



Frugal abundance: Conceptualisation for degrowth

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ABSTRACT

The concept of ‘frugal abundance’ has recently been mentioned in numerous degrowth publications and even presented as “the essence of degrowth” (Kallis et al., 2022, p.2). However, it has not yet been clearly conceptualised. The aim of this article is to start filling this gap. It provides substance to degrowth-compatible understandings of frugality and of abundance based on frugality, stressing the importance of the autonomous and pluriversal design of ‘enough’. It highlights that human material desires can be finite and satiated under some societal organisations and cultures. It also proposes a definition of a society of frugal abundance: it is a society in which everyone has a good life, consumption is low enough to achieve global ecological and social justice, and the material wants of everyone are satisfied. Through the notion of frugal abundance, the article argues that degrowth is associated with abundance, prosperity, richness, and it puts forth the term as a valuable addition to the conceptual and communication toolbox of the degrowth movement.

1. Introduction

The concept of sufficiency has made a notable entrance into the latest IPCC reports. In the mitigation report, sufficiency is mentioned 180 times – excluding references and other meanings (IPCC, 2022). It is defined as “a set of measures and daily practices that avoid demand for energy, materials, land and water while delivering human well-being for all within planetary boundaries” (IPCC, 2022, p. 1815). It is considered as an important strategy to reduce greenhouse gas emissions and achieve the objectives of the Paris Agreement.

Degrowth, concisely defined by Kallis et al. (2018, p.292) as “a process of political and social transformation that reduces a society’s throughput while improving the quality of life”, is seen as particularly close to sufficiency (Parrique, 2022; Alexander and Gleeson, 2022). Therefore, the degrowth movement, which has a strong lineage with ecological economics and its concerns with use of resources and energy in more sustainable ways (Kallis, 2023), saw the latest IPCC reports as an intellectual victory.

However, degrowth- and sufficiency-inspired ideas are often negatively depicted outside of degrowth spheres. For example, French President Emmanuel Macron (2023) connected sufficiency to the end of an era of abundance due to ecological constraints. This relates to degrowth being associated by critics with a society of restraints and scarcity, in which prosperity and pleasure would be limited (Parrique, 2020).

In contrast, in this paper I argue that degrowth is associated with abundance, prosperity and richness. Other degrowth scholars have put forth a similar view – see e.g. Hickel (2019), Kallis (2019), Gómez-Baggethun (2020) and Saito (2022) – but, here, I do so through the concept of ‘frugal abundance’. It is already and increasingly being used in degrowth publications, and Kallis et al. (2022, p. 2) even state that it captures “the essence of degrowth”. However, so far, the degrowth movement has not yet deeply engaged with the notion. This article aims at expanding and deepening current conceptualisations of frugal abundance. By doing so, I hope not only to associate an imaginary of abundance and prosperity with degrowth, but also to propose ‘frugal abundance’ as a valuable addition to the communication and conceptual toolbox of the degrowth movement. In terms of communication, it directly challenges a strongly rooted common sense: that abundance and the good life are based on high levels of consumption and production. It could also be part of a powerful counter-hegemonic narrative, since it can relate to still-existing popular cultures and dormant common senses.

The paper proceeds as follows. Section 2 introduces some methodological considerations for this conceptual article. Section 3 briefly reviews the English literature mentioning the term ‘frugal abundance’ within degrowth scholarship, arguing that it has so far mainly been used as a catchphrase. Section 4 presents the origins of frugal abundance, dating back to French and Italian literatures from the 1970s onwards. In Sections 5 and 6, I provide degrowth-compatible understandings of frugality and of abundance based on frugality. In particular, I stress the

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importance of the good life, global social and ecological justice as well as autonomous and pluriversal design of ‘enough’. I also state that having limited material desires which are satisfied as well as a predominantly immaterial understanding of abundance are required. This leads to a proposed definition of a society of frugal abundance in [Section 7](#): It is a society in which everyone has a good life, consumption is low enough to achieve global ecological and social justice, and the material wants of everyone are satisfied. The rest of [Section 7](#) discusses the definition while [Section 8](#) expands on how frugal abundance could be valuable to degrowth, both conceptually and in terms of communication.

2. Methodological considerations

[Section 3](#) briefly reviews the degrowth academic publications written in English mentioning the term ‘frugal abundance’. I focused not only on academic articles, but also on academic books, book chapters and PhD theses that were accessible through UCL credentials or were already in my possession. To find such publications, I started by searching the term in all the resources on Timothée Parrique’s degrowth database (<https://timotheeparrique.com/resources/>), which contained at that time more than 600 entries. It was complemented by searching “‘frugal abundance’ AND ‘degrowth’” on Google Scholar and Scopus. The review of this literature ended on the 12th of June 2023.

In the rest of this conceptual paper, I rely on other degrowth-related bodies of literature which have been purposively chosen. The objective was not to review all relevant publications, because it would have entailed mobilising degrowth views which are difficult or even impossible to reconcile. Doing so is not even desirable, because “degrowth horizons are broadened by the celebration of a rainbow of knowledges, cosmologies, and vital worlds, conceptualised as components of a pluriverse” ([Paulson, 2022](#), p. 182). Therefore, I take sides in favour of some arguments and literature which might be criticised in some corners of the field, for instance when I prefer to engage with scholarship about desires and subjective indicators rather than universal lists of needs. Nevertheless, I hope that the paper does not feel alien in any of the diverse currents of degrowth, as I prefer to build bridges rather than tensions within the movement.

3. Brief review of the literature mentioning ‘frugal abundance’

I found 35 academic publications written in English mentioning the term ‘frugal abundance’, 18 of which were published between 2020 and June 2023 – see Appendices A and B. Most publications (25) are journal articles, and they cover various topics such as tourism (e.g. [Fletcher et al., 2019](#)), food systems (e.g. [Guerrero Lara et al., 2023](#)), organisation (e.g. [Banerjee et al., 2021](#)), housing ([Nelson and Schneider, 2019](#)) as well as general introductions to degrowth (e.g. [Demaria et al., 2013](#)). The authors who have most cited the term are Giorgos Kallis (5 publications), Anitra Nelson (4) and Federico Demaria (4). The first mention of the concept in English dates back to 2012 ([Latouche, 2012](#)). Most publications refer to the work of Serge Latouche, who introduced the phrase in English-speaking degrowth spheres.

In some publications (9), frugal abundance is presented as a principle of degrowth. In many others (18), it is framed as part of the vision of the future advocated by the degrowth movement. The notion is seen as challenging the “growth-based roots of the [current] social imaginary” ([Demaria et al., 2013](#), p. 209), and “decoupling utopia from a one-way future of material abundance” ([Kallis and March, 2015](#), p. 362). The phrase is also sometimes used in counterarguments to views associating limits with scarcity (e.g. [Gómez-Baggethun, 2020](#)).

Nevertheless, the term is very rarely a focus of the analysis in these publications. It is mentioned in passing, as part of another argument. It is not used more than twice in 30 out of 35 publications, and mostly in quotation marks (22). This suggests that frugal abundance is mostly used as a catchphrase. Only [Liegey and Nelson \(2020\)](#) and [Alexander \(2017\)](#) dedicate space to discuss its meaning.

[Liegey and Nelson \(2020\)](#) include ‘frugal abundance’ in their glossary of key degrowth concepts. Their definition is “letting go of work, consumption and environmentally unfriendly activities to make space and time to enjoy a rich quality of a life coextensive with a low ecological footprint” ([Liegey and Nelson, 2020](#), p.61). They see frugal abundance as intentionally limiting consumption and its environmental impacts to avoid the ‘over-abundance’ of Western societies, and redirect focus on ordinary moments of life that bring happiness. It also includes favouring quality over quantity, in the spirit of ‘small is beautiful’ ([Schumacher, 1973](#)). They categorise frugal abundance within their so-called ‘individual sphere’ of degrowth. It would therefore be a rather individual practice, even if Liegey and Nelson admit that frugal abundance also connects to their ‘collective spheres’. In addition, it is not only a subjective matter, but “culturally transferable” (p.xi). Overall, they see frugal abundance strongly linked to voluntary simplicity.

[Alexander \(2017, p.159\)](#) considers frugal abundance as “reduced consumption and production” that increases “social and ecological well-being”. Such reduction would therefore be positive. Alexander contrasts it with the negative consequences of reductions within capitalism. In this conceptualisation, frugal abundance is the opposite of capitalist austerity. It requires meeting basic material- and energy-intensive needs, but then attention is shifted onto less material- and energy-intensive aspects of life.¹

While these two publications provide an initial understanding of frugal abundance, a thorough conceptualisation is clearly missing in this literature. As a consequence, in the rest of the article, I explore other bodies of literature which provide more promising avenues for conceptualisation.

