The insanity of endless growth

The authors consider the reality that endless economic growth on a finite planet is unsustainable, especially if society has exceeded ecological limits. The paper examines various aspects of society's endless growth predicament. It reviews the idea that there are 'limits to growth'; it then considers the 'endless growth mantra' within society. The paper then considers the 'decoupling' strategy and its merits, and argues that it is, at best, a partial solution to the problem. The key social problem of denial of our predicament is considered, along with the contribution of anthropocentric modernism as a worldview that aids and abets that denial. Finally, the paper outlines some potential solutions to our growth predicament.

Haydn Washington and Helen Kopnina

The world is faced with a grave predicament, yet one rarely spoken of. The United Nations (UN), almost all governments, business, media and both the political 'left' and 'right' are busy extolling *endless growth*. Yet we live on a *finite* planet, so clearly endless economic growth is impossible, and its pursuit unsustainable and unethical – indeed, such destructive pursuit of the impossible is insane. There are three main drivers of 'unsustainability' – overpopulation, overconsumption and the growth economy (Washington, 2015). We feel it is time to focus on these. These points have been made in the past, but for quite some time the reasons behind the unsustainability and insanity of endless growth have not been explored. We feel society (and academia) need to be regularly reminded of them.

The question "On a finite planet, is it possible to keep growing economically forever?" is one hardly ever asked in neoclassical economics (Daly, 1991; 2014) or in many other academic disciplines (Washington, 2015). Even the World Commission on Environment and Development (1987) report *Our Common Future* did not ask that question – suggesting that 'sustainable development' required a gross domestic product growth rate of 5% (a rate at which the global economy would *double* its output every 14 years).

More recently, the UN Environment Programme (2011: 2) has promoted the idea of the 'green economy', which it describes as "a new engine of *growth*" (our emphasis). The UN Sustainable Development Goals (available at http://www.un.org/sustainabledevelopment/) also fail to acknowledge that endless growth is impossible and its pursuit fundamentally unsustainable (Kopnina, 2016b).

Ecological limits

This obsession with endless economic growth demonstrates that societies still do not understand that humanity has exceeded ecological limits, and that this is the root cause of the current environmental crisis. The book *Limits to Growth* (Meadows *et al.*, 1972) showed that human population growth and the concomitant increase in the consumption of resources would exceed planetary limits around the middle of the 21st century, causing societal collapse. Upon its release, this report was strongly criticized by traditional economists, who labelled the authors 'prophets of doom' (Solow, 1973). However, a recent 40-year review of *Limits to Growth* has shown that its models are remarkably accurate (Turner, 2014). To summarize key environmental indicators of ecological overshoot:

- The Global Ecological Footprint now stands at 1.6 Earths (Global Footprint Network, 2017).
- The Living Planet Index has declined by 58% between 1970 and 2012 (WWF, 2016).

About the authors

Haydn is an environmental scientist, writer and activist based at the PANGEA Research Centre, UNSW, Sydney, NSW, Australia.

Helen is an environmental anthropologist at Leiden University, Leiden, and The Hague University of Applied Science, The Hague, the Netherlands.

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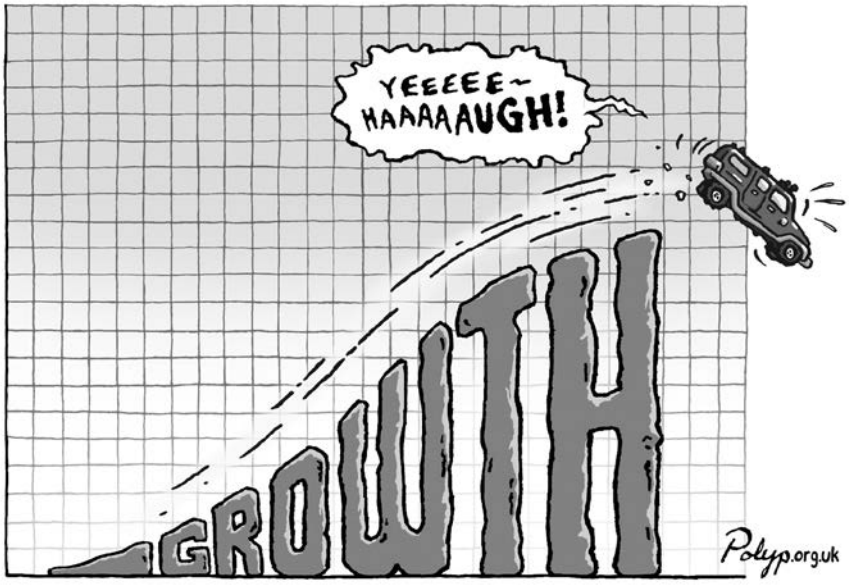


