Defining degrowth¹

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Abstract: If there is one point of consensus in the degrowth scholarship, it is that degrowth defies consensual definition. As of now, there is no widely accepted definition of the term within the field. This article analyses 115 definitions of degrowth in English and French ranging from 2006 to 2024 in order to identify a minimal list of characteristics that narrows down the meaning of degrowth to a more operational level. Based on that analysis, this paper offers a new definition: degrowth as *a downscaling of production and consumption to reduce ecological footprints, planned democratically in a way that is equitable while securing wellbeing*.

Keywords: degrowth; post-growth; growth-critical theory; definitions

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Introduction

If there is one point of consensus in the degrowth scholarship, it is that degrowth defies consensual definition. As of now, there is no widely accepted definition within the field. The disagreement is not that much about the essence of the idea, which, as this paper will show, is rather consistent throughout the literature, but rather about finding one short and easy definition that encapsulates all the diverse meanings behind the term.

Degrowth is mobilised in diverse social settings, from academia and policymaking to the arts and activism, and the word "degrowth" is interpretated in different manners, as a societal project, a social movement, a philosophy, an umbrella term, a concept, an imaginary, an ideology, among plenty of other things (Parrique, 2019: 221). Yet, this article is not about what degrowth is from a sociology of knowledge perspective. The goal is not to determine whether degrowth is a discourse, a theory, a movement, or anything else. Rather, it clarifies what degrowth *is about*, meaning the concrete, observable phenomenon hiding beneath the term. The present articles offers an "explicative definition" (Gupta and Mackereth, 2008), one that specifies exactly what degrowth entails by identifying a minimal list of characteristics that can differentiate degrowth from other lookalike ideas.

The purpose of this paper is thus to narrow down the meaning of degrowth to a more operational level. In recent years, there has been a tendency among the degrowth scholarship to broaden the concept. Buch-Hansen and Nesterova (2023) is a good case in point, associating degrowth with a long list of desirable transformations ranging from reductions in greed, homophobia, and bureaucracy to increases in kindness, creativity, and regard for planetary boundaries. I find these elements too vague (and too many) to constitute a workable definition for academics and policymakers. Instead of treating degrowth as an umbrella term to gather as many features as possible (the prevailing approach in the field), I will try in this paper to distil the various aspects of the term into an essential definition.

I do so by analysing 115 definitions of degrowth (full list available in *Appendix*). They range from 2006 to 2024 (I can only read French and English so these are the two only languages considered here). Since the purpose of this study is to make degrowth more operational, I have excluded from the start definitions that describe degrowth as a broader paradigm, theory, or philosophy², leaving only those who more concretely specify what degrowth is about. While I will often comment on trends within this list of definitions, it is important to bear in mind that the definition I build throughout this paper is not meant to be a faithful representation of the average depiction of degrowth (I will, in fact, criticise most definitions in the list for being either unclear or incomplete).

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² Here are a few examples of broader definitions. <u>Liegey and Nelson (2020: 20)</u> define degrowth as "the transformation of society and the adoption of new models with qualitative, human-oriented and Earth-centred characteristics such as conviviality, autonomy and enjoyment of life." For <u>Feola and Koretskaya (2020)</u>, it is "a project of urgent and fundamental transformation [that] requires reimagining our societies from the perspective of being profit-centred to being wellbeing-centred." Or also: "degrowth is an umbrella term for many diverse theories and activist perspectives atheistic towards economic growth as the primary measure of human flourishing, and critical of a-political environmentalism" (Howson, 2021).

This is not the first time I dissect definitions of degrowth. In *The political economy of degrowth* (Parrique, 2019: 221-233), I analysed 58 definitions and proposed a historical typology, arguing that the term had evolved to incorporate three dimensions to its meaning: a degrowth *of* (decline), a degrowth *from* (emancipation), and a degrowth *to* (destination). I called the first wave the "environmentalist definitions" because they put the emphasis on ecological sustainability. The second wave was termed the "revolutionary definitions" because they focus on societal changes, often phrased as an emancipation from specific ideologies such as neoliberalism, consumerism, or productivism. I called the third and most recent wave "utopian definitions." This seemed fitting because these definitions emphasise the aspirational essence of the term, degrowth being associated to a variety of desirable values like wellbeing, gentleness, care, justice, conviviality, or autonomy.

In that previous piece of work, I took the role of an historian of thought, affirming that "my goal is not prescriptive but descriptive, meaning I will report on how people have defined degrowth without commenting on how I personally think it should be defined" (Parrique, 2019: 222). This paper is different. After several years spent in this field of research, I have noticed that not all definitions are equally good in terms of clarity and precision. It should not be controversial to state that some definitions are better than others. Anyone who has spent time discussing the topic has probably realised that unclear definitions lead to unproductive debates. The parade of misunderstandings is tiringly long: degrowth as a "centrally planned recession" (McAfee, 2020), "the pursuit of negative growth" (Dolgopolova, 2021), a regime of "eco-austerity" (Eagleton, 2021), or an "asceticism reminiscent of the early Christendom" (Milanovic, 2021). There are many things worth disagreeing about with degrowth, but this can only be done after understanding what the idea is about.

The purpose of this paper is thus to set rigorous standards concerning how degrowth should be defined. Surprisingly, this has not been done yet. Definitions of degrowth are most often offered in passing, without much critical reflection on the choice of words. A few authors have spent time clarifying certain aspects of degrowth (e.g., <u>Jackson et al., 2024; Schmelzer et al., 2022; 20-29; Hickel, 2021; Kallis, 2019; Parrique, 2019: Chap 7</u>) but did so by responding to critiques instead of building up degrowth as a stand-alone concept. Others have spent time developing more encompassing theories of degrowth (e.g., <u>Latouche, 2006; Flipo, 2007; Demaria et al., 2013; Lievens, 2015; Kallis, 2018: 118-123; Abraham, 2019; Parrique, 2019: Chap 6 – for a review, see <u>Parrique, 2019: 237-244</u>), but did so without offering a concise, workable definition. With the concept of degrowth experiencing an unprecedented surge in popularity (<u>Parrique, 2023</u>), it might be wise to ensure that discussions take place on solid foundations, starting with a precise definition.</u>

The five elements of degrowth

This paper builds a definition of degrowth in five steps. The section titles correspond to the actual elements of the definition given in order, degrowth being defined as (1) a downscaling of production

and consumption (2) to reduce ecological footprints, (3) planned democratically (4) in a way that is equitable (5) while securing wellbeing.

A downscaling of production and consumption

Here is the conceptual core of degrowth: *a downscaling of production and consumption*. This is what sets degrowth apart from other concepts like green growth (Buch-Hansen and Cartensen, 2021), sustainable development (Kothari et al., 2015), green new deals (Mastini et al., 2021), circular economy (Nesterova and Buch-Hansen, 2023), wellbeing economy (Fioramonti, 2024), ecosocialism (Nelson, 2022), and productivist socialism (Kallis, 2019), which either assume that the social-ecological transition will generate further economic growth, or fail to specify whether it will or not. What makes degrowth unique is that it brands itself as an intentional slowdown of economic activities. In the list of definitions, this idea is expressed in different ways: *downscaling*, *reduction*, *contraction*, *shrinking*, *decline*, *slowdown*, and *decrease*.

Of all these terms, "downscaling" is the most popular, being used in 33 definitions. The idea of *economic scale* comes from the work of Herman Daly on the "steady-state economy" (Daly, 1977; for a synthesis of Daly's work, see Victor, 2022). An economy has a sustainable scale if it operates within the carrying capacities of its ecosystems. On the other hand, an economy whose footprint exceeds its biocapacity can be said to be in ecological overshoot. "Downscaling" is a more precise term than "reduction," "contraction," or "shrinking" because it implies that the goal is to fall back under a certain threshold, what Daly compared to a plimsoll line, the reference mark on a ship's hull indicating the maximum depth to which a boat can be safely submersed. Among the list, twelve definitions further specify that degrowth is a process of downscaling leading to a steady-state. This is an essential point: degrowth is a transitional phase of *downscaling* towards a *stabilisation* at a lower, stable level.