4. Origins of frugal abundance

According to [Latouche \(2020, n. 34\)](#), the first use of the term ‘frugal abundance’ – in French, *abondance frugale* – was by the French social democratic think tank *Échange et Projets* in a report called *The Revolution of chosen time*, published in 1980. Frugality was understood as “a bit less of material goods” and reduction “where there is excessive [material] wealth”² ([Échange et Projets, 1980](#), p.106). This reduction, however, would be positive for both French individuals and French society. The think tank advocated for a revolution in which individuals would be free to choose their time allocation, and frugality was seen as the necessary “rebalancing of values and behaviours” (p.106). This would, in turn, increase “freedom and authenticity” (p.106). It would also help to tackle environmental issues by decreasing production, and to reduce inequalities by adopting a mindset prone to solidarity and redistribution. Frugality would be associated with a different form of abundance:

There is no question of giving up abundance, but on condition of converting its meaning. It is impossible to escape a certain frugality, but it would not be impoverishment, because what we would be deprived of provides increasingly marginal satisfactions ([Échange et Projets, 1980](#), p.106).

Jean-Baptiste de Foucauld, one of the main authors of the report, elaborates on the notion in a book published in 2010 called *The frugal abundance: For a new solidarity*. He states that frugal abundance is about balance. It is the balance between material, relational and spiritual needs of all humans. It is also the balance between one’s desires and the means to satisfy them. Because of frugality, individuals would “concentrate on the essential” ([de Foucauld, 2010](#), p.33), which is

¹ For ease of language, this article uses the adjective ‘material’ as a shortcut for ‘material- and energy-intensive’. However, I distance myself from scholarship that neglects the embedded resources and energy in any act of production and consumption.

² Quotations in this section are my own translations from French and Italian.

composed of “what is judged socially necessary” beyond mere survival, as well as “that little something extra that gives meaning to life” (p.77). Individuals would then let go of all other desires, considered superfluous. By doing so, he argues that desires would be fulfilled, individuals would have enough time to do what they want, and the environment would flourish again. In that sense, abundance would be achieved. ‘Frugality’ and ‘abundance’ can therefore “complement each other” (p.76) and lead to “harmony” (p.87). He sees frugality as “found and negotiated at the individual level” (p.78), because ‘that little something extra’ is solely personal. However, frugality would be socially “accepted, shared, equitable” (p.33).

Échange et Projets (1980, p.106) imagined frugal abundance as the “ecologist, French version, of the ‘revolutionary austerity’ advocated by the Italian Communist Party”. The notion of revolutionary austerity, also called ‘just austerity’, has been put forward by Enrico Berlinguer, the national secretary of the Party, in several speeches from 1977 to 1979.³ Italy was in a serious recession at that time. Some austerity, conceived as a decrease in consumption and in the State’s expenses, was seen as necessary. However, Berlinguer advocated for a different kind of austerity – at the time, ‘austerity’ was not yet so negatively understood (Bramall, 2017), so it was possible to subvert its meaning. Berlinguer’s austerity was not aimed at maintaining the consumeristic and capitalistic system, but rather to start a general reflection on “how much and why to produce” (Berlinguer 1979, cited in Marcon, 2014, p. 70), and “therefore on what [...] is needed” (Berlinguer 1979, cited in Marcon, 2014, p.73). Such type of austerity was seen as a means “to counteract the roots and lay the foundations for overcoming a system [...] whose distinctive characteristics are waste and squandering, the exaltation of the wildest particularisms and individualisms, of the most insane consumerism” (Berlinguer 1977, cited in Marcon, 2014, p.35). Berlinguer saw the crisis as an opportunity to create “a more just, less unequal, truly freer, more democratic, more humane society” (Berlinguer 1977, cited in Marcon, 2014, p.56). Finally, Berlinguer argued that austerity could lead to higher happiness by focusing on non-material aspects of life:

Man is made to be happy: it’s just that it’s not necessary to have a car to be happy... Beyond a certain material limit, material things don’t count for much; and then life is concentrated in its cultural and moral aspects (Berlinguer 1977, cited in Marcon, 2014, p.58).

While degrowth precursors did not invent the phrase ‘frugal abundance’, it was used by Jacques Ellul and André Gorz in the coming years. Ellul (1982, p.213) argues that a reduction of consumption for most in the Global North would “not be an impoverishment, because what we would be deprived of provides increasingly marginal satisfactions”, such as gadgets. This reduced consumption would enable the reallocation of production to serve those who are materially deprived, particularly in the then-called ‘Third World’: “we have to put a little abundance where there is misery, and frugality where there is waste (public and private)” (p.213).

In an article for *Le Monde Diplomatique*, Gorz (1993a) builds on Échange et Projets’s report – which he considers to be of “inexhaustible richness” and “deserves to always be at the bedside of environmental campaigners”. He considers frugal abundance as the balance “between [the] level of consumption and [the] degree of autonomy, between ‘having’ and ‘being’”. He defines a civilisation of frugal abundance as one “which, while guaranteeing increasing autonomy and existential security to all, progressively eliminates excessive consumption, [which is] a source of time-wasting, nuisance, waste and frustration, in favour of a more relaxed, convivial and free life”.

In recent years, Serge Latouche has popularised the notion of frugal

³ During this period, the Italian Communist Party was highly popular. It obtained 33.4% of the votes in the 1976 Italian general elections and was indirectly involved in government.

abundance in degrowth spheres – he even thought that he was inventing the phrase when he started to use it in the 2000s (Latouche, 2011, p.10). Two of his recent books refer to it directly: *Towards a society of frugal abundance: Misinterpretations and controversies of degrowth in 2011*, and *Frugal abundance as an art of living: Happiness, gastronomy and degrowth in 2020*. According to him, frugal abundance concerns a self-limitation – defined as the voluntary limitation of all unnecessary consumption – which would lead to “genuine abundance, as opposed to the false abundance put in spectacle by a society of waste based on the frustration of unlimited unfulfilled desires” (Latouche, 2020, p.76). Frugal abundance entails a redefinition of happiness, which “is generally associated with abundance, but never with frugality” (p.7). According to him, the good life should be redefined as “frugal abundance in a solidary society” (Latouche, 2020, p.52). Frugal abundance is much linked to Latouche’s project of the ‘decolonisation of the imaginary’:

By liberating ourselves even a little from productivist and consumerist propaganda, it becomes clear that frugality is a prerequisite for any form of abundance (Latouche, 2011, p.25).

Common themes can be found among these authors. According to them, frugal abundance is about letting go of what is materially superfluous in order to leave space for non-material aspects of life such as free time, happiness and autonomy. It also benefits the non-human world and those who lack the basics. Nevertheless, several differences arise. For example, de Foucauld envisions frugal abundance as a predominantly individual project, while Latouche and Berlinguer focus on the societal level. Moreover, Gorz conceives frugal abundance as an end, while Berlinguer and Ellul emphasise its potential for revolution or for social justice. Finally, Gorz and Berlinguer stress the fulfilment of what is essential, while Latouche insists on the satisfaction of a constrained number of desires. The authors also do not define – and do not provide a methodology for defining – what is needed, essential, desired, superfluous or excessive. These topics are addressed in the following sections.

5. Conceptualising frugality

In this section, I provide substance to a degrowth-compatible understanding of frugality. To do so, I rely on several bodies of literature, including those on simplicity, sufficiency, frugality and (strong) sustainable consumption. In particular, I stress the importance of the good life for all as well as of global ecological and social justice. These concerns lead me to consider frugality in a collective way and to advocate for the autonomous and pluriversal design of the good life, the essential and the superfluous.

Frugality generally relates to the good life. Its etymology traces back to the Latin word *frux*, which means fruit, profit, or value (Westacott, 2016) and relates to long-term flourishing (Jackson, 2017). The degrowth literature related to frugality particularly emphasises the good life. For instance, Alexander (2015, p.114) states that it is about “seeking a higher quality of life”, while many authors in the sustainable consumption literature investigate whether it could lead to a ‘double dividend’ of higher well-being and reduced environmental impact (Sahakian et al., 2022; Jackson, 2005; Syse and Mueller, 2015; Herziger et al., 2020). Therefore, let me state right away that frugality in the degrowth tradition differs from misery, scarcity, poverty or austerity understood as the experience of deprivation from the basic conditions of a good life (Parrique, 2020; Tévoédjrè, 1979; Daoud, 2018). It also diverges from asceticism understood as the denial of joy, pleasure and happiness (Latouche, 2020; Parrique, 2020).

In particular, frugality from a degrowth perspective emphasises the non-material aspects of the good life. This is clearest in the simplicity literature, where simplicity is seen as “a way of life that is outwardly simple and inwardly rich” (Elgin, 1981) or as “harmony among the material, sensual, and ideal” (Shi, 2014). Alexander (2015, p.xiii) also argues that simplicity consists of “redirecting life’s vital energies towards non-materialist sources of meaning and fulfilment, such as friends and

family, social engagement, creative activity, home production, meeting our civic duties, or exploring whatever one's private passions might be".

