What's Wrong with Degrowth?

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What's Wrong with Degrowth?

by

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Abstract

Why is degrowth being dropped by some of its highest profile populist writers? What happened to degrowth's foundational concerns for biophysical reality, limits and stopping the imperialist spread of growth as development? Is the second generation of degrowth writers losing touch with reality and common sense? Key positions and conflicts are drawn out of selected speeches from two European Parliament conferences: *Post-Growth 2018* and *Beyond Growth 2023*. Plenary speeches are analysed to address the question of how compatible are the different perspective of degrowth (Giorgos Kallis), post-growth (Tim Jackson), doughnut (Kate Raworth) and steady-state (Timothy Parrique). Political pragmatism is shown to conflict with creating meaningful and coherent understanding. Specific issues raised are the implications of the growth imaginary, the reality of limits, and planetary boundaries vs. post-development A critical realist perspective highlights a range of issues affecting degrowth including the need for rational judgment in theory choice, realism in conceptualisation, connecting activism to science, and attending to causal mechanisms and structure to identify potentiality for systems change. The paper reveals how far degrowth has drifted from its origins.

Keywords: degrowth, post-growth, doughnut economics, steady-state economics, critical realism, growth imaginary, limits, post-development

Introduction

The opening plenary of the 2023 Beyond Growth conference at the European Parliament featured Jason Hickel, the author of "Less is More: How degrowth will save the world" preceded by the President of the European Commission (EC). A major occasion for degrowth to profile its message. Astoundingly, the term degrowth did not feature even once in Hickel's talk. In recent times, degrowth appears to be taking a backseat to post-growth. Hickel is now based in Barcelona with Giorgos Kallis, and together with ecological economist Julia Steinberger they are running a newly funded research project called "Post-Growth Deal" formulated without mentioning degrowth. Kallis and Hickel are co-authors on a recent article making no mention of degrowth, but instead employed the term post-growth, defined as having governments "actively manage lower rates of growth" (Slameršak, et al. 2024 52). They are also part of a broader collective labelling itself post-growth (see Kallis et al., 2025), which includes Tim Jackson (post-growth), Kate Raworth (doughnut), Dan O'Neill (steadystate) and Peter Victor (ecological-macroeconomic modelling). Three years earlier, an almost identical collective (excepting Raworth) published a similar article under the heading of degrowth (Hickel, et al. 2022). So, why is degrowth being dropped?

Shortly after the first international degrowth conference, Economic Degrowth for Ecological Sustainability and Social Equity, Paris 2008, and publication of the Degrowth Declaration (Research & Degrowth 2010), the term was subject to criticism as being negative (Scott-Cato 2010). For some degrowth fell into the category of Malthusian doomsaying, imposing limits and deny the benefits of technology. Degrowth was heavily criticised by Raworth (2015) along these lines; she prefers positive framing, promoting human innovation and new technologies (Raworth 2017). For originators, like Serge Latouche, degrowth is a missile word, a provocation to the rhetoric of consumerist convenience society with its promotion of materialist hedonism, individualism, technology as inherently progressive and growth as saviour of the poor. Gershon (2018) notes that the term degrowth "sounds to many in the economic and political mainstream absolutely absurd. (Given Americans' boundless love of all things material, it may not be surprising that the idea has taken off faster in Europe)." However, she recognises its role. "Many Americans prefer to thinking about economic reform in positive terms—'sustainability', 'green jobs'—but the negativity of the word 'degrowth' can be exactly what makes it right". She cites Sam Bliss who believes "Degrowth is clear—it can't be co-opted by people who are trying to make money".

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¹ No occurrences only appearing in a few publication titles. https://www.realpostgrowth.eu/ Accessed 25/5/2025

In fact, degrowth has been quite successful, quickly becoming an established and widely recognised social movement. A decade after Paris, degrowth researchers were invited into the European Parliament to debate policy and five years later they were back at the *Beyond Growth* conference, engaging with policy advisers, union and business representatives, researchers and NGOs. A younger generation of environmental activists also joined, motivated by such negative framings as extinction, catastrophe and emergency. Degrowth is common sense for a generation seeking plain speaking truth about the reality of social-ecological crises using science to confront politicians and post-truth denialism.

However, degrowth was not established to be a scientific paradigm that would produce a theory of contraction equivalent to economic growth theories (Latouche 2004). Indeed, attempts convert degrowth into ecological macroeconomic models have resulted in conceptual mainstreaming and loss of its essential messages and meaning (Morgan 2017; Spash 2024). Yet, degrowth has not lacked a scientific basis. French scholars' first promoted *decriossance* and in Paris they identified Georgescu-Roegen's (1971) work on entropy and limits as foundational. There have since then been strong connections to ecological economics despite some academics fearing values and ideology coming into science. Critical realism counters such fears by rejecting the fact-value dichotomy and traditional naive objectivist accounts of empiricism and modelling as value free. Ideology motivates science from its foundation (Spash 2024). Good scientists act on their findings and in the social sciences that means seek policy reform and removing bad institutions (Collier 1998 446). Good scientific understanding is also essential to informed and effective activism. This is also why social ecological economics and degrowth are complimentary and many identify with both.

Degrowth prominently critiques the capital accumulating growth imaginary regardless of the regime being corporate capitalism USA, ordoliberal Europe or state socialist China. Social-ecological economics provides causal explanation of economic growth, how it structures society and its biophysical basis. Social metabolism and unequal exchange explain the operation of technology and inherent features of capital accumulation including exploitation, environmental destruction and militarised interventions to secure supply chains. A broad research agenda arises about how to structure alternative economies for social-ecological provisioning to meet human needs within an ethical framework of care and justice for others, both human and non-human. (Spash 2024; Spash and Ryan 2023). This involves criticising, improving and replacing concepts to reflect reality and countering fallacious mainstream economic and utilitarian accounts (e.g. found within the Wellbeing Alliance Fioramonti, et al. 2022). Research is directed at the constituents of a good/meaningful life,

distinguishing between needs and satisfiers, investigating sociopsychology of consumerism and human relationships with Nature.