This process of downscaling applies to the whole economy. Put differently, it is a reduction of aggregated levels of production and consumption. Of course, societal transitions involve the expansion of certain sectors in parallel to the decline – and even phasing out – of others. What warrants the use of the term "degrowth" is a situation where the overall level of economic activity goes down, meaning that the expansion of certain sectors/products is more than compensated by the decline of others. I will later explain why degrowth should be understood as a selective reduction which primarily targets most-polluting, least-essential activities. But for now, let us just say that degrowth is the macroeconomic opposite of what happens during periods of economic growth where the decline of certain activities is more than offset by the expansion of others. This is where degrowth goes further than concepts like zero growth, secular stagnation, and steady-state economy, which imply the cessation of growth but not its reversing into negative territory.

Even though degrowth mobilises measures, objectives, and initiatives that one finds in other discourses (e.g., plant-based diets, agroecology, cooperatives), its defining trait is to illuminate practices

that should be abandoned (e.g., fossil fuels, for-profit corporations, advertising). One could speak of *avoid* strategies in reference to the "avoid, shift, or improve" framework, of "exnovation" efforts (Kimberly, 1981), or also of the *refuse* stage in the 9-R framework often used in the circular economy literature (Reike et al., 2018). The focal point of degrowth is mainly – although not exclusively – to phase down or phase out socially unessential and ecologically unsustainable goods and services. Degrowth advocates assume that the magnitude of this drawdown will be so significant that it will lead to a decrease in overall levels of economic activity.

The downscaling applies to *production and consumption*. Both elements matter and so does their ordering. By focusing only on consumption, degrowth would bear the risk of putting the burden of the transition onto buyers, leaving out the important role that businesses play in enticing – and sometime even forcing (as in the case of planned obsolescence) – consumption. This, I suspect, is why production comes first in almost all definitions. On the other hand, a sole focus on production would exclude important discussions about consumerist cultures (Soper, 2020.; Schor, 1998). From a global sustainability perspective, there is little use in producing less in one country if its inhabitants maintain their levels of consumption by importing more. Just like there is little use in consuming less if growing levels of production are exported elsewhere. The world's ecosystems and climate cannot tell the difference. Hence the rationale of degrowth: downscaling levels of production and consumption.³

Will the *downscaling of production and consumption* translate into a reduction in Gross Domestic Product (GDP)? The short answer is: yes.⁴ After all, the very purpose of GDP is to estimate the total output of an economy using either value added, income, or final expenditures as proxies for production (SNA, 2008: 104). So, without major changes in the fundamentals of national accounting, it is safe to say that an aggregated decrease in levels of production and consumption would imply smaller levels of GDP. One should not, however, get too distracted over matters of national accounting. One should instead treat "production and consumption" as a concrete category, measurable in different ways, for example in number of units (e.g., the number of new cars manufactured and sold), in hours of time (e.g., the time spent manufacturing cars or driving them), or in monetary terms (e.g., the turnover of car manufacturers and the household budget spent on car purchase and use). What preoccupies degrowth scholars is not value added, incomes, or GDP but the specific goods and services being produced and consumed – so, in the previous example, cars.

That said, degrowth advocates are usually very careful to avoid the common conflation of degrowth with a recession (e.g., <u>Hickel, 2020a</u>; <u>Parrique, 2019: 322-330</u>). Indeed, conflating a simple accounting operation (smaller GDP) with a complex societal transformation would be like arguing that

³ From the perspective of ecological economics, there is little biophysical difference between *consumption* and *investment*. A car, for example, is considered consumption when purchased by a household and investment when bought by a company. But in biophysical terms, a car is a car. When I speak of "production and consumption" in the definition, I therefore include all goods and services that one finds in the economy, regardless whether they are recorded in national accounting as consumption, investment, or anything else.

⁴ Even without getting into discussions on the decommodification of certain activities, which would, all things being equal, translate into a smaller GDP for an equal volume of output.

an amputation and a diet are the very same thing just because they both cause weight loss. If degrowth shares a common element with recessions, namely the reduction of levels of production and consumption, what makes it conceptually original is that the economic contraction is designed to achieve specific social and ecological goals.

To reduce ecological footprints

The first objective is environmental: the downscaling of production and consumption is meant to *reduce ecological footprints*. The concept of degrowth offers an alternative to the idea of "green growth" (e.g., Terzi, 2022; McAfee, 2019) by assuming that it is impossible to sufficiently decouple economic activities from all their environmental pressures (Vogel and Hickel, 2023; Parrique et al., 2019; Hickel and Kallis, 2020; Jackson and Victor, 2019). For countries in a situation of ecological overshoot that do not manage to lower their footprints fast enough (or at all) while maintaining or increasing the size of their economy, degrowth is an alternative strategy that can help them return under sustainable thresholds of resource use and environmental impacts. In the list of definitions, this purpose is expressed in two different ways. Some focus on the thing that should be reduced (e.g., *energy and materials, throughput, ecological footprints, environmental pressures*) while others emphasise the final state to be reached (e.g., *ecological sustainability, planetary wellbeing, harmony with nature, respect of planetary boundaries*).

There are two reasons why I find the phrase "to reduce ecological footprints" most fitting. The term "ecological footprint" has a long history in environmental science and politics (Wackernagel and Rees, 1996). Even though it is not exempt of criticisms (Galli et al., 2016), the image it gives is tangible and easy to understand: the carrying capacity of ecosystems (the *biocapacity*) is finite and only has enough room for so many footprints, so if some communities' footprints are too big, it leaves less space for others. France, for instance, is running at 187% of its biocapacity according to the Global Footprint Network (2019). The French ecological footprint per person is as high as 4.5 global hectares, compared to a biocapacity of only 2.4 global hectares per person. To be more precise, one could also speak of "environmental pressures," another umbrella term that includes both resource use (e.g., minerals, metals, biomass, and fossil fuels) and environmental impacts (e.g., climate change, biodiversity loss, and pollution). The important point here is that the biophysical web of life supporting human communities is multifaceted and that the idea of sustainability should not be reduced to a single indicator (hence "footprints," plural, in my definition of degrowth).

Following that biophysical line of thinking, degrowth can be interpreted as a kind of macroeconomic diet. Just like we humans have bodies, economies have biophysical metabolisms which feed off energy and matter while excreting all kinds of waste (<u>Fischer-Kowalski and Haberl, 1997</u>). Degrowth aims at reducing biophysical *throughput*, the quantity of energy and materials that are used – or, more precisely, go through – an economy (<u>Daly, 1996</u>). A smaller throughput means fewer natural

resources are extracted from nature, transformed within economies, and discharged back into the wild; this means a reduction in both resource use and environmental impacts.

And just like a diet, the lowering of footprints has a specific target. The objective of degrowth is not only to reduce environmental pressures but to do so to an extent that ensures the economy fits sustainably within the biosphere. These sustainability thresholds are often expressed with the concept of "planetary boundaries" (see Richardson et al., 2023 for the latest version, and Rockström et al., 2009 for the original framework). Ecological boundaries can also be calculated at the level of individual countries – or even cities (Amsterdam Donut Coalition, 2020; Thirty et al., 2021). For example, Fanning et al. (2022) estimate that France is overshooting six of its seven planetary boundaries (there was not enough data to estimate the last boundary concerning blue water). Each environmental indicator has its own sustainability threshold in tonnes of emitted greenhouse gases, cubic meters of water, global hectares, rates of species extinction, etc. Using 2015 data, Fanning et al. (2022) show that France was using 340% of its available carbon budget while overshoot was estimated at 300% for phosphorus, 453% for nitrogen, 116% for land-use change, 178% for ecological footprint, and 322% for material footprint.

This means that degrowth transitions will differ in composition, scale, and speed depending on where and when they happen. Let us start with composition. To lighten ecological footprints, the downscaling of production and consumption must be selective and target nature-intensive goods and services. In France, transport is the most carbon-intensive sector, responsible for 32% of the country's territorial emissions, followed by agriculture with 19% (Insee, 2023). A closer inspection finds that approximately half of transport and agriculture emissions come from cars and cattle, respectively. So, beef and automobiles alone generate 26% of territorial emissions, making them good candidates for avoid/exnovation/refuse strategies (or for short: degrowth strategies). Producers could manufacture fewer new cars while consumers drive less, and the cattle industry could shrink while people eat less meat. What I want to underline here is that the basket of goods and services that a territory might phase down/out will vary between places depending on the biophysical composition of its economic metabolism.