Frugality in the degrowth tradition strongly emphasises global ecological and social justice. The decolonial, feminist and Marxist literatures point out that the causes of current social and ecological crises are not equally distributed (Mehta and Harcourt, 2021; Salleh, 2009). They are linked to capitalism, patriarchy and coloniality, among other social structures (e.g. Brand and Wissen, 2021; Sultana, 2022; Hickel, 2017; Chertkovskaya et al., 2019). Therefore, frugality has to counter oppressions such as those based on class (Dale, 2022), sex, gender (Salleh, 2009) and race. Importantly, justice also concerns future generations (Alcott, 2008) and non-humans (Gabriel and Bond, 2019).

The emphasis on justice leads to consider frugality in a collective way, acknowledging that it relates to the individual (Fuchs et al., 2021; Liegey and Nelson, 2020) as well as to the meso-level of groups, firms and industries (Jungell-Michelsson and Heikkurinen, 2022). It means that individualistic understandings of frugality, such as in the voluntary simplicity movement (Alexander, 2015), are discarded. This emphasis on the collective aligns with Latouche (2011) who uses the phrase 'society of frugal abundance'. Importantly, any degrowth project involving frugality prioritises collective struggles against social structures such as capitalism, imperialism, patriarchy and productivism.

The importance of justice and the good life lead to connect frugality to a sense of enoughness (Jungell-Michelsson and Heikkurinen, 2022). This means that "how much is enough" is a primary concern (Skidelsky and Skidelsky, 2012). On the one hand, individuals and groups should have enough to achieve a good life (Fuchs et al., 2021). On the other hand, they should not consume so much that they prevent others from obtaining what is essential or threatens the long-term sustainability of future generations and non-humans (Parrique, 2020; Spengler, 2016). Some call for a minimum and a maximum of production and consumption. In the sustainable consumption literature, this minimum and maximum are grouped to become what they call the 'consumption corridor' (Fuchs et al., 2021). Others prefer to focus on finding the right balance between insufficient and excessive consumption and production (Daoud, 2018; Alexander, 2015; Jackson, 2021). This leads Alexander and MacLeod (2014) to consider "the middle way" between over-consumption and under-consumption".

The definitions of the good life, the essential and the superfluous deserve further scrutiny. Some scholars in degrowth spheres prefer to focus on objective lists of elements which apply to all societies and cultures (Koch et al., 2017; Lamb and Steinberger, 2017; Büchs and Koch, 2017). However, the universal character of any of such list is debatable (Soper, 1993). Indeed, it is difficult to reconcile diverse, and often conflicting, worldviews in building such a list. Power relations inevitably come into play in prioritising some worldviews over others.

I see the definition of such universal lists as infringing the principles of autonomy and pluriversity of degrowth. Indeed, if experts detached from the population decide in a top-down manner, it creates what André Gorz (1993b) called an "expertocracy", in which the definition of important societal elements becomes "the preserve of a caste of experts, sheltered by a superior body of knowledge supposedly inaccessible to the population at large" (p.59).⁴ In this context, subaltern visions such as *buen vivir* and *ubuntu* might be discarded – see Illich (1992) for a similar line of argument. Autonomy, defined by Castoriadis (1994) as the conscious self-institution of both individuals and collectives, is not achieved. Moreover, universal lists do not let sufficient space for cultural diversity, to "create a world in which many worlds fit", as the Zapatistas put it (Kothari et al., 2019).

The alternative to this strategy is generally claimed to be the reliance on the preference satisfaction theory, in which individuals are seen as

⁴ Some theories (e.g. Max-Neef et al., 1991) argue that need satisfiers are culturally-dependent, but the needs themselves are still universally identified by experts.

the best and sovereign judges of their own interests. This approach is problematic for many reasons (e.g. Gough, 2015, Section 2), among which that it is not interested in moral judgements for social and environmental reasons. For instance, it cannot challenge individuals arguing that very high levels of consumption are necessary for them even if they negatively impact the lives of others and the environment. As a result, this theory is also discarded.

In this article, I advocate for an autonomous and pluriversal design (Escobar, 2018a; Kothari et al., 2019) of the good life, the essential and the superfluous. In practice, communities themselves would decide based on their own selected institutions, their own context and worldviews. In a nutshell, "every community practices the design of itself" (Escobar, 2018b, p. 143).

Autonomous design requires individuals and groups to educate themselves and to practise what Castoriadis (1999) calls 'self-limitation', that is, a certain moderation that enables the good of the greater collective. Scientific knowledge – such as about planetary boundaries and the good life – should be taken into account, while some sort of coordination between local groups is necessary to avoid the infringement of the principles of global social and ecological justice. Overall, the process must ensure that "dominant and subaltern worlds can be partially connected, even co-produce each other, while remaining distinct" (Escobar, 2018b, p. 141). In particular, the autonomous and pluriversal design should put particular care and attention to ensure that the most marginalised and deprived are listened to and have an influence (Mehta and Harcourt, 2021). This approach should therefore take race, gender, class and other categories into account in an intersectional manner (Mollett, 2017).

Already existing examples can inspire autonomous and pluriversal design. For instance, the commons-based peer production movement has created systems for worldwide decentralised collaboration (Kostakis et al., 2015; Robra et al., 2023), while the UCL Institute for Global Prosperity has pioneered a method for the bottom-up definition of the good life in several parts of the world (Moore and Woodcraft, 2019; Woodcraft et al., 2020).

The notions of wants and desires are also relevant to the definition of the good life, the essential and the superfluous.⁵ Here, I see the desires of individuals and groups beyond those necessary for survival as highly socially constructed. In other words, the societal organisation and culture greatly influence them. Consequently, wants can be deflated, shaped and steered towards low-impact activities as well as towards non-material aspects of life by creating different societal organisations and cultures. Therefore, I concur with Graeber (2011) and Skidelsky and Skidelsky (2012) – see also Sahlins (1996, 2008, 2017) – that material desires can be finite and that their fulfilment can require a low level of resource and energy use.

Many religions and ancient philosophies focus on giving up some desires such as those based on greed, pride or excessive material consumption (Alexander and MacLeod, 2014; Skidelsky and Skidelsky, 2012; Brown, 2017). However, many of such ancient philosophies praised frugality in order for aristocrats and religious leaders to justify their power and legitimise oppressions rather than to achieve social and ecological benefits (Dale, 2022; Tévoédjrè, 1979, p.8). Instead, I prefer to start from people's daily lives and vernacular ways of conceiving and practising frugality (Salleh, 2009; Rahnama, 1992). In a genuinely autonomous and pluriversal design, 'experts' and powerful entities like the Church do not have the ability to decide in a top-down manner.

6. Conceptualising abundance based on frugality

An understanding of abundance which is compatible with frugality as framed in the previous section requires two elements. The first is a

⁵ I understand wants and desires as synonyms. Moreover, the term 'material desires' refers to 'material- and energy-intensive desires' – cf. footnote 1.

predominantly immaterial understanding of abundance. The second is to have limited material desires which are satisfied. In the following, I explain why both conditions are necessary before providing evidence that some societies had fulfilled, or still fulfil, these conditions.

6.1. Abundance as predominantly immaterial

When individuals and groups value material consumption above everything else, they cannot be satisfied with a situation in which material plenty is not achieved. Therefore, they are likely to consider themselves to be poor. In contrast, if abundance predominantly refers to non-material aspects of life such as freedom, time, ease, equity, brotherhood, trust or wisdom, then being rich or abundant refers to attaining a high level of these elements. In this case, abundance can be based on frugality, because a low level of consumption – which is sufficient for subsistence – is not a barrier to consider oneself as rich.

Degrowth scholars grounded in different traditions – decolonial, feminist, Marxist – have advocated for a redefinition of abundance beyond the material. For instance, [Mehta and Harcourt \(2021\)](#) frame abundance not only as a material reality, but as a relational concept related to gender, social and power relations – see also [Mehta et al. \(2019\)](#). They emphasise that a feminist and decolonial lens leads to consider non-material aspects of abundance such as flourishing, love, happiness and time. Similarly, [Richter \(2022\)](#) calls for affective, spiritual as well as material abundance for collective well-being. Finally, [Saito \(2022, chap. 7\)](#) provides a subversion of the meaning of abundance in his reading of Marx through a degrowth lens. He argues that Marx envisioned wealth not only as material, but also as a form of cultural, social and natural richness.