This is an agenda informed by critical realism, recognising different potentialities, mechanisms and counter-mechanisms. Capitalism turns everything into a money making opportunity, pollution limits become new markets for pollution permits and biodiversity loss a chance to trade offsets. Contra Bliss, degrowth can be co-opted. Rather than asking what would firms have to be like to create a degrowth economy and society (Johanisova and Fraňková 2017; Nesterova 2020), degrowth can be subject to co-creation with business schools and incorporated into existing business models (Roulet and Bothello 2020). Premising science on a preanalytic vision that identifies the necessity of radical transformation is very different from working within hegemonic institutions (Brand 2016).

A particular concern is then how growth imaginaries can entre through the backdoor of post-growth, doughnut or steady-state economics. Gershon (2018) notes that ecological economist Joshua Farley (Bliss's doctoral supervisor) avoids the term degrowth, preferring to talk about an overflowing neo-cornucopian horn of plenty with more than 'we' need becoming detrimental to our wellbeing. Other ecological economists have similarly emphasised American style affluence as the main problem and advocated a steady-state economy (Dietz and O'Neill 2013). In post-growth and doughnut economics capitalist growth is no longer an inherently problematic structure, 'we' just have too much of a good thing. This contrasts with understanding that the cornucopia is not, never was, and never will be for all.

Degrowth has also been subject to change with a new generation in the movement after Paris (e.g., Kallis and a decade later Hickel). As Pellizzoni (2021 89) notes: "the original standpoint, eminently represented by Serge Latouche's writings between the 1990s and the early 2000s, is that it is necessary to stop growth, shrinking energy and resource throughput [...] a significant drift in the argument has been taking place among the second generation of scholars". Indeed, a paradoxical position has become increasingly prevalent in which economic growth is recognised as harmful but policy should enable the global South to benefit from it. Discussing 'no growth' and biophysical limits is no longer *de rigueur* in some degrowth circles.

In the following, the drift and problems around degrowth are addressed. The two most high profile European public policy events, the conferences held in 2018 and 2023, are outlined and then used to profile the way in which positions are publicly presented. Plenary speeches covering degrowth, post-growth, doughnut and steady-state economics are critically analysed. Based on this analysis the idea of merger is brought into question. Three

specifically contentious topics are then discussed: growth imaginaries, the denial of limits and development as growth. Throughout the content and meaning of degrowth is reflected upon informed by a critical realist philosophy of science.

Background on Two European Parliament Conferences

Post-Growth 2018

For this conference, Phillipe Lamberts' team, supported by ten Members of the European Parliament (MEPs) from five political groupings,² gathered together hundreds of professionals from policy, business and labour organisations. The two day main conference was preceded by a day of workshops with around eighty European degrowth/ecological economic researchers and succeeded by a meeting with trade unions. The opening session featured Jackson and the closing session Kallis. An open letter, "Europe, It's Time to End the Growth", signed by around 230 scientists, petitioned MEPs to meet four demands.³

- 1) Constitute a special commission on Post-Growth Futures in the EU Parliament
- 2) Incorporate alternative indicators into the macroeconomic framework of the EU and its member states
- 3) Turn the Stability and Growth Pact into a Stability and Wellbeing Pact
- 4) Establish a Ministry for Economic Transition in each member state

In the closing session four MEPs remained, but only Molly Scott-Cato commented directly on the demands. She supported 3) and 4) strongly, but dismissed the first two as repeating ongoing activities, i.e. no need for more committees or metrics. Lamberts closing speech noted intensive lobbying and attempts to co-opt MEPs showed they had real power. He promised a follow-up conference.

The union meeting next day revealed orthodox conformity to a growth paradigm prioritising jobs over environment. Luca Visentini, European Trade Union Confederation (ETUC) General Secretary, appeared totally aligned with Jeffrey Franks, Director of International Monetary Fund (IMF) Europe. Interestingly, Visentimi was later arrested for corruption in the ongoing Qatargate scandal and ejected from his post for accepting bribes.

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² https://www.postgrowth2018.eu/ Accessed 20/5/2025

³ Authors: Demaria, O'Neill, Kallis, Raworth Jackson, Hickel and Conde (Federico Demaria personal communication 25/7/2018).

2023 Beyond Growth: Pathways towards Sustainable Prosperity in the EU

Lamberts' office organised the follow-up conference,⁴ supported by twenty MEPs. Thousands attended with high profile academics, political players and non-European speakers. Plenaries were held in the parliamentary chamber.

Ursula Von der Leyen, EC President, opened with a Germanic ordoliberal position advocating green growth and a "social market economy". Commissioners followed suit with green growth agendas backed by circular economies, green consumerism, ocean resource extractivism, high-tech, renewable energy (extractivism) and financialisation of nature (EU taxonomy). More progressive was the shift in the Union leaders position towards planned transformation of economic activities rather than defence of fossil fuel industries, and some vocal support for degrowth.

Joseph Stiglitz (online) delivered an apologia for economic growth consistent with his belief that: "What matters is whether growth is sustainable, and whether most citizens see their living standards rising year after year" (Stiglitz 2015 149). In ecolgical economics he is known for ignoring Georgescu-Roegen's direct challenge to the Stiglitz-Solow growth model, despite being rechallenged by Daly (1997a; 1997b). Stiglitz' simplistic advocacy of carbon pricing and decoupling revealed his orthodox credentials.