As for the scale of a degrowth transition, it first depends on the degree of overshoot: large reductions for regions with large ecological overshoot and smaller contractions for less unsustainable territories. One must also consider the degree of coupling between economic activities and environmental pressures. Assuming the same degree of overshoot, a nation where one or several footprints are already decreasing will have to degrow a smaller volume of goods and services compared to a country where production and consumption are tightly coupled to resource use and environmental impacts. Said differently using the avoid-shift-improve triad, an economy which has access to ecologically leaner means of need satisfaction will be able to maintain certain activities via *substitution* or *improvement*. In contrast, an economy which has no such means will only be left with *avoid* strategies. For instance, a territory with well-developed train infrastructures and resource-efficient

electric vehicles will have more capacity to maintain mobility demands following the phasing out of fossil-powered modes of transport. An economy where these alternatives are not available will have little choice but to just travel less (at least until cleaner infrastructures become available).

As for the pace of the transition, it will depend on how it is designed and implemented: the steeper the decline, the faster the return to sustainable footprints and the shorter the transition. In other words, degrowth can be faster or slower depending on how many years a territory gives itself to achieve the necessary cuts. This is ultimately a political decision and it is to this issue of planning to which we now turn.

Planned democratically

In the way the concept is being mobilised by scholars and activists, degrowth should be *planned democratically*. Definitions describe a process that is *democratic*, *planned*, *deliberate*, *purposeful*, *voluntary*, *managed*, *intentional*, or *intended*, with the three most popular words being "planned," "voluntary," and "democratic." This theme is best exemplified by the often cited definition by Schneider et al. (2010: 512) which specifies that degrowth is "offered as a social choice, not imposed as an external imperative for environmental or other reasons." As Abraham (2019, italics added) points out in his slogan for degrowth: "producing less, sharing more, *deciding together*." Unlike a recession which takes an economy by surprise, a degrowth transition is implemented willingly. It is a "conscious set of policies" (Remblance, 2021) where the decrease is "deliberate" (Ridoux, 2006, mt). To continue the eating analogy, a recession would be starvation due to an unexpected lack of food whereas degrowth is a proactive switch of diet.

One should not confuse the planning of degrowth as a temporary phase of societal transition with the more complex challenge of organising an entire economy on a daily basis. This is a good demarcation point to distinguish degrowth from more sophisticated reflections on socialist planning. While there are more and more interactions between the two concepts, degrowth and ecosocialism have different points of departure. Ecosocialism starts from a critique of capitalism with a focus on the democratic control of the means of production; degrowth, on the other hand, starts from a critique of growth while stressing the importance of downscaling production and consumption. The agendas might be similar but the order of logic is different. For degrowthers, it is the downscaling of production and consumption that should be democratically planned while for ecosocialists, it is the democratic planning of production that will lead to a slowdown of economic activities. The defining feature of degrowth is the downscaling, with the remaining elements of the definition being added to clarify the nature of that downscaling, for example the fact that it should be *planned democratically*.

Building on the first element of the definition, this gives us at least two different, yet interconnected, planning problems: one concerning production and the other concerning consumption. Let us start with supply. Frequently cited instruments downscale production include specific measures

to close national flight routes, dismantle large banks, shut down parts of the financial system, reduce working time, repurpose military facilities for more socially useful activities, restructure social media as a public utility, restrict car ownership and sales, and curb industrial meat production (for a full list of degrowth policy instruments, see Fitzpatrick et al., 2022). The agenda also mentions several proposals which aims at changing how production is organised: the introduction of energy quotas, long-term warranties, the standardisation of not-for-profit legal status for business, the generalisation of agroecological farming, or the introduction of alternative accounting frameworks. Put together, degrowth can be understood as a *shrink-and-change* strategy: reduce overall levels of production while altering the logic and outcome of the production that remains, shifting from hierarchical for-profit structures that maximise exchange value to more democratic alternatives that prioritise use values (the *shrink* is unique to degrowth but the *change* is shared with several other sustainability paradigms).

These policies are either direct or indirect. If a government decided to ban the sale of SUVs, this would be an example of a *direct* reduction of production. On the other hand, a state which decides to introduce energy quotas or raise taxes on corporate profits would be examples of *indirect* policies that push down levels of production. A similar logic applies at the level of a single organisation. Removing performance-based remunerations may weaken growth imperatives (hence the "indirect"), while setting declining output targets for output is a more straightforward way of curbing production. These decisions can be taken at different levels. The introduction of a cap and share scheme for fossil energy is *national* planning; the rationing of land available for construction within a city is *municipal* planning; deciding to change the interest rate of a specific complementary currency is a form of *community* planning; and the decision to reduce working or even to quit an unsustainable job could be considered a form of *individual* or *household* planning.

As for consumption, popular demand-side instruments include limits to advertising, the introduction of object-sharing networks, lower speed limits, progressive prices on natural resources, taxes on unhealthy and unsustainable products, and repair cafés and makerspaces (full list in Fitzpatrick et al., 2022). Just like for production, policies ranges on a direct-indirect spectrum. Introducing a legal cap on the number of cars a household can own will directly limit the consumption of cars. Acting on advertising or promoting a repair culture, on the other hand, will only reduce willingness to buy.

What makes degrowth unique as a concept is the emphasis on deconsumption practices, namely the conscious elimination of certain acts of consumption. Just like actions to influence production, deconsumption strategies can be implemented at different levels. Regulating sales to forbid events like Black Friday, criminalising planned obsolescence, or introducing frequent flyer levies (Büchs and Mattioli, 2022) are examples of demand-side degrowth through national planning. A city that decides to introduce progressive pricing for water or to remove ads in public places are examples of planned reductions of consumption at the municipal level, and deciding to stop eating meat and quit flying to emit less carbon could be considered a form of individually planned deconsumption.

The adverb "democratically" emphasises that the process of planning should be as participatory and deliberative as possible. Here, definitions speak of a process that is *democratically-led*, *self-organised*, *collective*, *participatory*, or *deliberative*. Degrowth scholars often use the idea of autonomy, ⁵ emphasising that an individual or a community is autonomous when they can take decisions critically and deliberately without dominating influences from the outside (<u>Parrique</u>, 2019: 252).

Democracy is more of a gradient than a binary choice. For instance, if the ban on the construction of new airports in France had been enacted following the recommendations from the Citizens Convention for Climate (CCC, 2020: 255), it could be considered relatively more democratic than if the Ministry of Transport decided alone upon it, and much more democratic than if it was imposed by a dictator. A CEO who decides to lower wages or to automate certain processes of production to maximise shareholder profits does not have the same democratic legitimacy as a self-managed cooperative that makes decisions via one-person-one-vote deliberations. The same subtleties apply for consumption. One should not confuse someone who stops flying because they cannot afford the ticket (involuntary austerity) with someone who voluntarily decides to stop flying (voluntary simplicity). There is no need to dive deeper into theories of freedom: one could simply say that the "democratically" gestures toward making decision-making as democratic as possible.

What matters here is not the final decision but the decision-making process that leads to it. A democratic planning process requires several conditions like the inclusion of relevant stakeholders, a participative protocol of deliberation, among more general features like access to education and information. These decision-making processes (some more inclusive and participative than others) happen at different levels: the Conferences of the Parties or the UNESCO World Heritage initiative at the international level; reforms via citizen assemblies and citizen-initiated referendums at the national level; municipal reforms deliberated via participatory budgeting, district councils, local currency associations at the city level; production decisions within businesses and commons through one-personone-vote decision-making at the level of single organisation; and even the smallest consumption decisions at the household level which can, in the spirit of democratic consideration, take into account factors that affect other human and non-human stakeholders.

