems, including climate change, biosphere integrity, biochemical flows, and land-systems far exceed the safe boundaries (Steffen et al. 2015). While the concept of planetary boundaries and global footprint refers to humans, the boundary has long been crossed for those species pushed to the brink of extinction (Cafaro and Primack 2014, Kopnina 2016b).

The troublesome idea(l) of the SDGs has made for neither clear waters nor smooth sailing in policy circles (Lysgaard et al. 2016). What is perhaps most troubling about the focus on economic growth, resilience, and inclusion is that all three elements refer to one species only. Considering the anthropocentric genesis of the SDGs framework, the ontological orientation of the SDGs risks exacerbating the negative influence of the Anthropocene on all natural systems (Kotzé and French 2018).

Economic Growth and Ecological Limits

As the SDGs fit within the wider ‘sustained and inclusive economic growth’ strategy (UN 2015), the equitable economic growth is seen as a panacea for solving other objectives: e.g., alleviating poverty, improving health, reducing child mortality, and solving climate change. Yet, the idea of ‘sustainable economic growth’ has been largely criticized as oxymoronic. As Adelman (2018) notes, the SDGs are oxymoronic because they erroneously foster the illusion of combining endless economic growth on a finite planet, social justice, and environmental protection. Critical scholars argued that economic growth fuels a massive expansion of industrial activities, exacerbates competition for resources, and ultimately causes social inequalities associated with differentiated access to these increasingly scarce resources (e.g., Rees 2008, Wijkman and Rockström 2012, Kopnina and Blewitt 2018). The implications of population growth *and* sharing of wealth, which in practice implies putting even more pressure on limited natural resources, are rarely discussed in wider society (Washington 2013). As Rees (2008) has expressed it, sustaining life on earth, in all its diversity and complexity, is incommensurable with economic growth, industrial and agricultural expansion, the way most SDGs do.

The economist Herman Daly (1991: 99) notes that the verb ‘to grow’ has evolved from ‘develop to maturity’ or ‘sufficiency’ to a hegemonic goal in and of itself. Presently, the ideology of economic growth actually favors the growing population. While the SDGs make vague mention of ‘reproductive health’, the large issue of population growth remains unaddressed. As Dasgupta and Dasgupta (2017:431) note, the “SDGs are largely silent on population, yet it is inconceivable that they can be met without addressing the subject”. Goal 13, for example, recognizes that addressing climate change will “require urgent collective action”; but there is no acknowledgment that the “target is unlikely to be met unless population growth is drastically reduced” (Dasgupta and Dasgupta 2017:431). Nor do the SDGs really discuss “collective action” in curbing production and consumption. Either some crucial piece of data is missing in SDGs to illustrate how consumption can remain the same by ‘elevating’ the poor to the level of the rich (e.g. forceful removal of resources away from the rich to give to the poor – as in the Russian revolution – so that the total global economic pie stays the same), or the SDGs miss a mark of demonstrating how ‘equitable distribution’ is going to avoid adding billions to the class of global over-consumers.

Raising billions of people out of poverty without fundamentally changing the growth model will have ‘potentially catastrophic impacts on the global ecosystem’ (Nemetz 2013:52). Crist (2012:141) notes that to “feed a growing population *and* enter increasing numbers of people into the consumer class is a formula for completing the Earth’s overhaul into a planet of resources... for the continued extraction, exploitation, and harnessing of the natural world”. The SDGs links biodiversity to natural resources (goal 14.a, for example, aims to ‘enhance the contribution of marine biodiversity to the development of developing countries’) without calls for immediate remedial action that requires harnessing both human population and economic growth. Many prescriptions typically made by social justice advocates are fanciful because they do not take into account the material aspirations of those currently consuming little, nor the moral imperative to indeed make consumption across the globe more equitable (Crist and Cafaro 2012).

Mehrabi et al. (2018) article 'The challenge of feeding the world while conserving half the planet' frames 'the challenge of feeding the world' (meaning, one species only) as a moral imperative, and see an intensification of food production technology as the solution. Yet, the moral imperative to 'feed' (or at least leave enough food for) millions of other species is not discussed. While the authors propagate the use of intensive agriculture technology to make food production keep pace with growing population, they ignore to mention reproductive (family planning) technology for those young girls in developing countries that are too young, abused or ignorant of human (women's) rights to decide whether they want to have children (Crist et al. 2017). Nor are the root causes of hunger in the developing world, and the emergence of so many mouths to feed are discussed. While seemingly noble, fundamental questions about the nature of present-day inequalities and dependencies need to be asked. Similar to the SDGs that seem to be focused on the elimination of symptoms ("feeding" the poor), the fundamental and perhaps politically uncomfortable questions of colonialism need to be asked. Some have actually argued that the concepts of SDGs are a form of colonialism, with supposedly 'developed' (superior) countries and 'underdeveloped' (inferior) ones, with Western industrial ideas of economic growth promoted as normative goals. While some countries became dependent on 'developed' countries after decolonization, selective technologies or economic goods are made freely available (e.g., medical technologies and exported consumer goods) in exchange for cheap labor and resources. Critical economists have noted that foreign aid, structural adjustment programs and programs to promote development may have caused more harm than good in exacerbating global inequalities and have largely failed in addressing ecological crises (e.g., Easterly 2006). The process responsible for the bulging population and unequal consumption in some parts of the world are ignored by the SDGs.