- The species extinction rate is at least 1000 times normal (Millennium Ecosystem Assessment, 2005).
- At least 60% of ecosystem services are degrading or being used unsustainably (Millennium Ecosystem Assessment, 2005).
- Four of nine planetary boundaries have now been exceeded as a result of human activity (Steffen *et al.*, 2015).

In effect, we are bankrupting nature and consuming the past, present and future of our biosphere (Wijkman and Rockström, 2012). On a finite world with expanding human population and consumption, clearly something has got to give. Humanity faces a fundamental problem, for it is totally dependent on the biosphere it is degrading (Washington, 2013). Hence society needs to understand and accept that we are *way past* sustainable ecological limits.

"We are bankrupting nature and consuming the past, present and future of our biosphere."

The endless growth mantra

Environmental science may tell us that the consumer society is on a self-destructive path, but many of us successfully deflect the evidence by repeating in unison the mantra of perpetual growth (Rees, 2008). Yet endless repetition does not make something true. Daly (1991: 183) pointed out that economic growth is unrealistically held to be "the cure for poverty, unemployment, debt repayment, inflation, balance of payment deficits, the population explosion, crime, divorce and drug addiction." This has not changed much in the 25 years since Daly wrote those words, and economic growth is still widely seen as the panacea for almost all societal ills. Sometimes commitment to growth may be promoted in the guise of 'free trade', 'competitiveness', 'productivity' – or even as 'sustainable development' (Victor, 2008). Indeed, from its coining in *Our Common Future* to now, 'sustainable development' has had its meaning largely coopted to mean 'sustainable *growth*' – a phrase which, we suggest, is an oxymoron (Washington, 2015). World leaders seek growth above all else. Neoclassical economics claimed that the benefits of growth would 'trickle down' and alleviate global poverty, but this has failed (Kopnina and Blewitt, 2015). As Daly (1991) notes, the verb 'to grow' has become twisted; we have forgotten its original meaning: to spring up and 'develop to maturity'. That is, in nature, growth gives way to maturity, a steady state. To grow beyond a certain point can be disastrous.

A final aspect of growthism is that it is commonly claimed that "economic growth is necessary if we are to have jobs." Is this claim correct? There are good grounds to question whether jobs have historically been linked to growth. Victor (2008) notes that the idea only developed 60 years ago, and for most of human history we managed to provide employment without economic growth. Does growth necessarily bring employment in any case? For example, there were more Canadians with incomes less than the 'low Income cut-off' in 2005 than in 1980, *despite* real Canadian gross domestic product having nearly doubled over that period (Victor, 2008). As Victor (2008) notes, it is possible to develop scenarios where full employment prevails, poverty is eliminated, people have more leisure, and greenhouse gases are drastically reduced, in the context of low – and ultimately no – economic growth. It is thus mistaken to assume that economic growth is a necessity for full employment.

Indeed, once we have exceeded ecological limits, growth will make us worse off. We have then reached *uneconomic* growth (Daly, 2014). However, unless there are changes in social outlook, our experience of diminished well-being will be blamed on 'product scarcity'. The orthodox economic and policy response will then be to advocate increased growth to remedy this. In the real world of ecological limits, this will make us even less well off, but this will in turn lead to advocacy of 'even more growth' (Daly, 1991). This becomes a death spiral. Healing our world requires accepting the reality that the economy cannot grow forever. However, in recent years the concept of *decoupling* has been put forward to argue that it is possible to have continued economic growth without producing further environmental damage.