What matters to degrowth advocates is that the process of downscaling should be carefully designed to include a variety of perspectives. As we will see in the next two sections, this is key to ensuring that degrowth happens in a way that is equitable without jeopardising wellbeing.

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⁵ In the degrowth literature, the term autonomy has slightly different, although not dissonant meanings for several authors. Castoriadis (1987) used it at both individual and collective levels to describe the power of self-institution and self-supervision expressed by those who are emancipated from external beliefs, norms, and codes of conduct and therefore free to invent their own futures. Illich (1973) used the term to refers to the ability to escape certain tools and institutions once they become a source of constraint. Gorz (1982) borrowed the term from Illich, gave it an existentialist spin, and used it with a strong focus on autonomy as freedom from wage-labour: is autonomous who can engage in the activities of their choice regardless of them being considered "work."

In a way that is equitable

After sustainability and democracy, the third condition for a successful degrowth transition is equity: the downscaling of production and consumption should be organised *in a way that is equitable*. Definitions mention this objective in three ways: by adding adjectives (e.g., *equitable*, *just*, *redistributive*, *proportional*, *equitable*), by specifying where the downscaling should happen (e.g., *in rich nations*, *in advanced economies*, *in the countries and for the populations that consume more of their fair share of ecological footprint*, *in wealthy countries whose ecological footprints currently far exceed sustainable scales*), or by appealing to specific goals (e.g., *social justice*, *reducing inequality*, *achieve inter- and intra-generational equity*, *distributing income and resources more fairly*, *equitable distribution of material wealth*, *equality on the planet*).

The term "equitable" is the most frequent, used in 34 definitions. The notion of equity should be understood with a specific worldview. If economic activities cannot be sufficiently decoupled from environmental pressures, and if we acknowledge that the biocapacity of ecosystems is finite and already under stress, then the pursuit of economic growth in one location necessarily uses resources that will no longer be available for people elsewhere. This zero-sum game logic of a world in overshoot has led proponents of degrowth to embrace a distributive rule of justice with upper and lower bounds. Concerning minima, the idea of "sufficientarianism" (Frankfurt, 1987) states that everyone should be capable of satisfying fundamental needs; this sets a minimal threshold of "decent living standards" (Rao and Min, 2018). As for maxima, "limitarianism" (Robeyns, 2024) stresses that nobody should have too much and so there should be upper limits to the accumulation of wealth and resources. One popular way of depicting these two boundaries together is Kate Raworth's "doughnut" where the "safe and just space for humanity" lies between social floors and ecological ceilings (Raworth, 2017; for the original framework, see Raworth, 2012). These are also referred to as sustainable production and consumption corridors (Di Giulio and Fuchs, 2014; Bärnthaler and Gough, 2023).

Essentially, the question of equity has to do with who should degrow and by how much. A first, rough division can be made at the country level. Historically, the concept of *décroissance* (degrowth in French) emerged as a critique of the "imperial mode of living" of the global North (<u>Brand and Wissen</u>, 2021). This is why several definitions (27 out of 115) specify that degrowth targets *high-income* nations, industrialized states, wealthy countries, wealthy economies, rich nations, or parts of the world that are causing the most environmental destruction.

Sustainability strategies in an unequal world in ecological overshoot bring two conundrums. First problem: the remaining ecological budgets are not large enough to sustain both high-footprint lifestyles in already-rich regions of the world as well as an energy and material intensive process of development in places where needs remain unmet. Second problem: the nature-intensive lifestyles of the global elite exacerbate environmental disasters (<u>Hickel</u>, 2020b; <u>Hickel et al.</u>, 2022; <u>Bruckner et al.</u>,

⁶ For a description of how the concept of degrowth emerged and how it has developed over time, see Parrique, (2019: Chap 5).

2023), which are predominantly suffered by low-income populations (UNEP, 2024: 56). The world's poorest find themselves constrained by resource scarcities and ecosystem collapse, making it even more difficult to meet their needs. Hence the degrowth credo: reducing resource use in affluent parts of the world to free up biophysical budgets for those who need it most while slowing down the ecological damage imposed to those who need it the least. From this perspective, the downscaling of production and consumption in rich parts of the world can be seen, not only as a strategy for addressing environmental problems, but also for achieving global justice (Parrique, 2022).

Even if several definitions say that degrowth targets already-rich nations, I want to argue that, in theory, any territory has the possibility of downscaling production and consumption to reduce ecological footprints (even though it would not be recommended for poor nations where a large portion of needs remain unmet). Today, levels of carbon inequality *within* – and not *between* – countries explain most of global inequality in emissions (Chancel et al., 2023: 18). One should not also forget intermediary category, upper middle-income countries like China, Brazil, Mexico, and South Africa who today represent the lion share of global material extraction and who have replaced high-income countries as the largest emitters of greenhouse gases (UNEP, 2024: 29 and 35). There are deprived communities in rich countries and wealthy communities in low-income countries. This means that the North/South divide should be complemented by an individual/community wealth-based analysis to identify those who should produce and consume less, regardless of where they are – predominantly in early-industrialised economies, but increasingly elsewhere too.

In general, degrowth should follow the principle of common but differentiated responsibilities and capabilities (Rajamani, 2023). First and foremost, abatement efforts should be proportional to responsibility: large reductions for super-polluters and smaller ones for those with less impacts. In France, the wealthiest 10% have an average per capita footprint of 16,2 tCO₂e, more than twice the level of the bottom half of the population who only emit 7.8 tCO₂e/cap (Chancel and Rehm, 2023: 33). To reach an individual target of 2 tCO₂e (or any other carbon ceiling that can effectively mitigate global warming), upper decile individuals will have to give up significantly more than someone else less privileged. Tracing these goods and services back to where they were produced means that the slowdown of production will be more significant in sectors and for products that are predominantly consumed by individuals with higher footprints.

Equity is not only a matter of responsibility but also of capability. This is the difference between equality and equitability. It might be easier to give up car use for a wealthy Parisian household than it is for a car-dependent rural family with less financial might. The 10% richest individuals on Earth (~780 million people) own 76% of world wealth, cause 48% of total emissions and are expected to bear 3% of the costs of climate change; while the situation is the polar opposite for the bottom half of humanity, ~3.9 billion people who own 2% of all wealth, emits 12% of greenhouse gases, and will bear 75% of climate costs (Chancel et al., 2023: 86). Taking wealth and income levels as measures of capability, one should expect those with most resources to contribute the most, in a spirit of equitable sharing of a

collective effort. In the context of degrowth, this contribution will take the form of a lowering of consumption and a redistribution of income and wealth.

This brings us back to the idea of planning: the fairness of a downscaling of production and consumption is a matter of policy design. Planning an equitable degrowth transition means ensuring that the worst-off people in today's economies see their situation improve while the bulk of the burdens are borne by the globally well-off. For example, low-income households and communities can be protected with safety nets like Universal Basic Services (Coote et al., 2019), job guarantees (Unti, 2017), an "ecological transition income" (Swaton, 2018), or different forms of guaranteed minimum incomes (Coady et al., 2021). On the other hand, instruments like income and wealth caps (Buch-Hansen and Koch, 2019), one-off wealth taxes (Apostel and O'Neill, 2022), or limits on rent-seeking practices (Stratford, 2020) can mobilise available resources among classes who can afford to live with less. As we will see in the next section, this two-speed approach is indispensable to securing the final objective of degrowth: wellbeing.

While securing wellbeing.

After economic downscaling, ecological sustainability, democratic planning, and social justice, the fifth and final feature of degrowth is *wellbeing*. This specific term appears in 36 definitions and alternative expressions include *meeting basic needs with dignity, increasing human relations, satisfy everyone's needs*, a *decent life for all people*, a good quality of life for all, a good life, harmony with family and community, living better with less, and convivial living. Historically, the concept of degrowth emerged in 2002 as *décroissance soutenable et conviviale* – sustainable and convivial degrowth (Parrique, 2019: 179-184). The Degrowth Declaration from 2008 (Research & Degrowth, 2010) specifies that "the objectives of degrowth are to meet basic human needs and ensure a high quality of life. One of the two Italian degrowth movements is called the "Movement for Happy Degrowth" and the French periodical *La décroissance* bears the subtitle "*le journal de la joie de vivre*" (the journal of the enjoyment of life).