On the other hand, the SDGs focus on developed and developing world exacerbates false dichotomies between the 'guilty' rich in the developed world and the 'innocent' (under-consuming) poor. Such dichotomy discounts the emergence and widespread of consumer class everywhere on this globe, migration from poor to rich countries, and other global processes that make simple divisions misleading (Crist and Cafaro 2012, Hansen and Wethal 2014). Besides, in biological terms, the ecological limits of what this planet can provide for seven and a half billion large omnivores remains limited. If the planet is to be "shared" with other species, and not appropriated as a "human real estate", a factory for non-stop food production (e.g., Crist 2012), it does not matter to the planet whether a few rich individuals are consuming a lot or a large number of poor individuals are consuming an equal amount. Raising per capita consumption through poverty alleviation *without* a strategy to radical productive efficacy and humanely reducing the number of consumers, is not a viable long-term solution (Nemetz 2013). Applying the 'lessons' of industrial growth to developing countries without fundamentally altering the economic growth model is likely to exacerbate sustainability challenges (Hansen and Wethal 2014). The SDGs seem to have little understanding of ecological limits (Kotzé and French 2018), let alone address deeper paradoxes embedded in simultaneous aims of promoting health and wealth and somehow still – as an afterthought – caring about the environment.

Inclusion and Exclusion

Gupta and Vegelin (2016) argue that in fact, the SDGs are not inclusive enough as it prioritizes economic growth in general and not the needs of vulnerable societies. It is doubtful whether the equitable distribution of wealth without

forcefully removing wealth from "the rich" to redistribute to the poor and lowering population and consumption globally will lead to sustainability. Saliently, 'inclusive' framework proposed by the SDGs *excludes* the most vulnerable and the most numerous communities of nonhuman species.

'Inclusive pluralism' that embraces non-human representation (Kopnina and Gjerris 2015; Kopnina and Cherniak 2016) is a far cry from the SDGs' anthropocentric inclusion rhetoric. The 15th goal of SDG to '*Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss*', is formulated in terms of 'management' and 'sustainable use' is split into sub-aim to 'promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources' (UN 2015). The terms 'use', 'benefits' and 'utilization' employed in these aims testify to complete subjugation of nature to economic objectives. "Fair and equitable sharing" apply exclusively to human groups. Following the principle of bio-proportionality, or allocating resources according to ALL species' needs (Mathews 2016), it is clear that SDGs are not proposing fair sharing with nonhumans – in fact, nonhumans themselves are seen as resources.

It is notable that most of the SDGs promote 'sustainable industrialization' and 'sustainable use of land', sustainable USE is a clearly anthropocentric term (Kopnina 2016a, 2016b). Unless fundamental issues concerning production, consumption, and population growth are addressed, the practice of USE of natural resources is likely to continue as ABUSE of ecosystems in a sense of taking away and providing no return (Crist 2012). The underlying ethic of USING 'resource' and 'services' underscores the exclusive focus on social and economic equity at the expense of ecological justice (Baxter 2005). Ecological justice includes biospheric egalitarianism (Naess 1973), which refers to justice between human and non-human species (Kopnina 2014). Yet, the SDGs are exclusively concerned with environmental justice – or fairness of distribution of environmental risks and benefits – that is akin to social justice (Strang 2017).

Obviously, supporting social justice is a noble cause. However, the great concern here is that neither ecological nor environmental (socially-defined) justice can be achieved if the rhetoric of SDGs prioritizes use and distribution of resources, not the preservation of the planet. In the long term, such concerns are not likely to lead to the sustainability of social or economic systems either. In this context, the SDGs' *inclusion* of capital, profit, and the competition in order to shape a supposedly sustainable economy in effect *excludes* nonhuman nature (Kopnina 2017), consideration of intrinsic value, and the very basic sense of responsibility for continuous destruction of the environment.