6.2. Abundance through limited and satiated material desires

When individuals or groups crave for more material than what they have and consume, they are likely to consider themselves to be poor. Abundance cannot be based on a situation of perceived material lack, even if it does not prevent subsistence. In contrast, satisfying all material desires is a situation of (material) abundance because there is nothing important that is lacking. Marshall [Sahlins \(2017\[1972\], p. 11\)](#) defended this position in his seminal *The Original Affluent Society* when he stated “want not, lack not”. He claimed that an abundant society “is one in which all the people’s material wants are easily satisfied”.

A vision of abundance based on limited material desires resonates with degrowth scholarship. For instance, [Kallis \(2019\)](#) argues that it is in human nature to have limited wants. He even states that “limiting and shaping our wants and desires is what makes us human” (p.127), because it “liberate[s] ourselves by controlling those instincts that would enslave us or threaten to destroy us” (p.129). Through self-limitation of material desires, humans would be able to see the world as abundant, because the finite resources of the planet would be more than sufficient to satisfy all desires. Many authors also criticise capitalist societies for constantly creating new desires, so that a situation of scarcity is inevitable (e.g. [Hickel, 2019](#); [Skidelsky and Skidelsky, 2012](#)).

6.3. Evidence of abundance without much in some societies

Some societal organisations and cultures result in individuals and groups having limited and satiated material desires as well as predominantly immaterial understandings of abundance. Delineating the contours of such organisations and cultures goes beyond the scope of this

article. However, it seems that some societies have indeed approached these ideals without a high level of consumption, and some still exist today.⁶ In the following, I provide evidence coming from societies which do not embrace a Western capitalist worldview, relying on anthropological research around [Sahlins \(2017\[1972\]\)](#) as well as on research in happiness studies. Both bodies of literature have been used in degrowth scholarship (e.g. [Martínez-Alier et al., 2010](#); [Latouche, 2020](#); [Sekulova, 2014](#)), but they have also been criticised. Therefore, I mention and engage with some criticisms.

Before going into the evidence, let me address the legitimate concern that this section romanticises the mentioned societies. First, the focus on societies from the Global South does not come from a tendency to see them as ‘noble savage’, but rather because capitalism and the ‘imperial mode of living’ have been so pervasive in the Global North that it is more difficult to find such conceptions of abundance there – even if exceptions exist, see [Grinde et al. \(2018\)](#) and [Kallis et al. \(2022\)](#) for plausible instances. Second, many communities and societies with low levels of consumption are not abundant as understood in this section. Material and immaterial misery are highly widespread in the current world. Moreover, these positive results must not hide the sufferings and traumas of most of the societies mentioned due to colonial and neocolonial atrocities, and the objective is not to praise their resilience. Finally, the communities mentioned in this section do not provide blueprints of desirable future societies since they emerged in a different political, economic, social and cultural landscape. Overall, rather than romanticising them, I hope that this section highlights the relevance of the knowledge and practices of many communities in the Global South in the struggle to build just and sustainable futures ([Todd, 2016](#)).

In *The Original Affluent Society*, Sahlins provides empirical evidence to state that some hunter-gatherer societies – which, at that time, had not yet been overly oppressed by (neo-)colonisers – satisfied the two conditions for abundance mentioned in this section. First, the societies under scrutiny seem to have a predominantly immaterial understanding of abundance and the good life because they do not seem to care much about non-subsistence goods. For example, the Yahgan people of Tierra del Fuego did “not even exercise care when [they] could conveniently do so” and did “place no value whatever on their utensils” (cited in [Sahlins, 2017\[1972\], pp. 12–13](#)).

Second, they do not seem to desire more material than what they have. Indeed, they stopped working as soon as they had enough to eat for the day. Instead, they preferred to spend their time chatting, resting, gossiping, sleeping, playing, having sex, among other things. They also adopted a nonchalant attitude towards what seems like a shortage from a Western perspective – like 3 days without food –, implying that they do not see it as a situation of lack ([Sahlins, 2017, p.31](#)). Overall, these societies consciously favoured non-material aspects of life such as leisure over achieving additional production beyond the essential ([Graeber and Wengrow, 2021](#)).

Even though Sahlins' essay is one of the classics in anthropology ([Bird-David, 1992](#)), it has been fiercely debated – see [Solway \(2006\)](#) for an overview of the critiques. The most widespread criticism is the reliance on sparse or unreliable data, most notably regarding the number of hours worked in hunter-gatherer societies. Nevertheless, the evidence presented in this section holds for the societies mentioned by Sahlins. Indeed, [Bird-David \(1992, p.31\)](#) defends, in a highly-cited article reviewing the essay, that some societies “are not interested in possessions and do not go to a great deal of bother to obtain and accumulate them” and that their material requirements are socially constructed to match what is easily producible or obtainable. Another criticism is that

⁶ In this article, a society is understood as an “imagined community” ([Anderson, 1983](#)), that is, a system in which its communication leads to differentiate itself from other societies to create meaning ([Luhmann, 2012](#)). Indigenous and intentional communities can therefore be considered as societies.

the essay claims that the results apply to all hunter-gatherer societies and to no other, whereas more recent evidence suggests that only some hunter-gatherers reached such abundance while some agriculture-based societies also achieved it (Graeber and Wengrow, 2021, pp. 139–140; Graeber, 2017).

An understanding of abundance which is not based on high material consumption can also be found in historical accounts of indigenous people considering themselves richer than the European colonisers (Graeber and Wengrow, 2021). This is exemplified in this speech from Kondiaronk, the well-known Chief of an agriculturalist Wendat group: “the Savages of Canada, notwithstanding their Poverty, are richer than you, among whom all sorts of crimes are committed upon the score of Mine and Thine” (Lahontan and d’Arce, 1735, p.113, cited in Graeber and Wengrow, 2021, p.148). Abundance, in this context, comes from attaining high levels of immaterial elements. In fact, Rahnema (1992) provides linguistic evidence that, in many cultures, poverty was not conceived as a predominantly material reality until recently.

Relatedly, the rest of this section provides evidence that some societies that are usually called ‘poor’ in material terms consider their well-being to be very high. It implies that they have mostly immaterial visions of abundance and the good life, and that they have been able to satisfy these visions without much production and consumption.

Frackowiak et al. (2020) measured the happiness of the hunter-gatherer Hadza people in Tanzania, one of the ‘abundant societies’ in Sahlins (2017[1972]), using the Subjective Happiness Scale. They found that the Hadza rated higher than any other population assessed with this measurement method, including Americans, Spanish and Austrians. Similarly, Martin and Cooper (2017) found that the rural Himba in Namibia are close to the maximum score of the Satisfaction with Life Scale, and much higher than any other population assessed with this measurement method as compiled by Pavot and Diener (2008, tbl.1).

Other recent results have reported that the indigenous people of Northern Alaska (Wu, 2020) and of Australia (Manning et al., 2016) are happier than non-indigenous Americans and Australians, respectively. In fact, in many indigenous societies, the strongest determinants of happiness are social relationships and health (Reyes-García et al., 2021; Martin, 2012). This also resonates with Miñarro et al. (2021), who found that two communities among “the poorest of the poor” in Bangladesh and the Solomon Islands are happier than any country included in the World Happiness Report. It is also worth noting that the country with the highest scores in terms of life satisfaction and feeling of happiness in the latest World Value Survey is Kyrgyzstan, a country which is considered materially poor (Haerpfer et al., 2022, Q46, Q49).

In the same vein, Diener and Seligman (2009, p.219) compiled already existing data on the life satisfaction of the Maasai, Inughuit, Swedish, and among Forbes magazine’s ‘richest Americans’ using the same measurement method. They found that these groups achieved similarly high scores – cf. Table 1.

Some studies also provide evidence of societies with low levels of consumption that seem to satisfy their material desires. For example, Biswas-Diener et al. (2005) found that the Maasai are satisfied with their material goods, housing, food and income – cf. Table 2. Compared with answers from individuals in materially rich countries to similar questions, the Maasai scores were equivalent or higher (Haerpfer et al., 2022, Q50; Hellevik, 2014, p.63). Regarding desires, Martin and Cooper (2017) report that, among the rural Himba, 72.7% of respondents strongly agreed to the statement “So far I have gotten the important

Table 1
Life satisfaction of various groups. Source: Diener and Seligman (2009, p.219).

Group	Mean life satisfaction (scale from 1 to 7)
Forbes magazine’s “richest Americans”	5.8
Inughuit	5.8
Maasai	5.7
Swedish probability sample	5.6

Table 2
Maasai satisfaction with material aspects of life. Source: Biswas-Diener et al. (2005, p.214).

Domain	Mean satisfaction (scale from 1 to 7)
Material goods	5.9
Housing	5.9
Food	5.4
Income	5.2

things I want in life”. Moreover, only 3.6% responded negatively to the statement, implying that an even smaller proportion would consider their material desires unfulfilled. Comparatively, only 28% of the UK population provided a positive response to the same statement.