Linguistically, there are good reasons to prefer "wellbeing" over "happiness." Happiness is an affective state; it is how we feel at a specific moment in time, which can be measured by asking people how satisfied they are, for example on a scale from one to ten. Wellbeing, on the other hand, is a broader term that includes both happiness (subjective or hedonic wellbeing) and needs-satisfaction (objective or eudemonic wellbeing). A person in a homeless situation may be happy to find a five-euro bill on the floor, but that does little to increase their objective wellbeing in terms of healthcare, housing, social network, and other fundamental needs. In the last few years, there has been a turn in research towards objective wellbeing (Koch et al., 2017) with measures of quality of life that takes into consideration concrete means of needs-satisfaction like nutrition, job satisfaction, or social security.

The choice of the verb is not without consequences. Certain definitions speak of *increasing*, *enhancing*, *achieving*, or *improving* wellbeing while others focus on *protecting*, *securing*, *satisfying*, or

maintaining. I have opted for "securing" for several reasons. First, it is a bounded term, which suggests that wellbeing has thresholds of sufficiency. This contrasts with a view of wellbeing as an illimited process of accumulation, as implied by terms like increasing, improving, and especially growing. The second reason is that one should not promise too much out of a downscaling of production and consumption, especially in the short-term. The bare minimum for a degrowth transition is that it should not threaten collective capacities for needs-satisfaction, meaning that essential social functions should be well-protected against the potential impacts of an economic slowdown. This is another reason to favour more cautious terms like protecting, maintaining, or securing. I prefer "securing" over "maintaining" and "protecting" because the latter imply that wellbeing levels are currently high-enough for everyone, which is far from being the case since poverty persists even in high-GDP countries (De Schutter, 2024). The term "securing" allows for a dual interpretation: protecting those needs that are already met and finding ways of satisfying those that are not.

I have decided to put wellbeing last in the definition because, in my view, all other elements are means to that end. Sustainability, democracy, justice, and the very process of downscaling itself are necessary conditions for a good life. To extrapolate this logic, one could say that degrowth aspires to lower the ecological-intensity of wellbeing or, said differently, to decouple needs satisfaction from environmental pressures. In other words, it aims to achieve what <u>Jackson (2009)</u> calls "prosperity without growth." This is a goal shared among several neighbouring discourses such as the "wellbeing economy" (<u>Fioramonti et al., 2022</u>), the "foundational economy" (<u>Bentham et al., 2013</u>), the "care economy" (<u>Ruzzene, 2015</u>), or the "post-growth society" (<u>Gadrey, 2010</u>).

Effective ways of securing wellbeing sustainably are currently discussed under the theme of welfare without growth (<u>Hirvilammi and Koch 2020</u>; <u>Corlet Walker et al., 2021</u>). For example, one may wonder how to finance public services (<u>Olk et al., 2023</u>) or how to avoid involuntary unemployment in a shrinking or non-growing economy (<u>Jackson and Victor, 2011</u>). This again is matter of policy design. Some specific measures must be put in place in order to safeguard essential "systems of provision" (<u>Bayliss and Fine, 2020</u>) that could be under pressure during a period of economic contraction. A small, local, not-for-profit, and democratically run cooperative might not be as profitable as a transnational corporation, but it might outperform the latter in terms of providing meaningful jobs and satisfying needs out of a shrinking biophysical budget (<u>Hinton, 2021</u>; <u>Nesterova, 2020</u>).

To secure wellbeing under degrowth conditions is a matter of prioritisation. To minimise welfare losses, a downscaling of production and consumption should start with goods and services that are considered least essential. This applies at the individual or collective level, where one person or community decides how they prefer to use a limited ecological budget. Just like in a Jenga tower, the mindset of selective degrowth consists in removing activities whose disappearance will not have dramatic consequences. If I must emit less carbon, I prefer giving up distant academic conferences before rationing my meals. In a similar fashion, it might be less impactful in terms of wellbeing to shut down high-fashion factories than farms and hospitals. Confronted with increasingly scarce resources, a

city might favour the building of a public sports facility that contributes to the quality of life of many (high wellbeing footprint) over the extension of private airports that benefits a minority of already-wealthy individuals (lower wellbeing footprint). It is here that democratic planning becomes essential: priorities are representative of the collective interest only if they emerge via inclusive deliberations, for example via deliberative citizen forums on needs satisfaction (Koch et al., 2021).

One may wonder whether ecological budgets are large enough to maintain a desired level of wellbeing. It is one thing to argue that economic growth does not increase quality of life in the long term (the so-called "Easterlin paradox" – see <u>Easterlin and O'Connor, 2022</u>), or that it is possible to increase welfare without producing and consuming more (e.g., <u>Van der Slycken and Bleys, 2024</u>; <u>Baltruszewicz et al., 2023</u>; <u>Creutzig et al., 2022</u>). But it does not necessarily follow that a drop in output is compatible with maintaining certain standards of living.

The magnitude of degrowth an economy can handle without undermining critical levels of wellbeing depends on its macroeconomic surplus. Concialdi (2018) calculates that, for the year 2013, 60% of total household income would suffice to satisfy the minimum needs of all the French population. These basic needs are calculated with the reference budgets method used to develop the concept of a "living wage" in UK (D'Arcy and Finch, 2019). In theory, France could reduce its national income by 40% without impacting collective wellbeing, if and only if the remaining income is equitably distributed among the entire population.

This threshold, of course, is based on a particular system of provision, and one could expect that the types of changes discussed in the degrowth scholarship – decommodification of essential amenities, minimalist lifestyles, sophisticated sharing institutions, etc. – will allow further reductions in production and consumption without jeopardising welfare. An economy with shared tiny houses, community childcare, and tool libraries will be able function at a much lower level of economic activity and biophysical throughput than one with private villas, for-profit nurseries, and individual toolboxes. Tønnessen (2023), for example, reports that 22 countries achieve the same levels of health and education as the United States with 26-37% smaller GDP per capita. This can be interpreted as evidence that countries with large GDPs have a considerable room for a degrowth manoeuvre, but it also tells us that the ability of a territory for degrowth is not unlimited.

Transcending these macroeconomic considerations, one finds a diversity of alternative consumption philosophies that champion the idea that less could be more. These bear many names: "alternative hedonism" (Soper, 2020), "sufficiency" (Princen, 2005), "voluntary simplicity" (see Roubouças et Soares, 2020 for a review), or "happy sobriety" (Rabhi, 2010), and are more generally known as downshifting, post-materialism, minimalism, or simple living. For example, someone opting for slow travel, a plant-based diet, and reduced work hours will have a lower ecological footprint without necessarily being worse off if it makes them healthier and less time-stressed. These benefits can also be expected at the collective level. Driving less lowers air and noise pollution levels (which is good for health) while producing fewer cars liberates time for associative activities (which is good for

conviviality). In that sense, the term "securing" is perhaps too modest if a degrowth transition can in fact enhance wellbeing. In the preface of Jason Hickel's *Less is more* (2021), <u>Mawuli Klu and Read</u> (2021: 5) evoke the "beautiful coincidence of degrowth," or the fact that "what we need to do to survive is the same as what we need to do to have better lives."

Conclusions

In this paper, I have defined degrowth as a downscaling of production and consumption to reduce ecological footprints, planned democratically in a way that is equitable while securing wellbeing. This definition contains five elements, including one concrete, observable process (producing and consuming less) and four principles (sustainability, democracy, justice, and wellbeing).

The downscaling of production and consumption is the conceptual core of degrowth, its key defining feature. It can be phrased differently (e.g., a reduction of economic activities or a slowdown in production and consumption), but it cannot be left out. Even though they may differ in essence and magnitude, all forms of degrowth involve, by definition, producing and consuming less. A definition that omits this element is unclear, potentially impinging on other concepts. For instance, a democratic planning of production that is fair, sustainable, and which enhances wellbeing is closer to a definition of ecosocialism that it is to degrowth. Same for a harmonious relationship with nature that respects inter-specie equity (closer to buen vivir) or a socially useful production that best satisfy the needs of the population (closer to wellbeing economy). To be able to articulate these different concepts, one must be careful to keep them well delineated.