Decoupling

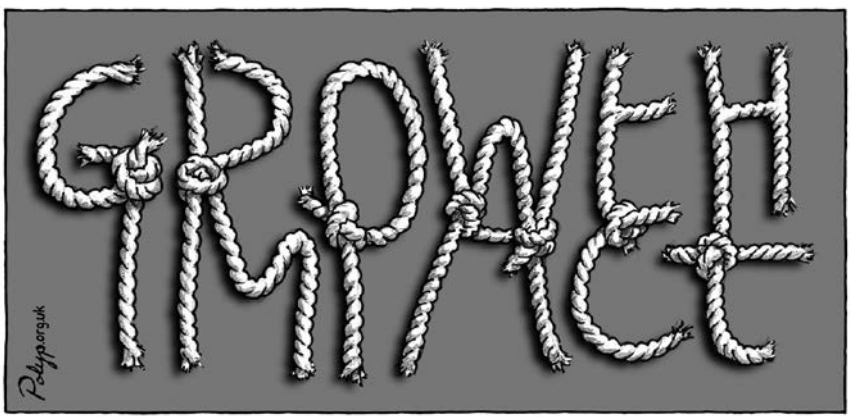
'Decoupling' refers to the idea that an economy can continue to increase its output of goods and services, without thereby increasing pressure on the environment – for example, by shifting to renewable energy sources, and using efficiencies to reduce the amount of resources and energy consumed. Reducing the use of energy and materials by society is certainly needed, and some claim we can move to a 'Factor 5' strategy and only use 20% of the energy and materials we currently use (von Wiezsäcker *et al.*, 2009), whilst still retaining our current quality of life. The problem with this approach is that the very concept of decoupling suggests we can keep on growing forever. As noted above, the UN advocates the 'green economy' yet also sees this economy as "a new engine of growth" (United Nations Environment Programme, 2011: 2); this combination of 'green' and 'growth' is only made plausible by invoking the idea that it is possible to completely decouple economic growth from environmental impacts.

How successful have we been in decoupling? Some modest decoupling of material flows occurred from the mid-1970s to mid-1990s, but total material throughput in the global economy still increased. Victor and Jackson (2015) note that while there has been some 'relative decoupling', any serious absolute decoupling is not evident. At best, as Victor (2008) notes, attempts at decoupling *slow down* the rate at which things get worse, but do not turn them around. Hence, talk of '100% decoupling' is likely to be merely wishful thinking that allows business-as-usual growth to continue. Indeed, focusing our attention on the idea of decoupling runs the risk of becoming part of the denial of the unsustainability of endless growth.

Denial

How is it possible for civilizations to be blind towards the grave and rapidly approaching threats to their survival, even when the evidence for those threats is extensive (Brown, 2008)? Humanity has a key failing – we tend to *deny* our problems. Humanity denies some things because they force us to 'confront change', others because they are just too painful, or make us afraid. This human incapacity to hear bad news makes it hard to solve the environmental crisis. Of course, another source of this denial is ideological, where the reality of the environmental crisis is denied owing to neoliberal hatred of any regulations that could restrict the activities of business (Oreskes and Conway, 2010). The result of such denial is that, as a society, we continue to act as if there is no environmental crisis, no matter what the science says (Washington, 2017a). Perhaps the key form that denial takes in the public realm is simply *silence* – thus the silence about the environmental crisis;

> "Attempts at decoupling slow down the rate at which things get worse, but do not turn them around."



the silence about the fact that the world is overpopulated; the deafening silence about the impossibility of endless growth (Washington, 2015).

In the past, denial of ecological limits was common in neoclassical economists. However, such denial of reality is not just a thing of the past. *An Ecomodernist Manifesto* (available at http://www.ecomodernism.org/) was written in 2015 by eighteen professionals, ten of whom are academics. The manifesto claims:

> Despite frequent assertions starting in the 1970s of fundamental "limits to growth", there is still remarkably little evidence that human population and economic expansion will outstrip the capacity to grow food or procure critical material resources in the foreseeable future [...] To the degree to which there are fixed physical boundaries to human consumption, they are so theoretical as to be functionally irrelevant.