The happiness literature, of which the studies mentioned above belong, is sometimes criticised in degrowth spheres. For instance, it is claimed to imply a utilitarian, hedonistic and individualistic understanding of the good life and not to sufficiently take justice into account (Koch et al., 2017; Lamb and Steinberger, 2017; Skidelsky and Skidelsky, 2012; Büchs and Koch, 2017). These criticisms are valid, and I only rely on this body of evidence because measurements based on autonomous and pluriversal design as depicted in Section 5 do not exist. Nevertheless, I would like to nuance these criticisms in the context of subjectively surveying individuals coming from societies that do not overly embrace a Western capitalist culture. Indeed, the meaning of happiness greatly depends on the culture (Selin and Davey, 2012), so that such individuals are likely to favour subaltern understandings of the good life when responding to survey questions.

7. Definition and clarifications

Based on the analyses in previous sections, I propose three main elements for the definition of a society of frugal abundance. The first, crucial to degrowth, is achieving a good life for all. The second, related to frugality, is limiting production and consumption to enable current and future generations, particularly those who are marginalised, to thrive. In short, it should enable global ecological and social justice. The third important element, coming from Sahlins’s (2017[1972]) definition of an abundant society, is satisfying the material wants of everyone. Wrapping up these elements, I propose to concisely define a society of frugal abundance as a society in which

- everyone has a good life,
- consumption is low enough to achieve global ecological and social justice,
- the material wants of everyone are satisfied (see Fig. 1).

The rest of this section provides some useful clarifications. First, seeing abundance as predominantly immaterial and based on limited

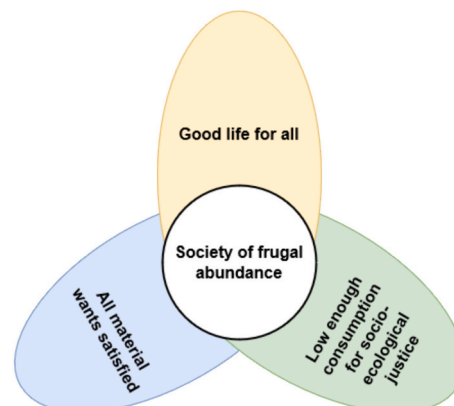


Fig. 1. Schematic illustration of the definition of a society of frugal abundance.

and satiated material desires is implicit in the definition. Otherwise, it would not be possible to achieve a good life for all and to satisfy all material wants without a high level of consumption, therefore infringing some elements of the definition.

The definition is left intentionally vague to enable diverse interpretations as well as autonomous and pluriversal design of the good life, the low enough level of consumption, and the material desires to be satisfied. In turn, it enables communities to make it their own, in their own worlds. Moreover, the concept of frugal abundance should not impose itself or replace other related notions within the global tapestry of alternatives such as *buen vivir*, *ubuntu* and *eco-swaraj* (Kothari et al., 2019). Instead, I humbly believe that it could speak to and empower some communities, both in the Global North and in the Global South – Section 8 will further elaborate this point.

A more precise definition of a society of frugal abundance will necessarily involve the autonomous and pluriversal definition of the essential, the superfluous, as well as the quantity and quality of production and consumption. After all, limits should not just take into account material reality, but also power relations as well as historical, cultural and socio-political aspects (Brand et al., 2021; Gómez-Bagge-thun, 2022; Mehta and Harcourt, 2021).

The importance of global ecological and social justice in the definition cannot be overstated. It is necessary to avoid legitimising any form of oppression or romanticising misery. Decoloniality (Ndllovu-Gatshehi, 2015; Mignolo and Walsh, 2018) and reparations (e.g. Táiwò, 2022; Sultana, 2022) must be at the centre when building frugal abundant futures.

Reaching large-scale societies of frugal abundance will not be easy, and it goes without saying that it will require collective struggles against capitalism, consumerism, imperialism and patriarchy, among other oppressive social structures.⁷ Nevertheless, I contend that it is achievable. The contrary position would defend a Rousseauian worldview, in which humans would have lost their initial freedoms and equalities by creating large scale and more complex societies. Graeber and Wengrow (2021) have forcefully debunked this worldview in *The Dawn of Everything*. Archaeological and anthropological evidence suggests that it is possible to organise large-scale and diverse cities and societies without large hierarchies and systems of oppression, whilst also having a small impact on their environment. Great revolutions in line with degrowth ideals have also succeeded throughout history, such as in Teotihuacan around 300 CE (chap. 9). Consequently, organising our complex and highly populated societies to achieve frugal abundance is possible.

8. Contributions of frugal abundance to degrowth

In this section, I explain how frugal abundance could be a valuable addition to the communication and conceptual toolbox of the degrowth movement. Conceptually, as degrowth is defined as a “process of transformation” (Schmelzer et al., 2022, p. 195), frugal abundance could be seen as one of the end goals. Latouche (2020, p. 56) even argues that “the project of degrowth is none other than the construction of another society, a society of frugal abundance”. In other words, degrowth towards frugal abundance. This is a step further than I want to go because no term or concept captures the multitude of degrowth objectives such as care, conviviality, commons, pluriversality, postwork, among others. However, it seems that frugal abundance encapsulates a large part of degrowth objectives, that is, “the essence of degrowth” (Kallis et al., 2022, p. 2).

In terms of communication, I contend that the phrase ‘frugal abundance’ as well as the evidence and discourse arising from the present article – that degrowth is associated with abundance, prosperity,

⁷ Analysing the numerous structural barriers and possible pathways towards futures based on frugal abundance goes beyond the scope of this paper.

richness – are beneficial to the degrowth movement and its strategy for societal change. It does so in at least two ways.

First, it directly attacks the idea that abundance is based on high levels of consumption and production. This view is embraced widely and in diverse intellectual circles, such as in orthodox economics, ecomodernism, socialist modernism and (neo-)Malthusianism (Kallis, 2019; Jonsson and Wennerlind, 2023; Mehta et al., 2019; Daoud, 2011). In Gramscian terms, it is part of the common sense of our epoch, that is, an “uncritical and largely unconscious way of perceiving and understanding the world that has become ‘common’” (Hoare and Nowell Smith, 1971, p. 322). By putting together two words that are usually seen as contradictory, ‘frugal abundance’ shocks and causes interrogations. It is a “provocation” (Latouche, 2011, p. 25) that “organis[es] the clash of contrasts” (de Foucauld, 2010, p. 81). Kallis and March (2015, p.362) argue that “the growth–degrowth or abundance–frugality pairs serve as dialectical oppositions, which “by way of negation ... grasp the moment of truth in each term” (Jameson 2004, 48).”

In philosophy of language, the term would be called a performative contradiction, that is, a phrase that, by contradicting presuppositions, challenges and alters the authoritative meaning and changes social reality itself (Austin, 1979; Bakhtin, 1981). By creating a situation in which the difference between myth and reality is blurred, it “reveal[s] aspects of reality that had previously been unimaginable” (Graeber and Wengrow, 2021, p. 525).

Second, frugal abundance can be part of counter-hegemonic narratives. Indeed, the phrase provides a positive and powerful imaginary of abundant futures to degrowth, “a horizon of meaning for an exit from the consumer society” (Latouche, 2011, p.27). Gramsci stated that effective counter-hegemonic narratives would renovate and rearticulate dormant common senses so that they would resonate with people’s lives and practices on the ground (D’Alisa and Kallis, 2020; García López et al., 2017, p. 3). Although more empirical research is needed, the narrative around frugal abundance is part of the dormant common senses. Indeed, ‘being rich’ or ‘abundant’ still means more than high levels of consumption and production in many popular cultures, also referring to elements such as morality, time, social relationships, affection, harmony with non-humans or spirituality. Moreover, the phrase could be well received or even empower groups that feel that their daily activities are meaningful even if they do not lead to large sums of money or consumption.

In practice, the phrase could be used as a starting point to open up spaces for discussions related to degrowth and to connect it to existing concepts and practices on the ground. I believe that ‘frugal abundance’ is more appropriate for degrowth than alternatives such as ‘prosperity without growth’ (Jackson, 2017), ‘alternative hedonism’ (Soper, 2020) and the ‘wellbeing economy’ (Fioramonti et al., 2022). A thorough comparison goes beyond the scope of the paper, but some abstract terms in these alternatives – ‘growth’, ‘economy’, ‘hedonism’ – make them less relatable to daily life and dormant common senses. However, ‘frugal abundance’ could be more easily co-opted than ‘degrowth’ (Trantas, 2021), as reformists such as de Foucauld (2010) have already used it. Therefore, I believe that frugal abundance should stay within the degrowth umbrella.