The four principles further clarify the nature of that downscaling. They can be considered necessary requirements for a downscaling of production and consumption to be considered degrowth. The essential point here is that degrowth is inherently multi-dimensional. What makes degrowth whole as a strategy is the co-existence of these principles applied to a specific process. Any understanding of degrowth that does not include all the four principles should be considered incomplete. Just like a mammal is defined by a specific set of features such as hair or fur, warm-blood, milk, and vertebrae, degrowth is indissociable from the four principles of sustainability, democracy, justice, and wellbeing. A cold-blooded cannot be called a mammal. Likewise, an undemocratic downscaling of production and consumption cannot properly be called degrowth.

Relying on a multi-element definition of degrowth might defuse several misconceptions. Degrowth is not a mere pausing of today's economy in the style of a pandemic lockdown (contra Pollin, 2020, and Kenny, 2021) because the downscaling it calls for is selective. It will not "push the species back to preindustrial living standards" (Klein, 2021) or "undermine welfare" (Ekins and Zenghelis, 2021) because it transforms the economy to secure needs satisfaction. Degrowth cannot "condemn hundreds of millions of people to endemic poverty" (Zenghelis, 2021) or "knock down the middle class"

(Brett, 2021) because it is designed in a manner that equitably split the transition efforts while protecting those who are most vulnerable. The democratic check protects degrowth from forms of eco-fascism such as "a state that forces everyone to do handicrafts" (Miller McDonald and Yungneocon, 2020) or "powerful corporate leaders" coercing people into public transports (Kotkin and Cox, 2021). And finally, I doubt it will "make the ecological crisis worse" (Naudé, 2023) if its very raison d'être is to bring overshooting economies back within planetary boundaries.

The present definition follows a specific logical order (sustainability \Rightarrow democracy \Rightarrow justice \Rightarrow wellbeing), heavily influenced by background as an ecological economist. But other combinations are possible. Degrowth could be described as a democratically planned downscaling of production and consumption to reduce ecological footprints and secure wellbeing for everyone (democracy \Rightarrow sustainability \Rightarrow wellbeing \Rightarrow justice) or as a wellbeing-enhancing, fair, sustainable, and democratic downscaling of production and consumption (wellbeing \Rightarrow justice \Rightarrow sustainability \Rightarrow democracy). Some may put more emphasis on one principle rather than another. Many permutations are possible, each representing a specific strand of degrowth – e.g., ecosocialist degrowth (emphasis on democracy), the happy degrowth of the Italian Movimento per la Decrescita Felice (emphasis on wellbeing), decolonial degrowth (emphasis on justice), or sustainable degrowth (emphasis on sustainability).

Considering the quantity of ink that has been spilled disagreeing over definitions, it might seem foolish to hope for settling the debate once and for all. Degrowth is a still-evolving term, which makes it difficult to define. This is hardly surprising considering the diversity of actors who came to embrace it (Schmelzer et al., 2022; Burkhart et al., 2020; D'Alisa et al., 2014). This is precisely why I favoured a modular definition allowing several variations based on different priorities in terms of sustainability, democracy, justice, and wellbeing. The adaptable definition built in the present paper should be seen as a starting point from which to welcome critical interrogation from scholars who feel inspired to invent better definitions of degrowth.

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Appendix: List of degrowth definitions

- 1. "A progressive reduction of material and energy consumption, in the countries and for the populations that consume more of their fair ecological footprint, especially for superfluous material possessions, and at the benefit of an increase in human relations. This decrease of consumption is deliberate." (Ridoux, 2006, pp. 91-92, mt)
- 2. "an equitable and democratic transition to a smaller economy with less production and consumption" (Kallis et al., 2009: 14)
- 3. "An equitable downscaling of production and consumption that increases human well-being and enhances ecological conditions at the local and global level, in the short and long-term [and which is] offered as a social choice, not imposed as an external imperative for environmental or other reasons." (Schneider et al., 2010: 512-13)
- 4. "a gradual decrease in economic output, and manage a true globally sustainable society" (<u>Lietaert, 2010:</u> 576)
- 5. "the reduction of the economic throughput and promoting responsible consumption and voluntary simplicity as demand-side alternatives to consumerism" (Van Griethuysen, 2010: 6)
- 6. "an equitable and democratic transition to a smaller economy with less production and consumption" (Martinez-Alier et al., 2010: 1741)
- 7. "a voluntary transition towards a just, participatory, and ecologically sustainable society." (R&D, 2010)
- 8. "socially sustainable and equitable reduction (and eventually stabilisation) of society's throughput." (Kallis, 2011: 874)
- 9. "a socially equitable and democratic process of downscaling the economy and bringing it within ecological limits." (Cattaneo et al., 2012: 515)
- 10. "the intentional limiting and downscaling of the economy to make it consistent with biophysical boundaries" (Van den Bergh and Kallis, 2012: 910)
- 11. "the average GDP/capita of Canadians is reduced towards a level more consistent with a world economy the size of which respects global environmental limits [...] a transformative path leading to a steady-state at a reduced level of economic output...defined by a reduced level of material and energy throughput" (Victor, 2012: 206, 210)
- 12. "a voluntary reduction of the size of the economic system which implies a reduction of the GDP" (Foster, 2012: 27)
- 13. "a collective and deliberative process aimed at the equitable downscaling of the overall capacity to produce and consume and of the role of markets and commercial exchanges as a central organising principle of human lives." (Sekulova et al., 2013: 1)
- 14. "an equitable and welfare-enhancing downscaling of economic production and consumption" (Asara et al., 2013: 218)
- 15. "an economy that contracts in a fair and orderly way, out of respect for ecological limits and basic human needs" (Cox, 2013: 259)
- 16. "a downscaling of the current size and pattern of socio-economic systems [...] powering down levels of consumption of energy and materials whilst also bringing in strong interest for equity, freedom and quality of life" (Sorman and Giampietro, 2013: pp.80-81)
- 17. "a downscaling of both production and consumption of goods to create more environmentally and socially sustainable communities." (Rogers et al., 2013)
- 18. "a socially sustainable process of strategic downshifting in material throughput (in contrast to involuntary downshifts such as recessions) which relies on policies such as egalitarian income distribution and tax shifting, low hours of work, and high political involvement." (Knight et al., 2013: 693)
- 19. "a democratically led redistributive downscaling of production and consumption in industrialised countries as a means to achieve environmental sustainability, social justice and well-being." (Demaria and Kothari, 2017: 2594)