A distinct development was participation by large numbers of young climate activists demanding systems change. Their standing ovations for anything challenging the establishment discourse disturbed the men and women in grey suits. They took over the closing event with singing and banner waving protest. Overall, however, the conference was a mixture of mainstream versus activist rhetoric talking past each other.

Degrowth Alliances and Political Pragmatism

Calls for alliances, like the post-growth collective (Kallis, et al. 2025), are not new. The 2018 open letter claimed:

[...] a post-growth movement has been emerging. It goes by different names in different places: *décroissance*, *Postwachstum*, steady-state or doughnut economics, prosperity without growth, to name a few. Since 2008, regular degrowth conferences have gathered thousands of participants. A new global initiative, the Wellbeing Economies Alliance (or WE-All), is making connections between these movements, while a European research network has been developing new 'ecological macroeconomic models'.

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⁴ https://www.beyond-growth-2023.eu/ Accessed 23/5/2025

Corridor discussions noted the exclusion of degrowth from the main conference title, "Post-Growth", compared to the pre-conference meeting: "The Institutionalisation of Degrowth & Post-growth: The European level". In light of this, Kallis' closing address flagged-up disputation over the term degrowth.⁵

"there is some discussion whether its you should talk about degrowth, post-growth or growth agnosticism. I would say to the extent that we talk with the European Union, or with institutions that the idea of growth is very entrenched, I wouldn't mind that much how we talk. That's why the letter you saw was signed by a broad array of people, of scientists, with which we don't necessarily agree on that question. For example, with Kate Raworth, whose work I admire, we had a disagreement; she was saying 'I wouldn't use the word degrowth', she preferred 'doughnut'. I prefer degrowth, *decriossance* [...] so there's an internal disagreement"

This readiness to employing terms interchangeably belies the different claims about underlying structure and converts the need for rational judgment between theories into a political word fight. Similar to Kallis, when comparing growth, degrowth and post-growth, Likaj, Jacobs and Fricke (2022 1) conclude that "the contemporary debate is best understood as a disagreement between political strategies, in which the character of public and academic discourse plays a key role". Jacobs and Mazzucato (2016) support inclusive green growth. Barth and Jacobs (2022), who both attended the 2023 conference, argue that green growth is compatible with degrowth and aligns with Jackson and Raworth. Such arguments deny fundamental incompatibilities concerning theoretical conceptualisations and ontological assumptions as revealed in the presentations of Jackson (post-growth), Raworth (doughnut) and Parrique (steady-state), which are next discussed in turn.

Degrowth is not Post-Growth

Jackson's 2018 opening address announced history was in the making, although the session was totally orthodox.⁶ Pro-growth arguments came from Margrethe Vestager, Danish Social Liberal Party and Wolfgang Munchau, Financial Times, who used his role as moderator to deride *Limits to Growth* (Meadows, et al. 1972), for which Jackson criticised him. However, Jackson's own apologetics for growth were at the fore.

"I absolutely agree with Margrethe that the benefits that growth has brought human development, up to a certain point, are enormous indicators of social progress: the reduction in infant mortality, the extension of the life expectancy of human beings, the access to

⁵ https://www.postgrowth2018.eu/closing-session/ Accessed 20/5/2025

⁶ All quotes from https://www.postgrowth2018.eu/opening-session/ Accessed 22/5/2025

sanitation, to clean sources of energy and water, the good nutrition that we for the most part in the EU, although not all, tend to take for granted, these are the products of what at first sight looks like an incredibly successful system delivering to human beings the needs that will make their lives full, healthy, satisfying and long. And there's also no doubt in my mind that in the poorest countries of the world those advances are absolutely necessary."

This statement makes a series of highly contestable claims about pre-capitalist livelihoods, and what can be historically attributed to economic growth, as opposed to independent scientific advance, for example, while also ignoring any downsides. Pre-industrialisation, agricultural capitalism enforced private property rights over common-pool resources, depriving people of both liberty and ability to self-provision leading to riots and civil protest (Hill 1997; Meiksins Wood 2003; Thompson 1993). The history of British industrialisation is one of widespread injustice and rural migration into urban poverty documented by diverse contemporary social reformers, e.g. Charles Dickens, Karl Marx, Patrick Geddes. That capitalist care nothing for needs (use value) and are only concerned with making money (exchange value) was central to Marx's explanation of labour exploitation and the horrors of the working day (Marx 1974 [1887] Chapter X). The more recently documented experiences of development policy in the global South reveal that: "What was supposed to bring contentment to everyone in every aspect of life led only to corruption, confusion and structural adjustment plans that turned poverty into destitution", and this applies equally to socialist regimes (Latouche 2004).

Jackson's account simplistically equates growth and development and by implication the need to impose growth on others (Spash 2021). This contrast with the Degrowth Declaration:

"In countries where severe poverty remains, right-sizing implies increasing consumption by those in poverty as quickly as possible, in a sustainable way, to a level adequate for a decent life, following locally determined poverty reduction paths rather than externally imposed development policies." (Research & Degrowth 2010 523-524)

Jackson (2009 41) believes that: "There is no case to abandon growth universally. [...] It is in these poorer countries that growth really does make a difference". So, post-growth is presented as universal economic growth first and after that something else. However, having institutionalised economic growth and all its problems how is something else meant to takeover? This was Keynes (1930 97) conundrum in knowingly recommending an economic growth system that institutionalises greed, love of money and related "semi-criminal, semi-pathological propensities". He had no answer.