9. Conclusion

This article pointed to a gap in degrowth literature: while the term ‘frugal abundance’ is increasingly popular in degrowth spheres, it has not been thoroughly theorised. I aimed to address this gap by proposing a conceptualisation of frugal abundance for degrowth. I started by briefly reviewing the existing English-speaking literature as well as by presenting the French and Italian origins of the concept. I argued that, while both of these bodies of literature provide avenues for further investigation, they do not offer a clear enough ground for conceptualisation. I therefore provided further substance for degrowth-compatible understandings of frugality and of abundance based on

frugality.

I emphasised the importance of global social and ecological justice as well as of the autonomous and pluriversal design of the good life, the essential and the superfluous for an adequate meaning of frugal abundance for degrowth. I also stressed conceiving abundance as predominantly immaterial and based on limited and satiated material desires. Moreover, I provided evidence that such conceptions of frugality and abundance have been realised in numerous and varied societies. Even though these societies do not provide blueprints of desirable futures, I believe that learning from them is an important research avenue for degrowth and ecological economics. This might involve further engagement with anthropological and archaeological scholarship, but also carrying out participatory and decolonial research on the ground with communities that, still today, live close to this way of life.

I proposed a definition of a society of frugal abundance: a society in which everyone has a good life, consumption is low enough to achieve global ecological and social justice, and the material wants of everyone are satisfied. I emphasised that this definition and the narrative of this article should only open up space for communities to make it their own, in their own worlds. I also argued that frugal abundance could unleash untouched potentials for the degrowth movement.

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CRedit authorship contribution statement

Adrien Plomteux: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization.

Declaration of competing interest

I have no conflict of interest to report.

Data availability

No data was used for the research described in the article.

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Appendix A. Degrowth publications mentioning the phrase ‘frugal abundance’

Authors	Publication year	Publication type	Publisher	Publication title	Number of occurrences of ‘frugal abundance’ (excluding references)
Guerrero Lara et al.	2023	Journal article	Sustainability Science	Degrowth and agri-food systems: a research agenda for the critical social sciences	1
Schmelzer et al.	2022	Book	Verso	The Future is Degrowth: A Guide to a World Beyond Capitalism	1
Nelson	2022	Journal article	Dialogues in Human Geography	Postcapitalist practices and human, economic, and cultural geographies	2
Kallis et al.	2022	Journal article	World Development	Southern thought, islandness and real-existing degrowth in the Mediterranean	2
Stöckelová et al.	2022	Journal article	Agriculture and Human Values	Sympoietic growth: living and producing with fungi in times of ecological distress	1
Gómez-Baggethun	2022	Book chapter	Edward Elgar Publishing	Limits	1
Hodaly	2022	PhD thesis	University of California, Riverside	Degrowth and Self-Realization: Direct Democracy, Village Economies, and Human Flourishing	1
Richter	2022	PhD thesis	Goldsmiths, University of London	Provincialising Degrowth and Situating Buen Vivir: A Decolonial Framework for the Politics of Degrowth	2
Nelson and Edwards	2021	Book	Routledge	Food for degrowth: perspectives and practices	14
Demaria	2021	Journal article	Oikonomics	Degrowth: a proposal to foster a deeply radical socio-ecological transformation	2
Howson et al.	2021	Journal article	Political Geography	Digital degrowth innovation: Less growth, more play	1
Nicoson	2021	Journal article	Sustainability Science	Towards climate resilient peace: an intersectional and degrowth approach	1
Banerjee et al.	2021	Journal article	Organization	Theoretical perspectives on organizations and organizing in a post-growth era	2
Howson	2021	Journal article	Ecological Economics	Distributed degrowth technology: Challenges for blockchain beyond the green economy	1
Parrique	2020	PhD thesis	Université Clermont Auvergne; Stockholm University	The political economy of degrowth	11
Alexander and Gleeson	2020	Journal article	American Journal of Economics and Sociology	Suburban Practices of Energy Descent	1
Liegey and Nelson	2020	Book	Pluto Press	Exploring degrowth: a critical guide	13
Gómez-Baggethun	2020	Journal article	Political Geography	More is more: Scaling political ecology within limits to growth	1
Adityanandana and Gerber	2019	Journal article	Journal of Sustainable Tourism	Post-growth in the Tropics? Contestations over Tri Hita Karana and a tourism megaproject in Bali	2
Fletcher et al.	2019	Journal article	Journal of Sustainable Tourism	Tourism and degrowth: an emerging agenda for research and praxis	1

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Authors	Publication year	Publication type	Publisher	Publication title	Number of occurrences of 'frugal abundance' (excluding references)
Richter	2019	Journal article	Journal of Global Cultural Studies	Struggling for Another Life: The Ontology of Degrowth	1
Demaria et al.	2019	Journal article	ENE: Nature and Space	Geographies of degrowth: Nowtopias, resurgences and the decolonization of imaginaries and places	1
Nelson and Schneider	2019	Book	Routledge	Housing for degrowth: principles, models, challenges and opportunities	2
Carcea	2019	PhD Thesis	Swinburne University of Technology	Reimagine the Degrowth theory in a resilient community: the fragile path toward "DemocraCity"	3
Zaimakis	2018	Journal article	Partecipazione e conflitto	Autonomy, Degrowth and Precognitive Politics: Voices of Solidarity Economy Activists amid Economic Crisis in Greece	2
Chertkovskaya et al.	2017	Journal article	Ephemera: Theory and Politics in Organization	The vocabulary of degrowth: A roundtable debate	1
Alexander	2017	Book chapter	Palgrave Macmillan UK	Frugal Abundance in an Age of Limits: Envisioning a Degrowth Economy	5
Gallardo Fierro	2017	Journal article	Sustainability Science	Re-thinking oil: compensation for non-production in Yasuni National Park challenging sumak kawsay and degrowth	1
Natale et al.	2016	Journal article	Futures	De-growth and critical community psychology: Contributions towards individual and social well-being	1
Kallis and March	2015	Journal article	Annals of the Association of American Geographers	Imaginaries of Hope: The Utopianism of Degrowth	1
Kostakis et al.	2015	Journal article	Futures	Design global, manufacture local: Exploring the contours of an emerging productive model	1
Kothari et al.	2014	Journal article	Development	Buen Vivir, Degrowth and Ecological Swaraj: Alternatives to sustainable development and the Green Economy	2
Asara et al.	2013	Journal article	Environmental Values	Degrowth, Democracy and Autonomy	1
Demaria et al.	2013	Journal article	Environmental Values	What is Degrowth? From an Activist Slogan to a Social Movement	2
Latouche	2012	Journal article	Capitalism Nature Socialism	Can the Left Escape Economism?	2

Appendix B. Supplementary data

The bibliography of Appendix A can be found online at <https://doi.org/10.1016/j.ecolecon.2024.108223>.