Resilience and Extinction

The SDGs aim to make bold steps 'to shift the world onto a sustainable and resilient path' by the means of developing 'resilient infrastructure', 'resilient cities' (UN 2015). But how is resilience defined, both by policy-makers and academia? The concept of resilience has been referred to as the buffer capacity for preserving what we have and recovering to where we were (Folke et al. 2016). Resilience is often used in the context of social and natural systems and their ability to adjustment adaptation, for example as in the case of climate change (Bassett and Fogelman 2013), or in the case when climate change is linked to social systems (O'Brien et al. 2015). Resilience

can also refer to the ability to absorb disturbances or to retain the same basic structure and ways of functioning, based on four components, identified by Walker et al. (2004). These components are Latitude (the maximum amount a system can be changed before losing its ability to recover); Resistance (the ease or difficulty of changing the system; how “resistant” it is to being changed); Precariousness (how close the current state of the system is to a limit or “threshold” and Panarchy (because of cross-scale interactions, the resilience of a system will depend on the influences from dynamics at scales above and below) (Walker et al. 2004).

Some of the resilience literature indicates that not all features of human adaptation to natural (or human-made) disturbances are desirable (Kopnina 2017). Lewis and Kelman (2010), for example, discuss community capacities in ecologies of catastrophe, arguing that vulnerability to environmental disaster should not be viewed as a contemporary snapshot of a group of people in a specific place-but attempt to reveal deeper causes of vulnerability that extend beyond here and now. Pelling (2011) discusses how adaptation to climate change can deny the deeper political and cultural roots that call for significant change in social and political relations if human vulnerability to climate change associated risk is to be reduced. In this context, Pelling counter poses resilience, which he sees as stability, to transition, which he defines as incremental social change and the exercising of existing rights, and transformation (new rights claims and changes in political regimes).

As accepting resilience is actively preventing us from taking the necessary actions to avert climate change or biodiversity loss, ‘adaptation’ came to be known as surrender to development (Rees 2008, Washington 2013). It was noted that resilience thinking is ‘inadequate or inappropriate for leading to sustainability, especially when viewed from a social science/learning perspective’ (Lotz-Sisitka et al. 2015:74).

What is particularly relevant in the context of anthropocentrism that little of resilience literature engages with non-human resilience (or the lack thereof). When discussing disaster prevention and management, Sudmeier-Rieux (2014), for example, speaks of preventing those disasters that can affect human – primarily economic interests. This is very similar to the way SDGs discuss climate change – in terms of mitigation of economic damages due to droughts or floods, and in terms of adaptation of human communities. In acknowledging differences between ecosystems and societies, Weichselgartner and Kelman (2015), for example, still argue for increasing resilience for society, with natural resilience seen as useful for society. This familiar utilitarian twist highlights the fact that while society might be highly resilient through technological advancement this resilience is often won at the cost of thoroughly ‘denaturing’ the planet by turning everything into a consumable resource (Crist 2012). Simply, resilience does not apply to nonhuman beings and their habitats that support them. The top-down management of ‘resources’ and innovation technology to increase resilience is rarely directly beneficial to non-humans as some of it involves, as previously stated, expanding industrial agriculture (which also implies inhumane treatment of farm animals) (Garnett et al. 2013). Considering that the human population can be materially sustained by genetically modified monocultures made resilient to insects, changes in temperature due to climate change, or even desertification and pollution caused by massive chemical inputs of this same agriculture, it is conceivable to imagine that humanity is not the most vulnerable species.

The resilience of non-human species is less evident, judging from The World Wildlife Fund’s Living Planet Report (WWF 2016) and Millennium Ecosystem Assessment (MEA 2005) reports. To use an example of agriculture,

which supports food security and the moral call for "feeding the planet", puts into question whether social and economic resilience can, in fact, lead to a decline in natural resilience. Expansion of agricultural and urban areas and associated water use and increased chemical inputs are causing declines or extinctions of indigenous flora and insects (Biesmeijer et al. 2006, Erisman et al. 2016). While some researchers in the field of sustainability praise intensive agriculture, they seem to discount the damage to nonhuman species – both through displacement from areas that tolerate no ‘invasive’ species nor from farm animal suffering. Ecocentric ethics and animal rights literature (e.g., Naess 1973, Katz 1999, Rolston 2002, Borràs 2016) are not considered. For example, the increase in the use of insecticides has led to sharp declines in pollinators and insect-dependent plants (Biesmeijer et al. 2006). Since in intensive agriculture “weeds” are controlled with herbicides and no use is made of natural insect control, the natural functions are not used and there is a high degree of dependence on external inputs to increase productivity (Erisman et al. 2016). Due to dependency on artificial fertilizers, the soil processes for nutrient supply playing only a marginal role (Erisman et al. 2016). Pragmatically, the realization of trade-offs necessitated by the biological requirement to consume plants (Evans and Clark 2017), implies that choices need to be made about what type of plant use is justifiable – both in terms of sustainability and ethics – and what is less so.