Jackson's orthodox mainstream account went on to relate economic growth to labour productivity and that to inequality. Declining labour productivity was presented as the most important problem facing society: "This secular stagnation challenge is to me emerging as the most forceful, important, the most resonant, politically resonant, challenge and the strongest reason for thinking about a post-growth economy". He continued by describing the principal justification for economic growth as being 'a rising tide lifts all boats'.

"Long as everything is growing, then it doesn't matter too much what's happening as long as that continues to raise the living standards of the poorest. You look at growth in the period after the second world war until about 1980, trickle down was happening; both across nations and within nations, the benefits of growth were going to the poorest in this society. This is largely Thomas Piketty's work and is really worth looking at as part of the evidence base."

Trickle down was advocated from the early 1960s onwards, but as benefiting all classes, not just the poorest. As Stiglitz notes, the belief was that:

"[...] economic growth would bring increasing wealth and higher living standards to all sections of society. At the time, there was some evidence behind that claim. In industrialised countries in the 1950s and 1960s every group was advancing, and those with lower incomes were rising most rapidly."

Note, the evidence cited is restricted to a twenty year period for industrialised nations. Stiglitz (2015 134) provides arguments why "The trickle-down notion—along with its theoretical justification, marginal productivity theory—needs urgent rethinking". Elsewhere, he states that trickle-down economics "suggests that high inequality is not really that bad, since all are better off than they would be in a world without such a high level of inequality" (Stiglitz 2012 154). However, the idea that if GDP is increased trickle-down economics will ensure that all will benefit is incorrect (Stiglitz 2012 62), "trickle-down economics doesn't work" (Stiglitz 2012 7).

Jackson's positive take on trickle-down economics failed to recount its use for justification of regressive taxation, because money given to the rich would inevitably 'trickle down' to the poor. Stiglitz (2015 134) notes that this version did not follow from the postwar evidence, but was promoted by the Regan administration to support "giving a blank check to the corporations and hoping that somehow some of that money will trickle down and eventually create jobs" (Stiglitz 2012 226). Bush and Obama did the same for the banks and bankers (Stiglitz 2015 136).

Jackson's call on evidence based empiricism, with its naive objectivism and closed systems thinking applied to open systems reality, is something which critical realism alerts us

to question. In this case, the focus on nation states ignores embodied labour, materials and ecological degradation from around the world, and how industrialised nations prosper at others expense. Indeed, missing here are the roles of economic growth as an American imperialist foreign policy tool (Schmelzer 2015), unequal exchange and how labour in industrialised nations exploits labour elsewhere, which also undermines productivity claims (Hornberg 2001; Hornborg 2024). Jackson's position also contrasts with point 3 of the Degrowth Declaration:

"Global economic growth has not succeeded in reducing poverty substantially, due to unequal exchange in trade and financial markets, which has increased inequality between countries." (Research & Degrowth 2010)

As Brand and Wissen (2021) explain, industrialised nations are engaged in 'the imperial mode of living' built on international exploitation.

Degrowth is not a Doughnut

Raworth (2015) stated her dislike of degrowth a few years before publishing *Doughnut Economics*. In that book, she dismisses degrowth in a few sentences before making her case for being "agnostic about growth". As Raworth (2017 208) explains:

"Back in 2011, I was tasked by Oxfam to write a policy paper to help the organisation decide whether, **in high-income countries**, it should promote the concept of 'Green growth' or side with those advocating 'degrowth'. I jumped at the chance because it took me back to the heart of macroeconomic thinking. But my excitement soon turned to paralysis as I dug into the debate and found that while both sides had some strong arguments, both too quickly dismissed the opposition's case, and neither had a singularly compelling answer. [...] What I needed was to stop trying to answer that question head-on." (emphasis added)

There are no grounds here for rational judgement between theories (as recommended by critical realism), no references to the "strong arguments", and no discussion of their relative merits.

As noted, degrowth has foundations in ecological economics, a field with which Raworth now affiliates herself, and she approvingly references authoritative growth critical texts by Daly and Georgescu-Roegen. That degrowth could then be understood as lacking better arguments than growth agnosticism or green growth is hard to comprehend, especially for "high income countries". Similarly, Raworth (2017 231) makes passing reference to Marx *Capital Volume One*, including his money cycling theory, explaining the structure of capitalism as inseparable from growth, which means supporting capitalism is pro-growth, not

agnosticism about growth. However, in debate Raworth has rejected discussing capitalism, referring to it as a black box and an 'ism', like socialism and communism, that puts people off.⁷

In practice Raworth rejects agnosticism and, like Jackson, promotes economic growth to alleviate poverty. The difference is how her rhetoric naturalises economic growth in a form of social neo-Darwinism. Her 2018 TEDtalk presents growth as a natural phase, something universally applicable to everything from babies to economies, and she cites 7% growth rates in Nepal and Ethiopia as a natural phase in their development. She explicitly supports high-tech solutions citing everything from 3D printers to AI to blockchain as innovations that will help humanity to a better future. This neglects how the industrial revolution, the machine age, and modern economies use of innovation and technology, is strongly related to unequal exchange of embodied energy, materials and labour from periphery to core (Hornberg 2001). Similarly, Raworth's advocacy of circular doughnut cities rather begs the question as to from where they get their resources and whose embodied labour they are exploiting.

The pro-growth position is also evident in Raworth's 2023 plenary where she adapted point 3) of the 2018 open letter to supplement, rather than replace, economic growth.

"Its time to follow through with these metrics with policies that turn them into practice. Not a stability and growth pacts but **accompanying that** with a well-being and stability, state of well-being and sustainability pact." (emphasis added)

A question from the floor asked her if the doughnut approach was anti-capitalist and in favour of degrowth, but got a characteristically evasive answer about degrowth being a reduction in GDP acceptable to get within planetary boundaries.