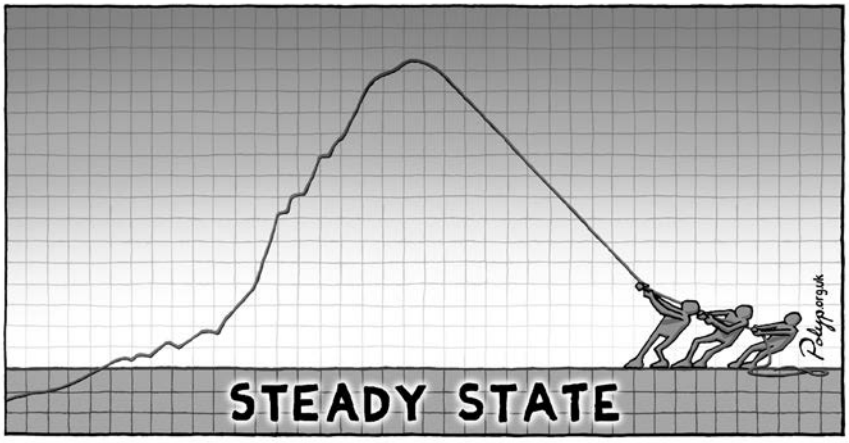
Such a dismissal of ecological limits (and the rapidly worsening environmental crisis) indicates many in academia are still in denial of the insanity and unsustainability of endless economic growth.

"It has only been possible for our societies to maintain a belief in the desirability of pursuing endless growth, because of the dominant anthropocentric worldview of modernism."

Anthropocentrism versus ecocentrism

Many things change (and solutions become easier) if we change our worldview and ethics. As Donella Meadows (1997: 84) notes:

> People who manage to intervene in systems at the level of a paradigm hit a leverage point that totally transforms systems [...] In a single individual it can happen in a millisecond. All it takes is a click in the mind, a new way of seeing.



It has only been possible for our societies to maintain a belief in the desirability of pursuing endless growth, because of the dominant anthropocentric worldview of modernism (Curry, 2011), which sees the world as no more than a resource for human use (Crist, 2012). To put this another way, the obsession with endless growth has been the offspring of the anthropocentric 'human chauvinism' and 'speciesism' that has dominated Western society for at least the last 200 years.

In contrast, an ecocentric worldview finds *intrinsic* value in nature (Washington *et al.*, 2017). It holds, as Daly (1991: 248) notes, that "there is something fundamentally wrong in treating the Earth as if it were a business in liquidation." Society thus needs to return to ecocentrism and adopt an Earth ethic (Rolston, 2012) and undertake the 'Great Work' of repairing the Earth (Berry, 1999) to enter the 'Ecozoic' (Swimme and Berry, 1992). Changing to a worldview of ecocentrism is thus the key step on the path to a sustainable future (Washington *et al.*, 2017).

Solutions

A major problem with tackling the environmental crisis is the distraction caused by partial solutions. For example, we acknowledge the need for the maximum possible 'decoupling' as part of a circular or green economy, one that massively reduces society's use of energy and materials (Kopnina and Blewitt, 2015). However, such savings should not be seen as 'a new engine of growth', nor will such savings be long-term solutions if we fail to address overpopulation and overconsumption. The plain truth is that partial solutions are only of value if they are part of a comprehensive move to abandon endless economic growth. We suggest the following solution frameworks (Washington, 2015):

- accept ecological reality and roll back denial;

- adopt an ecocentric worldview (inspired by a sense of wonder at life), where we abandon the false anthropocentric dream of 'mastery of nature'.

These are the overarching changes in our mindset that we must make. Within them are the practical strategies, including:

- controlling population growth through education, family planning and non-coercive, humane strategies (Engelman, 2016);
- rolling back the deliberately constructed consumer ethic (Assadourian, 2013) and concurrently adopting a 'cradle to cradle' approach (Kopnina and Blewitt, 2015);
- moving past growthism to a steady-state economy (Daly, 2014);
- solving climate change urgently, focusing on mitigation;
- adopting of 'appropriate' technology, especially 100% renewables within two to three decades, concurrently with major drives for energy efficiency and conservation;
- reducing poverty and inequality, while simultaneously supporting the Nature Needs Half vision (Kopnina, 2016a);
- educating effectively for sustainability based on ecological reality and ecocentrism;
- creating the political will for change.