Bibliography

- Alcott, B., 2008. The sufficiency strategy: would rich-world frugality lower environmental impact? *Ecol. Econ.* 64, 770–786. <https://doi.org/10.1016/j.ecolecon.2007.04.015>.
- Alexander, S., 2015. *Prosperous Descent: Crisis as Opportunity in an Age of Limits*. Simplicity Institute, Melbourne.
- Alexander, S., 2017. Frugal abundance in an age of limits: Envisioning a degrowth economy. In: Garcia, E., Martinez-Iglesias, M., Kirby, P. (Eds.), *Transitioning to a Post-Carbon Society: Degrowth, Austerity and Wellbeing*. Palgrave Macmillan UK, London, pp. 159–179.
- Alexander, S., Gleeson, B., 2022. Collective sufficiency: Degrowth as a political project. In: Alexander, S., Chandrashekeran, S., Gleeson, B. (Eds.), *Post-Capitalist Futures: Paradigms, Politics, and Prospects, Alternatives and Futures: Cultures, Practices, Activism and Utopias*. Springer, Singapore, pp. 53–64.
- Alexander, S., MacLeod, A. (Eds.), 2014. *Simple Living in History: Pioneers of the Deep Future*. Simplicity Institute, Melbourne.
- Anderson, B.R.O., 1983. *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. Verso Editions, London.
- Austin, J.L., 1979. Performative utterance. In: Urmson, J.O., Warnock, J.G. (Eds.), *Philosophical Papers*. Oxford University Press, Oxford, pp. 233–252.
- Bakhtin, M.M., 1981. *The Dialogic Imagination: Four Essays*. University of Texas Press, Austin.
- Banerjee, S.B., Jermier, J.M., Peredo, A.M., Perey, R., Reichel, A., 2021. Theoretical perspectives on organizations and organizing in a post-growth era. *Organization* 28, 337–357. <https://doi.org/10.1177/1350508420973629>.
- Bird-David, N., 1992. Beyond "the original affluent society": a culturalist reformulation [and comments and reply]. *Curr. Anthropol.* 33, 25–47.
- Biswas-Diener, R., Vittersø, J., Diener, E., 2005. Most people are pretty happy, but there is cultural variation: the Inghuit, the Amish, and the Maasai. *J. Happiness Stud.* 6, 205–226. <https://doi.org/10.1007/s10902-005-5683-8>.
- Bramall, R., 2017. Austerity pasts, austerity futures? In: Garcia, E., Martinez-Iglesias, M., Kirby, P. (Eds.), *Transitioning to a Post-Carbon Society: Degrowth, Austerity and Wellbeing*, International Political Economy Series. Springer, pp. 111–129.
- Brand, U., Wissen, M., 2021. *The Imperial Mode of Living: Everyday Life and the Ecological Crisis of Capitalism*. Verso Books, London, New York.
- Brand, U., Muraca, B., Pineault, É., Sahakian, M., Schaffartzik, A., Novy, A., Streissler, C., Haberl, H., Asara, V., Dietz, K., Lang, M., Kothari, A., Smith, T., Spash, C., Brad, A., Pichler, M., Plank, C., Velegrakis, G., Jahn, T., Carter, A., Huan, Q., Kallis, G., Martínez Alier, J., Riva, G., Satgar, V., Teran Mantovani, E., Williams, M., Wissen, M., Görg, C., 2021. From planetary to societal boundaries: an argument for collectively defined self-limitation. *Sustainability: science. Pract. Policy* 17, 265–292. <https://doi.org/10.1080/15487733.2021.1940754>.
- Brown, C., 2017. *Buddhist Economics: An Enlightened Approach to the Dismal Science*. Bloomsbury Press, New York.
- Büchs, M., Koch, M., 2017. *Postgrowth and Wellbeing: Challenges to Sustainable Welfare*. Palgrave Macmillan, Cham, Switzerland.
- Castoriadis, C., 1994. The logic of magmas and the question of autonomy. *Philos. Soc. Criticism* 20, 123–154. <https://doi.org/10.1177/019145379402000108>.
- Castoriadis, C., 1999. *Les carrefours du labyrinthe Tome 2 : domaines de l'homme*. Points, Paris.
- Chertkovskaya, E., Paulsson, A., Barca, S. (Eds.), 2019. *Towards a Political Economy of Degrowth, Transforming Capitalism*. Rowman & Littlefield International, London.
- Dale, G., 2022. Sustainability in the ancient world: Sufficiency as a strategy of aristocratic hegemony. In: Karagiannis, N., King, J.E. (Eds.), *Visions and Strategies for a Sustainable Economy: Theoretical and Policy Alternatives*. Palgrave Macmillan Cham, pp. 3–32.
- D'Alisa, G., Kallis, G., 2020. Degrowth and the state. *Ecol. Econ.* 169, 106486 <https://doi.org/10.1016/j.ecolecon.2019.106486>.
- Daoud, A., 2011. The modus vivendi of material simplicity: counteracting scarcity via the deflation of wants. *Rev. Soc. Econ.* 69, 275–305. <https://doi.org/10.1080/00346764.2010.502832>.
- Daoud, A., 2018. Unifying studies of scarcity, abundance, and sufficiency. *Ecol. Econ.* 147, 208–217. <https://doi.org/10.1016/j.ecolecon.2018.01.019>.