Despite basic divergences over economic growth, some argue that a "Degrowth Doughnut can contribute to the emerging research field of eco-social policy, by combining environmental and social policies, while considering the urgency of a global metabolic shift away from the growth paradigm" (Domazet et al., 2023: 369). This is described as establishing the "right principles" and relationship under a "principle theory approach". The representation of social-ecological systems in Raworth's doughnut appears to lack the realist ontological foundations and structural theory to provide such insights. A more simplistic hope is a principled justification of multiple indicators, as in Raworth's plenary conclusion recommending metric management. However, this appears like business as usual given the existing proliferation of sustainability metrics (Roman and Thiry, 2017) and MEP Scott-

⁸ See video from 8:17 https://www.youtube.com/watch?v=b73YoklpIW4 Accessed 23/5/2025

⁷ Plenary 2021 UN, SDGs Conference. See https://www.clivespash.org/lectures-and-presentations/conference-papers/

Cato's noted lack of enthusiasm for more. Numeric monitoring of the road to collapse has done nothing to address root causes (Smith 2017). In contrast, degrowth stimulates the search for alternatives which, critical realism makes us aware, requires structural understanding of potentiality for social-ecological transformation, not backward looking empirics.

Degrowth is not a Path to a Steady-State

Parrique's 2023 plenary targeted decoupling as fallacious, which is generally accepted amongst ecological economists. However, decoupling remains prominent in climate policy, within the EC and amongst apologists for growth, like Stiglitz. Parrique proposed "a more realistic strategy for Europe, degrowth to a steady-state economy". Strangely, this presented degrowth as a quantitative downturn in economic activity, a position typically used to caricature degrowth as austerity, and dismiss its relevance, by those ignorant of the literature on transformative potentials (Gómez-Baggethun 2020; Robbins 2020). Yet, Parrique employed this approach, stating:

"There's no way of avoiding a temporary phase of degrowth. See this as a macroeconomic diet for biophysically obese economies. Once this is done, that's phase three, the size of the economy can fluctuate around the steady state. It can produce a bit more, it can produce a bit less, depending on biocapacity. The important thing over the long term is that the economy should never overshoot biocapacity nor undershoot decent living standards."

Actually, humans do not live within a given biocapacity in some uniform way and their social-economic systems vary in how they interact with Nature. There is also more to degrowth than living within planetary boundaries, because it rejects specific forms of economic system and their social-ecological structure, while proposing alternatives (Buch-Hansen and Nesterova 2023).

Parrique's presentation of degrowth as a pathway to a steady-state economy appears heavily indebted to Kerschner (2010), including his seesaw analogy. However, rather than a realistic strategy Kerschner (2010 544) qualified the steady-state economy as something that "should be defined as a quasi steady-state, resting in a dynamic equilibrium and as an 'unattainable goal', which can and probably should be approximated". Debates around steady-state economics have been ongoing for decades, from the exchange on its thermodynamic properties between Daly (1977) and Georgescu-Roegen (1977a; 1977b) to the critique of its orthodox mainstream features (Pirgmaier 2017). Problems include using equilibrium theory for social-ecological economic systems that are never in equilibrium, deciding on which state

to select and how, and relying on crisis creating capitalism hoping side constrains on scale and redistribution will counter its inherent tendencies for exploitation of people and Nature. When placed at the core of the book by Dietz and O'Neill (2013) such problems undercut their approach, and employing Daly's appeal to cost-benefit analysis to determine the optimal steady-state fell into all the traps of mainstream thinking (Spash 2015).

Why focus on maintenance of a macroeconomic capitalist system when a direct concern for minimum standards is the central issue? Parrique made vague references to maintaining 'decent living standards' without content. Social ecological economists already moved to needs and their satisfiers, and Kapp's concept of social minima (Spash 2024). Parrique did mention the requirement to fulfil "unmet needs" in the global South, but such passing remarks left unanswered how objective needs are meant to connect with subjective living standards.

A final point is the appeal to contract and convergence. Capital accumulating growth is again recommended, despite its inherent tendency to exploit resources and people and create money fetishism that eradicates non-monetary social-provisioning. Yet, Parrique sees no choice but, "temporary degrowth in the global North, temporary growth in the global South, then both meeting at a sustainable steady state securing well-being for all within planetary boundaries". The economic growth system is imposed despite all its problems.

Parrique's conclusion that "the system should be radically transformed" appears disconnected from his presentation, the message of which was: keep the system, reduce its scale, spread it to the rest of the world and call this equality. Before presenting Parrique informed me he was dropping degrowth and, like others, moving to post-growth. That seems appropriate because the degrowth movement has proposed a very different society (Buch-Hansen and Nesterova 2023), not a universal downsized American steady-state with low/middle income countries upsized to match.

Degrowth and Reality

A series of contradictions have been shown to arise from claiming a diverse set of approaches allowing a role for growth can be treated as equivalent with the ethos and direction of degrowth. Next, I turn to three specific topics arising in how arguments are presented. First, the implications of the growth imaginary. Second, confusion over the meaning and implications of biophysical limits. Third, advocacy of growth for development and divorce between planetary boundaries and degrowth.

The Growth Imaginary as a Realist Concept

In 2018 Kallis' closing speech emphasised the "substantive issues" and central concept of a growth imaginary in modernity relating to the pervasiveness of the idea that good things must grow. Daly (1992) referred to economists growthmania, but Kallis describes a more widespread phenomenon, "the logic of expansion". This has the characteristics of a sociopsychological condition whereby people transfers the concept of growth incorrectly, outside of its domain of relevance. He asks, why should care grow? and quips, do we want more sick people?, and why talk of personal growth. The idea of growth as good, perpetuated by promotion of economic growth, motivates its general application, so whatever substitutes GDP must link to the growth imaginary.