Yet, the choices are not seen as ethical but pragmatic – and strictly from human utility point of view. Despite concerns about dependence on external inputs, exhaustion of the soil, increased toxicity, contamination of groundwater, and massive loss of biodiversity, the debate about sustainable agriculture is characterized by a one-sided focus on the need to increase production (Erisman et al. 2016). This is just one example of resilience, used to promote food security by the SDGs that once again privileges social and economic at the expense of ecological objectives. The commodification of nature as a resource or an ecosystem service in the quest for human resilience is thus ethically questionable (e.g., Shoreman-Ouimet and Kopnina 2016, Kopnina 2017). It is not clear how simultaneous aim to feed billions of people and intensifying food production can realistically be combined with the aim of *“halting and reversing land degradation and halt biodiversity loss”* (UN 2015). Latitude, resistance, precariousness, and panarchy might thus mean very different things when food security as opposed to the question of species' decline or extinction.

Ways Forward

In order to move forward and to retain the aim of “our common future” including billions of nonhumans, we need to consider how economic growth, inclusion, and resilience need to be radically reconceived. Instead of economic growth, the less optimistic but very necessary limitations – in terms of carrying capacity (to use anthropocentric terms), as well as a limitation to economic greed, need to be considered. Inclusion should also mean including nonhuman species into moral consideration and questions of equitable division of resources. Resilience for natural versus social/economic systems needs to be considered beyond one species. The only way in which humankind, acting as principal global agents of care, will be able to ensure a sustainable future for the entire Earth community, should include all planet’s citizens in distribution of resources (Kotzé and French 2018).

To move forward, the United Nations and associated institutions need to consider policy steps to reduce population and consumption as key aims of sustainable development. As Crist (2012:151) stated, the "population growth

everywhere would decelerate as soon as this was made the concerted goal of an international campaign, involving the partnership of aid organizations, financial and UN institutions, governments, and grassroots health caretakers and activists". From there, we could "take the road to decline numbers-perhaps thereby averting the sixth mass extinction, a dilapidated global ecosystem, climate catastrophes, and the real possibility of immense human suffering" (Ibid). In this case, the win-win scenario of promoting social equity and freedom, in a sense of exercising women's rights and reproductive rights, promoting education and reducing population is possible (Crist et al. 2017). As Dasgupta and Dasgupta (2017:431) argued, "if family planning programs were intensified to meet unmet need everywhere in Africa, the population there would be some 1 billion smaller in 2100 that is currently projected by UNPD (2015)". Thus, "greater investment in the service, bringing it into an alliance with other social programs, could be expected to reduce the population projections further" (Ibid). While some of the SDGs address human rights and education, explicit focus on reproductive rights of women in areas where most unwanted pregnancies occur and most children are born, exacerbating poverty and food insecurity, need to be made a priority (Crist et al. 2017). Reproductive rights and food security of nonhuman species need to be considered as well.

Simultaneously, removing economic growth from the agenda can remove ideological, practical and ethical barriers to achieving long-term goals of sustainability that takes all life on earth as a starting point. The growth economy is still espoused by the UN and almost all national governments. Instead of the growth economy, the steady-state economy that features a sustainable population size for the local carrying capacity, low resource use and a fair distribution of wealth (Daly 1991) as well as the circular economy. These frameworks seek to fully reuse rather than merely downcycle resources (e.g., Kopnina and Blewitt 2018). As a way forward, the SDGs might need to include explicit ecocentrism, which sees humans as part of the environment, but not exclusive or superior to it. In this framing, anthropocentrism is inadequate for biodiversity conservation as not all species fulfill economic function (Shoreman-Ouimet and Kopnina 2016, Piccolo et al. 2018), contributing to resilience and inclusion of all global citizens.

Conclusion

In a globalized market economy supported by the SDGs, ecosystems and their non-human inhabitants are increasingly framed as mere providers of 'resources' and 'services' to human communities (Strang 2017). This relationship can be evaluated directly, in terms of sustainable resource use and/or within the limits of ecosystems, or indirectly, in terms of just distribution or equal opportunities (Keitsch 2018). As Adelman (2018) summarized it, the model of development envisaged in the SDGs is unlikely to enhance ecological sustainability and thus threatens to increase impoverishment. A more ecocentric orientation is urgently required to enable a truly equitable world and in order to better mediate the human-environment interface in the Anthropocene (Kotzé and French 2018). Hope lies in re-formulating the SDGs in such a way that the only "growth" promoted becomes that of human wisdom and compassion. In this reformulation, the inclusion of nonhumans should mean consideration of disproportionality (Mathews 2016) and ecological justice (Baxter 2005). The resilience of the planet offered by such reforms will stretch beyond short-term concerns with clean water, air, and resources, but include the resilience of entire planet, with all her inhabitants, to problems of our own making.

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