- 20. "a political project aimed at democratically generating a socially sustainable and equitable reduction in the physical size of the global economic system [...] to a level deemed environmentally sustainable." (Briens, 2015: 51, mt)
- 21. "a democratic and redistributive downscaling of the biophysical size of the global economy" (Asara et al., 2015: 377)
- 22. "a process of planned economic contraction, with the aim of moving toward a socially desirable, ecologically sustainable, steady state economy." (Alexander, 2015: 91)
- 23. "a planned contraction of economic activity aimed at increasing well-being and equality." (Schmelzer, 2015: 264)
- 24. "the transition via the gradual and equitable downscaling of production and consumption to a quantitatively smaller and qualitatively different economy that respects the environment, increases human well-being and aims at social equity." (Petridis et al., 2015: 176)
- 25. "a society with a smaller metabolism (the energy and material throughput of the economy), but more importantly, a society with a metabolism which has a different structure and serves new functions [...] the reduction of energy and material throughput, which is needed to face the existing biophysical constraints [...] a call for deeper democracy [...] an equitable redistribution of wealth within and across the Global North and South, as well as between present and future generations (Kothari et al., 2015: 369)
- 26. "scaling back the total material and energy use of the global economy." (Vansintjan, 2015)
- 27. "an economy that seeks to downscale and/or stabilize production and consumption for more well-being and ecological sustainability." (Gerber, 2015: 413)
- 28. "the democratically-led shrinking of production and consumption with the aim of achieving social justice and ecological sustainability." (Kallis et al., 2015: 1)
- 29. "a purposeful, equitable slowing of the rate at which we transform nature into stuff." (Bliss, 2016)
- 30. "a transitory phase of economic contraction in wealthy countries whose ecological footprints currently far exceed sustainable scales." (Büchs and Koch, 2017: 49)
- 31. "an equitable downscaling of production and consumption that will reduce societies' throughput of energy and raw materials." (Mastini, 2017)
- 32. "a quest for building, in a voluntary way, a better society and creating a new "post-development" pattern that is socially just and within ecological limits" (Cosme et al., 2017: 323)
- 33. "a voluntary and equitable downscaling of the economy towards a sustainable, just, and participatory steady-state society." (Weiss and Cattaneo, 2017: 220)
- 34. "the planned, deliberate process by which we can transition from an economy in ecological overshoot to one that operates within its host planetary environment." (Millstone, 2017: 28).
- 35. "practical utopian perspective [that] aims at the development of more equitable and sustainable lifestyles through the planned contraction of the current mode of economic activity, while also challenging its ideological legitimation such as productivism, economism, and developmentalism." (Muraca and Schmelzer, 2017: 189)
- 36. "the pursuing of collective and deliberative, downscaled production of (natural) resources and less consumption for convivial living." (Metze, 2018: 1)
- 37. "a trajectory where the "throughput" (energy, materials and waste flows) of an economy decreases while welfare, or well-being, improves." (Kallis, 2018: 9)
- 38. "an equitable downscaling of throughput, with a concomitant securing of well-being." (Kallis et al., 2018: 297)
- 39. "a planned reduction of total energy and material use to bring the economy in line with planetary boundaries, while improving people's lives by distributing income and resources more fairly." (<u>Hickel</u>, 2019)
- 40. "a voluntary, democratically negotiated, equitable downscaling of societies' physical throughput until it reaches a sustainable steady-state." (Fonseca, 2019)
- 41. "a democratically deliberated shrinking of economic activities in order to achieve a sustainable way of living." (Theuer and Hopp, 2019)

- 42. "managed equitable downscaling of the material size of the global economy before reaching a 'steady-state' at safe ecological levels." (Herbert, 2019)
- 43. "socially sustainable process of downscaling society's metabolism and throughput, i.e. a degrowth of material production and consumption [...] with the overall goals of preserving the environment and increasing human well-being and social equity" (Sandberg et al., 2019: 137)
- 44. "voluntary, democratically negotiated, equitable downscaling of societies' physical throughput until it reaches a sustainable steady-state" (Büchs and Koch, 2019: 155)
- 45. "a planned economic contraction [...] intended to shift the societal metabolic regime towards a decarbonized one based on lower material throughput" (Fletcher et al., 2019: 1746
- 46. "a societal transformation to reduce and stabilize, or 'de-grow', the energy and matter throughput of the global economic system, and to reorient economic activity toward designing structures of provisioning and peer-governance that address people's shared and individual needs through flourishing of public wealth." (Medak et al., 2020: 7)
- 47. "an equitable downscaling of throughput with a concomitant securing of wellbeing, aimed at a subsequent downscaled steady-state economic system that is socially just and in balance with ecological limits." (Wiedmann et al., 2020: 5)
- 48. "Active contraction in overall economic activity to a material scale and footprint consistent with remaining inside planetary boundaries." (Hensher and Zywert, 2020: 1)
- 49. "a democratically led, proportional and redistributive downscaling of production and consumption as a means to achieve environmental sustainability, social justice and well-being." (Schneider, 2019: 14)
- "a democratically led redistributive downscaling of production and consumption in industrialized countries as a means to achieve environmental sustainability, social justice, and well-being." (<u>Demaria</u> and <u>Latouche</u>, 2019: 148)
- 51. "a self-organized journey towards ecologically sustainable, socially decent and democratically organized societies, involving reductions in extraction, production, consumption, traffic and waste." (Collectif d'intellectuel pour la décroissance, 2020, mt)
- 52. "a voluntary and creative transition to a downscaled economy with less consumption and production, and reorientation of societies from economic growth to holistic objectives of human and planetary well-being." (Vlasov, 2020: 13)
- 53. "democratically managing, in an internationally just manner, a decline in the levels of production and consumption of materials and energy of the socioeconomic metabolisms, until we place ourselves back within the limits of the biosphere with the objective of a decent life for all people." (Lodeiro, 2020)
- 54. "a clear, voluntary, democratic and equitable reduction of extraction, processing, transport, consumption and disposal of materials and energy." (Kotsila et al., 2020)
- 55. "a downscaling of production and consumption activities oriented to increase environmental quality and social collaboration." (Andreoni, 2020: 1)
- 56. "a democratically planned yet adaptive, sustainable, and equitable downscaling of the economy, leading to a future where we can live better with less." (<u>Degrowth New Roots Collective</u>, 2020)
- 57. "a planned reduction of excess energy and resource use in rich nations to bring the economy back into balance with the living world, while reducing inequality and improving people's access to the resources they need to live long, healthy, flourishing lives." (Hickel, 2020a)
- 58. "a democratic and just transition to a smaller, steady state economy in harmony with nature, family, and community." (DegrowUS cited in Czech and Mastini, 2020)
- 59. "it is about reducing the material throughput and energy consumption related to human activity in a controlled way, specifically in the parts of the world that are causing the most environmental destruction and depleting the most resources, and finding new ways to flourish as a civilization." (Richardson, 2020)
- 60. "a period of planned economic contraction leading eventually to the type of steady-state economy at a sustainable level of aggregate." (Büscher & Fletcher, 2020: 150)
- 61. "a planned, coherent policy to reduce ecological impact, reduce inequality, and improve well-being." (Hickel, 2020b: 4)

- 62. "a planned downscaling of energy and resource use to bring the economy back into balance with the living world in a safe, just and equitable way." (Hickel, 2020c: 29)
- 63. "a reduction in both production and consumption on the global scale along with a fundamental shift in society's understanding of the relationship between consumption, wealth and well-being. This, in turn, requires a rebalancing between wealthier and less prosperous societies; pragmatically, the throughput of developed nations must be reduced significantly in order to achieve an equitable worldwide 'compromise' level of well-being' (Sharpley, 2020: 1940)
- 64. "a radically democratic reogranization of the political and economic structures of industrialized societies, aiming at drastic reductions in resource and energy throughput while furthering a good life for all" (Burkhart et al., 2020: 144)
- 65. "the voluntary transition toward a just, participatory, and ecologically sustainable society....to meet basic human needs and ensure a high quality of life, while reducing the ecological impact of the global economy to a sustainable level, equitably distributed between nations" (Kopnina, 2020: 286)
- 66. "a planned reduction of energy and resource use designed to bring the economy back in balance with the living world in a way in a way that reduces inequality and improves human well-being. [...] a planned, coherent policy to reduce ecological impact, reduce inequality, and improve well-being" (Hickel, 2021: 1105b)
- 67. "an equitable downscaling of throughput, with a concomitant securing of wellbeing" (Mastini et al., 2021: 3)
- 68. "degrowth means planned and equitable contraction of the energy and resource demands of the most 'developed' and overgrown economies." (Alexander, 2021: 3)
- 69. "a radical reduction in production and consumption, especially in rich nations, in order to mitigate the future impacts of natural resource depletion and climate change on the global economy and social well-being." (Van Der Woude, 2021)
- 70. "the general advocacy to plan a reduction in energy and material throughput to restore balance with the planet, meanwhile reducing inequality and improving human well-being." (Dunlap, 2021)
- 71. "a voluntary and organized movement to progressively reduce energy and raw material consumption in order to return to respecting planetary limits while improving human well-being." (Batho, 2021)
- 72. "the downsizing of production and consumption in order to achieve a more ecologically balanced society." (Ford & Kuetting, 2021: 293)
- 73. "Sustainable degrowth is a transformative quest towards a more equitable socio-economic setting, as well as a reasonable level of economic throughput that, taken together, improve the quality of life while respecting planetary boundaries." (Lüdeke-Freund and Froese, 2021)
- 74. "Degrowth entails transitioning to a society where economic growth is no longer at the center, with downscaling of production and consumption to enhance human and ecological well-being." (Nicoson, 2021: 2).
- 75. "a proposal for voluntary, equitable, and democratically led reduction of the materials and energy that a society extracts, processes, and disposes of as waste, but it is more fundamentally a call to break with economic growth as a societal goal and to oppose the automatic association of growth with better outcomes that is, the ideology of growth." (Akbulut, 2021: 98)
- 76. "an intended reduction of energy and resources throughput so that the economy springs back in balance with the living world in a way that reduces inequality and improves human well-being." (Guzman, 2021)
- 77. "a reduction in material and energy use, likely resulting in a reduction in GDP, organised in an equitable and sustainable way that maintains societal wellbeing." (Lenzen and Kleyber, 2021)
- 78. "Degrowth is a conscious set of policies designed to optimize human and planetary wellbeing while minimizing inequality, poverty and environmental harm." (Remblance, 2021)
- 79. "a voluntary, democratically negotiated, equitable downscaling of economic production and consumption to assure that society's throughput resource use and waste stays within safe ecosystem boundaries." (Trantas, 2021)
- 80. "as a social movement advocating a global downscaling of production and consumption to face collectively both environmental disasters and social inequalities." (Zorzin, 2021: 3)