Indeed Kallis himself referenced the need to "prosper" without (economic) growth, citing Jackson. Dictionary definitions of prosper are: to be successful, usually by earning a lot of money; to succeed in an enterprise or activity, especially to achieve economic success. Top hit online is prosper.com owned by Prosper Marketplace Inc. brokering personal loans with interest rates from 9%-36%. The growth imaginary also appears in Raworth (2024) who talks of "redefining success not as endless growth but rather as thriving". Dictionary definitions of thrive are: to grow vigorously, flourish; to gain in wealth or possessions, prosper. Top hit online is Thrive Capital Management LLC, a multi-billion dollar American venture capital firm. Prosper, thrive and grow are synonyms.

The purely rhetorical use of such terms that implicitly play on the growth imaginary is evident because the authors leave them as undefined abstractions. Flourishing is another such term mentioned by Kallis, used loosely by Jackson (see Spash 2024 125-126) and included as "planetary flourishing" by Raworth (2024) after earlier scepticism concerning "human flourishing" (Raworth 2015). In common use flourishing is synonymous with prosper, thrive and grow. However, its also has a very different meaning with a pedigree back to Aristotle's *eudaimonia*, as an objective state of being (not having). Aristotle's philosophy recognises in the nature of living entities the potential to 'flourish' (for humans achieve *eudaimonia*) defined by the limits of being a particular form of entity. As Pellizzoni (2021 93) remarks: "The imperative of growth, instead, builds on the persuasion, ingrained in western modernity, that to be one *has* to do (make, get, become)." The term, if defined clearly with this philosophical context could be divorced from the growth imaginary, but not when used rhetorically.

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⁹ Jackson (2009) actually advocates economic growth of the service sector.

Critical realism helps explain why such terms prove problematic. Conceptualising requires terms that make sense but referring to a word involves associations and meanings, sense and reference combine (Sayer 1992 39-44). As shown, common sense associates the terms prosper, thrive and flourish with growth, money and wealth. In seeking to break the growth imaginary, degrowth needs concepts matching their intended meaning (e.g. being over having). Adopting abstract undefined weasel words that play on the growth imaginary may well get people onboard but for the wrong reasons.

Limits as Real Constraints

In presenting post-growth agnosticism and apologetics for growth there is an implicit denial of limits. Amongst some second generation degrowth authors limits have become a social construct, a metaphor, premised on a human desire (Kallis 2021). D'Alisa et al. (2014 8) state that: "Rather than *limits to* growth, the literature on **autonomy** emphasizes collective *self-limitations* ... not invoked for the good of nature or to avoid an impeding **disaster**, but because living simply ... is how the good life is conceived" (emphases original). The same position was earlier put forward by Schneider et al. (2010 513) who regard limits as a 'social choice'. The position is contentious even within degrowth, e.g. conflicting with *buen vivir* which recognises intrinsic value in nature and rejects such anthropocentric positions as 'Western' (Gudynas 2014 202).

Anthropocentric instrumentalism supports a relationship to Nature based on the belief that humans are in control of their own destiny to the extent of being self-transforming. Nature is then an externalised other and self-realisation is freedom through liberation from domination by Nature. This modernist position is implicit in the degrowth literature cited above. For example, Kallis (2021) states that:

"[...] limits are not something out there that imposes scarcities but a *political* project towards the good and just life. 'Degrowth' does not warn of limits to growth. Rather, it expresses a desire to limit growth and open alternatives. I call this project 'collective self-limitation' [...]"

Limits are relativised into an individual personal choice about gaining freedom by undertaking self-limitation. This encapsulates a fundamental modernist assumption that human beings produce themselves independently of Nature, 'the other', over which they maintain mastery and control. Modernity replaced the external forces to which humanity must submit, along with ideas of absolute power and authority being imposed on the individual. As Lumsden (2021 284) puts it, "in modernity the norms are willed and imposed upon ourselves

because we are rational". In contrast, the energy and material throughput of modernity is now widely recognised as out of alignment with a flourishing and self-sustaining ecology. Rethinking human–Nature relationships is essential for social-ecological transformation. Freedom entails being at home in otherness, and relating to our interconnections including what determines, negates or limits (Lumsden 2021).

Contra second generation degrowth authors, limits exist beyond those humans define for themselves, and a self-limiting life of sufficiency (whatever its benefits) does not eradicate our basic common sense and scientific knowledge of there being limits. Gómez-Baggethun (2020; 2021; 2022) has specifically and extensively criticised Kallis on his denial of external limits, while also responding to the associated taboo against discussing limits in political ecology. His points are clear and substantive and align with a critical realist approach. However, along the way he argues that: "Scarcity (defining what we cannot use as much as we want) is a relation between means and ends, and hence is socially defined. Limits (defining what is finite) are a property of the material world, and hence can be physically defined." (Gómez-Baggethun 2021: 1).

This definitional separation of (objective) limits from (subjective) scarcity aims to reestablish the distinct importance of limits in a degrowth literature that confuses terms and leaves them poorly defined. However, in doing so, it adopts the (neo-Austrian) economic dogma founded by Lionel Robbins (1932 15) assertion that: "Economics is the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses". Things are only scarce because (subjective) demand outstrips (objective) supply; meeting unlimited wants with limited supplies justifies productivism and growth. Hence, the attempt amongst some degrowth authors to deconstruct limits/scarcity and treat them as dismissable social constructs. While countering this, Gomez-Baggethun's approach risks imposing unnecessary restrictions on the concepts of both scarcity and limits.