Change is urgently needed, and is certainly feasible. The key to this is breaking the silence of denial, by *talking* about the problems. This may sound wishy-washy, but in fact meaningful dialogue on the impossibility of endless growth is an essential step. Academia can (and should) lead the way on this. Solving the key cause of the problem – the idea we can have endless economic growth on a finite planet – means tackling the three key drivers of unsustainability (Washington, 2015): overpopulation, overconsumption and growth-focused economic policy.

However, this also means tackling some of the biggest taboos in society. First, many in society still consider discussion of limiting the human population a taboo, but we cannot afford to have this remain an 'undiscussable'. Secondly, Western society (globalized around the world) is a 'consumer culture' that has been deliberately constructed since 1950; and what was deliberately constructed can also be deconstructed (Assadourian, 2013). Thirdly, the growth economy is still espoused by the UN and almost all national governments. However, a rational (and ethical) solution has been espoused by ecological economist Herman Daly since the 1970s: the steady-state economy (Daly, 1991; Daly, 2014). A steady-state economy features a sustainable population size for the carrying capacity of its region, low resource use and a distribution of wealth which is fair and equitable on an intergenerational basis (Daly, 2014).

The transition path to a steady-state economy will be made up of many small 'positive steps' that society can take (Washington, 2017b). The steady-state economy deals with all three key drivers of ecological unsustainability, plus a key driver of social unsustainability: inequality of income. The scale of income inequality as a problem can be understood from the fact that the wealthiest 10% of the world's population now owns approximately 85% of the world's wealth (Credit Suisse, 2016). The 'cradle to cradle' approach (and the related circular economy) arguably offer the most hope to cut resource use (Kopnina and Blewitt, 2015). However, we feel that ways forward can only be found if the steady-state economy and the circular economy (within the former) are adhered to in strict terms and practice. That means that they must not be subverted to become partial solutions used to encourage further growth.

As remarked above, to enable these changes, what is needed is a major paradigm shift from anthropocentric modernism to ecocentrism (Washington *et al.*, 2017). We acknowledge that the scale of our predicament is huge, but maintain that solutions are possible if we overcome the denial that currently blocks them. Now, accepting the reality of our predicament can be depressing. Hence the need to discuss statements such as: "It is too late." The danger of such statements

"The steady-state economy deals with all three key drivers of ecological unsustainability, plus a key driver of social unsustainability: inequality of income."

is that they tend to become self-fulfilling prophecies, as they give people an excuse to go into despair, and do nothing positive (Washington, 2015). In fact, every action we take towards a 'Great Work' of repairing the Earth (Berry, 1999) is useful. *So it is never too late.* Some actions, indeed, may fail, but some may help to turn the tide – a 'great tide' of rising action (Moore, 2016).

Conclusion

The insanity and unsustainability of endless economic growth is a critical reality that society must acknowledge and discuss. To ignore this is irrational and self-destructive. Ecological limits exist and have been exceeded. Yet society remains locked into the unsustainable mantra of endless growth that has caused the environmental crisis. Most government and business response to this has been to undertake partial solutions, while at the same time denying the central cause – our addiction to endless growth. Our ability to deny our predicament is aided by the dominant worldview of anthropocentric modernism. Hence we face a difficult predicament, for the global experiment of endless growth has well and truly failed, and destructively so.

"The insanity and unsustainability of endless economic growth is a critical reality that society must acknowledge and discuss. To ignore this is irrational and self-destructive."

Change is not easy but it is possible, but only by accepting the nature and scale of our predicament. If we break the silence of denial, then everything becomes easier. The other great game-changer is changing our worldview from anthropocentrism to ecocentrism. We can then move to slow (then stop) growth in population, and minimize resource use via a steady-state economy. We can stop global ecocide, improve social equality and move to a truly sustainable future. Then, this era could become, not the egotistical 'Anthropocene', but the start of the sustainable 'Ecozoic'. That is a worthy vision for the 21st century, a 'Great Work' we can *all* help bring to reality. ■

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