- 81. "a planned and intentional process which increases wellbeing while simultaneously reducing ecological harms." (Smith et al., 2021)
- 82. "shrinking wealthy societies' throughputs of materials and energy in ways that prioritize justice and well-being." (Bliss and Kallis, 2022)
- 83. "Sustainable degrowth is a downscaling of production and consumption that increases human well-being and enhances ecological conditions and equity on the planet." (R&D, 2022)
- 84. "a democratically defined absolute reduction of material and energy throughput, whilst ensuring well-being for all within the planetary boundaries and without outsourcing social and ecological burdens from the Global North to countries of the Global South." (Barlow et al., 2022: introduction)
- 85. "a democratic process of transformation to a more just, sustainable, and less material and energy-intensive society." (Schmelzer et al., 2022: 13)
- 86. "a democratic process of transformation [that] enables global ecological justice in other words, it transforms and reduces its material metabolism, and thus also production and consumption, in such a way that its way of life is ecologically sustainable in the long term and globally just; strengthens social justice and self-determination and strives for a good life for all under the conditions of this changed metabolism and redesigns its institutions and infrastructure so that they are not dependent on growth and continuous expansion for their functioning" (Schmelzer et al., 2022)
- 87. "reducing ecologically destructive forms of production and resource throughput in wealthy economies to achieve environmental goals, while transforming production to focus on human well-being." (Bodirsky et al., 2022)
- 88. "a planned slowdown to respect planetary boundaries, pursuing wellbeing by a convivial reclamation of the commons." (Kallis et al., 2022: 3)
- 89. "the planned and democratic reduction of production and consumption as a solution to the social-ecological crises." (Fitzpatrick et al., 2022: 1)
- 90. "a planned and democratic reduction of production and consumption in rich countries to reduce environmental pressures and inequality, while improving well-being." (Parrique, 2022a)
- 91. "Degrowth is the idea to redesign human wellbeing provisioning systems to reduce throughput to a level of materials and energy use that the planet can perpetually accommodate and to redistribute wealth so that everyone, everywhere, can meet their basic needs with dignity, as a human right." (Wilkins, 2022: 8)
- 92. "A reduction in production and consumption to lighten ecological footprints, democratically planned in a spirit of social justice and for the sake of well-being." (Parrique, 2022: 15b, mt)
- 93. "the democratically planned reduction of energy and material consumption." (<u>Dunlap and Marin, 2022:</u> <u>5</u>).
- 94. "Degrowth is a deliberate set of strategies to reduce the material footprint, including energy use, of wealthy nations." (Remblance, 2022)
- 95. "an end to the fetishization of growth in contemporary society, a reduction in energy and material throughputs in the Global North, and a global just distribution of wealth and resources. [...] to phase out fossil fuels, regenerate the planet's damaged ecosystems and attain a decent quality of life for all" (Heron, 2022)
- 96. "shrinking rather than growing economies, so we use less of the world's energy and resources and put wellbeing ahead of profit." (Masterson, 2022)
- 97. "The 'Degrowth' pathway emphasises strategies that reduce the material throughput of society, protecting human wellbeing through equitable distribution of material wealth rather than growth, reducing energy and resource consumption in the most industrialized countries as a means to achieve inter- and intra-generational equity and a good quality of life for all." (IPBES, 2022: 26)
- 98. "Wealthy economies should abandon growth of gross domestic product (GDP) as a goal, scale down destructive and unnecessary forms of production to reduce energy and material use, and focus economic activity around securing human needs and well-being." (Hickel et al., 2022: 400-401)

- 99. "a sort of aggregate economic 'degrowing' of rich countries in terms of an 'equitable downscaling of production and consumption with the goal of decreasing societies' social metabolisms." (Gräbner-Radkowitsch and Strunk, 2023: 1)
- 100. "a radical reorganization of society that leads to a drastic reduction in the use of energy and resources and that is deemed necessary, desirable, and possible." (Schmelzer and Nowshin, 2023: 16)
- 101. "a political project and a matrix of alternatives designed to bring about jointly and democratically (i) a narrowing of the social and cultural hold of economic rationality, and (ii) a socially sustainable and equitable reduction in the physical flows of the economic system to a level that is environmentally sustainable and generalisable." (Briens, 2023, mt)
- 102. "a democratically led redistributive downscaling of production and consumption in industrialised countries as a means to achieve socio-environmental justice and well-being." (<u>Kaika et al.</u>, 2023: 1194)
- 103. "a democratically driven, equitable downscaling of the throughputs of materials and energy that eventually results in a sustainable steady state." (<u>Dwyer, 2023: 10</u>)
- 104. "to achieve sufficiently rapid decarbonisation, high-income economies may need to adopt degrowth policies, scaling down less-necessary forms of production and demand." (<u>Li et al., 2023: abstract</u>)
- 105. "a society based on sufficiency, autonomy, and democracy, liberated from the drive to consume and produce, and therefore able to downscale economies' material throughput, beginning with all excess." (Savini, 2023: 1)
- 106. "Production and consumption must be scaled down to lower the levels of resource use and limit bio-physical throughput and thus end the ongoing climate crisis while creating a more just and equitable society." (Corvellec and Paulsson, 2023: 1)
- 107. "radically leaner resource and material use in the North, along with an extensive income and wealth redistribution worldwide, could tackle global social injustice and ensure a good life for all." (Sekulova et al., 2023: 2)
- 108. "the democratic downscaling of production and consumption notably in these countries to bring human activity within planetary boundaries, while equitably maintaining or improving living standards." (Bueno de Mesquita, 2024: 3).
- 109. "a multi-level voluntary path towards reduction of production and consumption aiming at ecological sustainability, good life, liberty, and social justice." (R&D website, 2024)
- 110. "degrowth wants wealthy economies to abandon gross domestic product (GDP) growth and reduce energy and material use by scaling down unnecessary production while focusing on human needs." (Kallis et al., 2024: 64)
- 111. "a democratically-led and planned redistributive downshifting of economic activities in socially just ways." (Maier, 2024: 73-74)
- 112. "the energy and matter throughput of the rich countries is to decrease significantly, and that this shrinking process would need to be organised democratically and without undermining critical levels of wellbeing." (Buch-Hansen et al., 2024: 5)
- "a downscaling of production and consumption that increases human well-being and enhances ecological conditions and equity on the planet." (Research & Degrowth website, 2024)
- 114. "degrowth aims to reframe and recreate economies that respect Earth's limits in order to achieve socio-political equity and ecological sustainability. [...] a radical reduction in production and consumption, greater citizen participation in politics, and more diversity, especially within ecological systems and landscapes, along with a flourishing of creativity, care, and commoning using renewable energy and materials." (Nelson, 2024)
- "a planned reduction of energy and resource use in advanced economies" (<u>Jackson et al., 2024:</u>

 1)