Scarcity is a concept relating purely to frequency of occurrence, within a given context, without providing an explanation of causation, whether subjective demand or something else. A fish species can be rare, a limited small stock and by definition scarce, without humans wanting to eat it! Unlike Lionel Robbins, ecological economists are concerned about the existence of non-human life, not just demand for commodities in capitalist market economies.

Limits conceptualise more than the 'limits of' physical stocks. There are also distinct 'limits to' an action, process or natural function, which may be biophysical or social. The toxicity of alcohol for a given human is set by their biophysical nature whether they drink alcohol or not. Without owning a vehicle or driving I can know the speed limit, or without

drinking know the alcohol limit for drivers. Similarly, the speed limit of a given vehicle is set by its physical structure. In commonsense terms, we recognise a car may have the power to go 100 km per hour regardless of whether it is actually driven that fast or not at all. Powers exist even when they are not activated to cause events, and we predict powers from structure: "A good deal of technological research is aimed at knowing how something will work before it is made" (Collier 1994 42). Scientists understand that the limits of climate forcing due to greenhouse gases are the same as in pre-industrial societies that failed to burn fossil fuels. The greenhouse effect exists with or without humans, but human fossil fuel emissions activate the mechanisms that enhance that effect. Critical realist explanation of causal powers and structure clarifies the basis of our ontological intuitions. There are real limits to human action.

Humans have both passive properties concerning a capacity to survive certain conditions (e.g., heat, cold) and active properties relating to the power to do something, if necessary pushing the thresholds (e.g. traverse the Saharah, climb Everest). There is a distinction between how humans passively react to specific conditions (e.g. dehydration, sunburn) and their powers to act under specific conditions, cognising conditions and acting (e.g. drink water, find shade). What humans are able to undergo as biophysical entities is subject to limits, whether we act to prevent crossing the thresholds, that they define, or not. If we fail to respect those limits we suffer the consequences.

In contrast, Kallis (2021) obscures and mystifies when he states that: "What turns external geophysical forces into 'limits' is the desire to grow and supersede them". So, what about naturally occurring external geophysical forces creating floods, fires, droughts, volcanic eruptions, earthquakes, tsunami? Are these actually just limits because of human desire for... what exactly? Humans' desire to live on planet Earth, perhaps!? The history of humanity is one of living with naturally occurring phenomena, respecting limits, simply to survive in a given environment under given conditions. For example, consider traditional Japanese houses built of bamboo and rice paper.

"Most buildings in Japan, both long ago and today, need to resist annual typhoons and occasional tsunami and earthquakes. On top of that, the summers can be very hot, the winters cold, and there is an annual season of heavy rain. The ancient and medieval Japanese found a simple solution to these difficulties: do not build to last. Rather than resisting the environment, houses were, therefore, built to follow its whims and, if the worst happened, they were designed to be easily rebuilt again." (Cartwright 2019)

All human cultures have to work within the limits of naturally imposed conditions and respond to them. Modernities denial of the existence of such natural limits is why today's

technology is so destructive, and denial is also part of the post-truth, anti-science movements of the extreme right's attacks on environmentalism. The attempts to deconstruct Robbins and mainstream economics employing anti-realist denial of limits and scarcity is an unnecessary and highly problematic response that leads to nonsense.

For example, after stating that 'limits' is a metaphor based on a desire for something which is limited (a tautology), Kallis (2021) continues: "Gravity, for instance, is a limit if you want to jump out of the window, but not if you want to stay on your couch". This really is nonsensical. Gravity is not a limit in either circumstance, it is a continuously operational force of nature which has specific consequences in difference circumstances subject to other mechanism that can either counter or reinforce its operation. Critical realism conceptualises this as a tendency that can be countered. The ability of planes to fly does not mean gravity no longer exists, neither is gravity created because humans desire to fly. Humans do not decide whether gravity is operational, but rather they employ mechanism to work with it or counter it. They have no choice in the matter.

The denial of limits is simply a denial of our ordinary ways of thinking seriously. Indeed, the assertion that "Degrowth' does not warn of limits to growth" proves hard to sustain even for Kallis. In his 2018 presentation he used statistics and empirical evidence to build an argument about exponential growth and doubling times that comes straight out of *Limits to Growth* (Meadows, et al. 1972). He called compound growth "ridiculous" and cited 3% growth leading to doubling times in 22 yrs. At this rate, he repeatedly emphasised, "this thing is catastrophic". His graphical illustrations of exponential growth showed GDP, population, environmental pressures and impacts (fertilizers, ocean acidification, nitrous oxides, carbon dioxide) and he extended this to vehicles, cars, dams, paper and so on. He used the correlation of GDP with carbon dioxide as a prime example of an empirical relationship, even comparable to a law and mentioned, according to econometricians, this is a 'truth'. He then emphasised that anything above 2 degrees is going to be catastrophic. That presentation sounds pretty much like somebody explaining an externally imposed limit by any other name!

This also appears to contradict Kallis' (2021 1) own warning against "a politics of invoking catastrophic external limits", because he believes this "only invokes capitalism's promise of 'more'". Actually, this belief is premised on an unquestioning acceptance of the mainstream co-opted and redefined concept of limits. The case for the limits to growth was converted into the case for the growth of limits by sustainable development, ecological modernisation and eco-efficiency (Pellizzoni 2021). Rather than adopt this antilogic, or

respond by denying limits, degrowth should counter and deconstruct its arguments, as Kallis actually did in his presentation.

Natural structure and limits are of central importance to understanding the social-ecological crises of modern economies. Georgescu-Roegen's concept of funds and flows explains how ecosystems can supply an on-going flow of things without being depleted, but that flow rate is limited. Benton (1989) discusses eco-regulatory activities where humans recognise natural limits, seek to understand them and work within them, they do not desire or seek to exceed them, exactly the opposite. For example, there are conditions to be met to grow crops—nutrients, water, temperature, sunlight—that limit humans ability to produce food. Combing concepts of eco-regulatory activities with funds creates insights into the limits of human control over ecosystems and environmental conditions. Nature to be commanded must be obeyed.

Capitalism, Growth and Planetary Boundaries

As noted earlier, political pragmatists have called for the merger of degrowth and green growth (Barth and Jacobs 2022). While this appears an absurd contradiction, it has also appeared in an editorial in *Nature*, which notes that planetary boundaries allow growth economies to continue:

"Researchers such as Johan Rockström at the Potsdam Institute for Climate Impact Research in Germany advocate that economies can grow without making the planet unliveable. They point to evidence, notably from the Nordic nations, that economies can continue to grow even as carbon emissions start to come down. This shows that what's needed is much faster adoption of technology" (Editor 2022)

Such modernist techno-optimism aligns with sustainable development as promoted by Jeffrey Sachs who has co-authored works with Rockström (see Lumsden 2021). Their work on planetary boundaries simply sets side-constraints on economic activity to avoid damaging basic functioning for human survival. The capitalist economy, including invasive technology and unlimited economic growth, is unproblematic. The rhetoric includes claims of abundance within planetary boundaries and appeals to decoupling and technocracy.

The same editorial is positively reference by Hickel et al, (2022 403) as follows: "A March 2022 editorial in this journal [*Nature*] argued that it is time to move beyond a 'limits to growth' versus 'Green growth' debate. We agree". Their article is entitled "degrowth can work", but early on states: "Researchers in ecological economics call for a different approach — degrowth [...] It frees up energy and materials for low- and middle-income countries in

which growth might still be needed for development" (Hickel, et al. 2022 400-401). So, degrowth can work by recommending economic growth!

How much further could degrowth drift from its origins? Latouche (2004) recognised this trend before Paris and the second generation of degrowth:

An increasing number of anti-globalisation activists now concede that growth as we have known it is both unsustainable and harmful, socially as well as ecologically. Yet they have little confidence in degrowth as a guiding principle: the South, deprived of development, cannot be denied at least a period of growth, although it may cause problems. [...] Insisting on growth in the South, as though it were the only way out of the misery that growth created, can only lead to further westernisation.

Poverty is treated as a universalised abstract concept justifying imposition of economic growth as an instrument of justice and equality. The irony is seeing well-meaning anti-colonialist, anti-imperialist, environmentalists seeking to spread modernist materialist Western values.

A strong counter position is post-development. This documents the use of economic growth as an imperialist American post Second World War policy, implemented via captured organisations, such as the IMF and World Bank (Sachs 2015 [1999]). Post-development differentiates poverty between living frugally, suffering deprivation and living under systems of economic scarcity, where the latter is created by systems of economic growth. Development is documented as denigrating traditional societies economic systems of social provisioning structured on frugality and sufficiency, and removing the ability of first nations peoples to sustain themselves by appropriating their land and resource and moving populations to urban areas to become commodified labour, saved from 'poverty' to join an economy of material scarcity, measured by money (Spash and Smith 2019). This clearly leads degrowth in a very different direction, from the apologist for growth, and one that seeks to identify and counter the mechanism of 'development'.

Conclusions

Degrowth as a radical movement for social-ecological transformation promises a political strategy of disturbing, provoking and challenging people. Despite attempts, it cannot be easily merged into the mainstream orthodoxy. Neither can it logically be turned on its head to support growth economies or related policy initiatives. The fallacies are obvious and the dangers are real. Using poverty as an excuse for enforcing economic growth on others has a long history from the rise of capitalism in Britian to American post-war development policy, to economic zoning in India and urbanisation in China. A one size fits all approach

encapsulates derision of variety and systemic eradication of alternatives by nation states, including cultures and languages as well as species.

Degrowths warns of the growth imaginary dominating our lives. Developing, progressing and thriving can all reenforce a logic of expansion, especially when used rhetorically. Rhetoric as the art of communication for persuasion is distinct from science as seeking to understanding the world in which we live. The latter requires thinking critically about reality, not denying its existence under the hubris of Western modernity. Adopting modernity's anthropocentric instrumentalism and individualism to make limits into a personal choice makes degrowth sub-hegemonic. All ontological distinctions are reduced to conventions and all limits self imposed. The growth machine is no longer unequivocally criticised. Degrowth becomes lifestyle politics, a matter of personal choices about dress, food, accommodation and mobility: "something which has long proven welcome to capitalism and hardly a bulwark against consumption" (Pellizzoni 2021 91).

Degrowth has an agenda of radical transformation that is prevented by current hegemonic economic structures. Empiricism can only inform about what has already been actualised and observed on a regular basis, weakly monitoring the progress of crises. Radical relativism and strong constructionism remove grounds for critique and align with accepting a post-truth politics and scientific denialism. Instead, degrowth needs to embrace its scientific foundations. Radical transformation requires identifying the mechanisms and structures that will empower the values of non-growth societies, non-monetary economies, ways of being in Nature's otherness and caring for others. Degrowth directs our attention to alternative ways of living and being, to our unrealised potentialities as humans and the possibilities of alternative social-ecological provisioning systems. In order to actualise those potentials we need to be critical and realist.

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