- de Foucauld, J.-B., 2010. L'abondance frugale: pour une nouvelle solidarité. Odile Jacob, Paris.
- Demaria, F., Schneider, F., Sekulova, F., Martinez-Alier, J., 2013. What is degrowth? From an activist slogan to a social movement. *Environ. Values* 22, 191–215. <https://doi.org/10.3197/096327113X13581561725194>.
- Diener, E., Seligman, M.E.P., 2009. Beyond money: Toward an economy of well-being. In: Diener, E. (Ed.), *The Science of Well-Being, Social Indicators Research Series*. Springer, Netherlands, Dordrecht, pp. 201–265.
- Échange et Projets, 1980. *La révolution du temps choisi*. Albin Michel, Paris.
- Elgin, D., 1981. *Voluntary Simplicity: Toward a Way of Life that Is Outwardly Simple, Inwardly Rich*. Morrow, New York.
- Ellul, J., 1982. Vers la fin du prolétariat. In: Hourcade, M., Jézéquel, J.-P., Paul, G. (Eds.), *Pour qui, pour quoi travaillons-nous ? La Table ronde*, Paris.
- Escobar, A., 2018a. *Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds*. Duke University Press, Durham.
- Escobar, A., 2018b. Autonomous design and the emergent transnational critical design studies field. *Strategic Design Res. J.* 11, 139–146. <https://doi.org/10.4013/SDRJ.2018.112.10>.
- Fioramonti, L., Coscieme, L., Costanza, R., Kubiszewski, I., Trebeck, K., Wallis, S., Roberts, D., Mortensen, L.F., Pickett, K.E., Wilkinson, R., Ragnarsdóttir, K.V., McGlade, J., Lovins, H., De Vogli, R., 2022. Wellbeing economy: an effective paradigm to mainstream post-growth policies? *Ecol. Econ.* 192, 107261 <https://doi.org/10.1016/j.ecolecon.2021.107261>.
- Fletcher, R., Murray Mas, I., Blanco-Romero, A., Blázquez-Salom, M., 2019. Tourism and degrowth: an emerging agenda for research and praxis. *J. Sustain. Tour.* 27, 1745–1763. <https://doi.org/10.1080/09669582.2019.1679822>.
- Frackowiak, T., Oleszkiewicz, A., Butovskaya, M., Groyecka, A., Karwowski, M., Kowal, M., Sorokowski, P., 2020. Subjective happiness among polish and Hadza people. *Front. Psychol.* 11, 1173. <https://doi.org/10.3389/fpsyg.2020.01173>.
- Fuchs, D.A., Gumbert, T., Sahakian, M., Di Giulio, A., Maniates, M., Lorek, S., Graf, A., 2021. *Consumption Corridors: Living a Good Life within Sustainable Limits*. Routledge, New York.
- Gabriel, C.-A., Bond, C., 2019. Need, entitlement and desert: a distributive justice framework for consumption degrowth. *Ecol. Econ.* 156, 327–336. <https://doi.org/10.1016/j.ecolecon.2018.10.006>.
- García López, G.A., Velicu, I., D'Alisa, G., 2017. Performing counter-hegemonic common (s) senses: rearticulating democracy, community and forests in Puerto Rico. *Capital. Nat. Social.* 28, 88–107. <https://doi.org/10.1080/10455752.2017.1321026>.
- Gómez-Baggethun, E., 2020. More is more: scaling political ecology within limits to growth. *Polit. Geogr.* 76, 102095 <https://doi.org/10.1016/j.polgeo.2019.102095>.
- Gómez-Baggethun, E., 2022. Political ecological correctness and the problem of limits. *Polit. Geogr.* 98, 102622 <https://doi.org/10.1016/j.polgeo.2022.102622>.
- Goetz, André, 1993a. *Bâtir la civilisation du temps libéré*. Le Monde diplomatique.
- Goetz, André, 1993b. Political ecology: Expertocracy versus self-limitation. *New Left Rev* 55–67.
- Gough, I., 2015. Climate change and sustainable welfare: the centrality of human needs. *Camb. J. Econ.* 39, 1191–1214. <https://doi.org/10.1093/cje/bev039>.
- Graeber, D., 2011. Consumption. *Curr. Anthropol.* 52, 489–511. <https://doi.org/10.1086/660166>.
- Graeber, D., 2017. Foreword to the Routledge classic edition. In: *Stone Age Economics*. Routledge Classics, New York, pp. ix–xviii.
- Graeber, D., Wengrow, D., 2021. *The Dawn of Everything: A New History of Humanity*. Allen Lane, Milton Keynes, UK.
- Grinde, B., Nes, R.B., MacDonald, I.F., Wilson, D.S., 2018. Quality of life in intentional communities. *Soc. Indic. Res.* 137, 625–640. <https://doi.org/10.1007/s11205-017-1615-3>.
- Guerrero Lara, L., van Oers, L., Smessaert, J., Spanier, J., Raj, G., Feola, G., 2023. Degrowth and Agri-food systems: a research agenda for the critical social sciences. *Sustain. Sci.* <https://doi.org/10.1007/s11625-022-01276-y>.
- Haerpfer, C., Inglehart, R., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano, J., Lagos, M., Norris, P., Ponarin, E., Puranen, B., 2022. *World Values Survey Wave 7 (2017–2022) Cross-National Data-Set*. <https://doi.org/10.14281/18241.18>.
- Hellevik, O., 2014. Is the good life sustainable? A three-decade study of values, happiness and sustainability in Norway. In: Syse, K.L., Mueller, M.L. (Eds.), *Sustainable Consumption and the Good Life*. Routledge, pp. 55–79.
- Herzigler, A., Claborn, K.A., Brooks, J.S., 2020. Is there Hope for the double dividend? How social context can shape synergies and tradeoffs between sustainable consumption and well-being. *Ecol. Econ.* 176, 106736 <https://doi.org/10.1016/j.ecolecon.2020.106736>.
- Hickel, J., 2017. *The Divide: A Brief Guide to Global Inequality and its Solutions*. William Heinemann, London.
- Hickel, J., 2019. Degrowth: a theory of radical abundance. *Real-World Econ. Rev.* 87, 54–68.
- Hoare, Q., Nowell Smith, G., 1971. *Selections from the Prison Notebooks*. International Publishers, New York.
- Illich, I., 1992. Needs. In: Sachs, W. (Ed.), *The Development Dictionary: A Guide to Knowledge as Power*. Zed Books, London, pp. 88–101.
- IPCC, 2022. *Climate Change 2022: Mitigation of Climate Change*. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, UK and New York, NY, USA.
- Jackson, T., 2005. Live better by consuming less?: is there a “double dividend” in sustainable consumption? *J. Ind. Ecol.* 9, 19–36. <https://doi.org/10.1162/1088198054084734>.
- Jackson, T., 2017. *Prosperity without Growth: Foundations for the Economy of Tomorrow*, 2nd ed. Routledge, Oxon, New York.
- Jackson, T., 2021. *Post Growth: Life after Capitalism*. Polity Press, Cambridge, UK.
- Jonsson, F.A., Wennerlind, C., 2023. *Scarcity: A History from the Origins of Capitalism to the Climate Crisis*. Harvard University Press, Cambridge, Massachusetts.
- Jungell-Michelsson, J., Heikkurinen, P., 2022. Sufficiency: a systematic literature review. *Ecol. Econ.* 195, 107380 <https://doi.org/10.1016/j.ecolecon.2022.107380>.
- Kallis, G., 2019. *Limits: Why Malthus Was Wrong and why Environmentalists Should Care*. Stanford University Press, Stanford, California.
- Kallis, G., 2023. Degrowth and the Barcelona school. In: Villamayor-Tomas, S., Muradian, R. (Eds.), *The Barcelona School of Ecological Economics and Political Ecology: A Companion in Honour of Joan Martínez-Alier*. Springer International Publishing, Cham, pp. 83–90. https://doi.org/10.1007/978-3-031-22566-6_8.
- Kallis, G., March, H., 2015. Imaginaries of Hope: the utopianism of degrowth. *Ann. Assoc. Am. Geogr.* 105, 360–368. <https://doi.org/10.1080/00045608.2014.973803>.
- Kallis, G., Kostakis, V., Lange, S., Muraca, B., Paulson, S., Schmelzer, M., 2018. Research on degrowth. *Annu. Rev. Environ. Resour.* 43, 291–316. <https://doi.org/10.1146/annurev-environ-102017-025941>.
- Kallis, G., Varvarousis, A., Petridis, P., 2022. Southern thought, islandness and real-existing degrowth in the Mediterranean. *World Dev.* 157, 105957 <https://doi.org/10.1016/j.worlddev.2022.105957>.
- Koch, M., Buch-Hansen, H., Fritz, M., 2017. Shifting priorities in degrowth research: an argument for the centrality of human needs. *Ecol. Econ.* 138, 74–81. <https://doi.org/10.1016/j.ecolecon.2017.03.035>.
- Kostakis, V., Niaros, V., Dafermos, G., Bauwens, M., 2015. Design global, manufacture local: exploring the contours of an emerging productive model. *Futures* 73, 126–135. <https://doi.org/10.1016/j.futures.2015.09.001>.
- Kothari, A., Salleh, A., Escobar, A., Demaria, F., Acosta, A. (Eds.), 2019. *Pluriverse: A Post-Development Dictionary*. Tulika Books, New Delhi.
- Lahontan, L.A., d'Arce, De L., 1735. *New voyages to North America giving a full account of the customs, commerce, religion, and strange opinions of the savages of that country*. In: *With Political Remarks upon the Courts of Portugal and Denmark, and the Present State of the Commerce of those Countries*, J. Walthoe, ed. London.
- Lamb, W.F., Steinberger, J.K., 2017. Human well-being and climate change mitigation. *WIREs Clim. Change* 8, e485. <https://doi.org/10.1002/wcc.485>.
- Latouche, S., 2011. *Vers une société d'abondance frugale: Contresens et controverses de la décroissance*. Mille et une nuits, Clamecy, France.
- Latouche, S., 2012. Can the left escape Economism? *Capital. Nat. Social.* 23, 74–78. <https://doi.org/10.1080/10455752.2011.648841>.
- Latouche, S., 2020. *L'abondance frugale comme art de vivre: bonheur, gastronomie et décroissance*. Éditions Payot & Rivages, Paris.
- Liegey, V., Nelson, A., 2020. *Exploring Degrowth: A Critical Guide*. Pluto Press, London.
- Luhmann, N., 2012. *Theory of Society, Cultural Memory in the Present*. Stanford University Press, Stanford, California.
- Macron, E., 2023. “C'est la fin de l'abondance” : Emmanuel Macron annonce un plan de “sobriété sur l'eau” [WWW Document]. URL: <https://www.youtube.com/watch?v=wMNXG8fMk48>.
- Manning, M., Ambrey, C.L., Fleming, C.M., 2016. A longitudinal study of indigenous wellbeing in Australia. *J. Happiness Stud.* 17, 2503–2525. <https://doi.org/10.1007/s10902-015-9704-y>.
- Marcon, G., 2014. *Enrico Berlinguer: l'austerità giusta*. Precursori Della Decrescita, Jaca Book, Milan.
- Martin, S., 2012. *Cultural continuity and communities and well-being*. *J. Rural Commun. Developm.* 7.
- Martin, R.W., Cooper, A.J., 2017. Subjective well-being in a remote culture: the Himba. *Personal. Individ. Differ.* 115, 19–22. <https://doi.org/10.1016/j.paid.2016.10.021>.
- Martinez-Alier, J., Pascual, U., Vivien, F.-D., Zaccai, E., 2010. Sustainable de-growth: mapping the context, criticisms and future prospects of an emergent paradigm. *Ecol. Econ.* 69, 1741–1747. <https://doi.org/10.1016/j.ecolecon.2010.04.017>.
- Max-Neef, M.A., Elizalde, A., Hopenhayn, M., 1991. *Human Scale Development: Conception, Application and Further Reflections*, 2nd ed. The Apex Press, New York.
- Mehta, L., Harcourt, W., 2021. Beyond limits and scarcity: feminist and decolonial contributions to degrowth. *Polit. Geogr.* 89, 102411 <https://doi.org/10.1016/j.polgeo.2021.102411>.
- Mehta, L., Huff, A., Allouche, J., 2019. The new politics and geographies of scarcity. *Geoforum* 101, 222–230. <https://doi.org/10.1016/j.geoforum.2018.10.027>.
- Mignolo, W.D., Walsh, C.E., 2018. *On Decoloniality: Concepts, Analytics, Praxis*. Duke University Press, Durham, NC.
- Miñarro, S., Reyes-García, V., Aswani, S., Selim, S., Barrington-Leigh, C.P., Galbraith, E. D., 2021. Happy without money: minimally monetized societies can exhibit high subjective well-being. *PLoS One* 16, e0244569. <https://doi.org/10.1371/journal.pone.0244569>.
- Mollett, S., 2017. Gender's critical edge: Feminist political ecology, postcolonial intersectionality, and the coupling of race and gender. In: McGregor, S. (Ed.), *The Routledge Handbook of Gender and Environment*. Routledge, Oxon, New York. <https://doi.org/10.4324/9781315886572.ch9>.
- Moore, H.L., Woodcraft, S., 2019. Understanding prosperity in East London: local meanings and “sticky” measures of the good life. *City Soc.* 31, 275–298. <https://doi.org/10.1111/ciso.12208>.
- Ndlovu-Gatsheni, S.J., 2015. Decoloniality as the future of Africa. *History Compass* 13, 485–496. <https://doi.org/10.1111/hic3.12264>.
- Nelson, A., Schneider, F. (Eds.), 2019. *Housing for Degrowth: Principles, Models, Challenges and Opportunities*, Routledge Environmental Humanities. Routledge, Abingdon, Oxon, New York, NY.
- Parrique, T., 2020. *The Political Economy of Degrowth (PhD Thesis)*. Université Clermont Auvergne; Stockholm University, Clermont-Ferrand, France.
- Parrique, T., 2022. *Sufficiency Means Degrowth*. URL: <https://timotheeparrique.com/sufficiency-means-degrowth/> (accessed 2.22.23).

- Paulson, S., 2022. Strategic entanglements. In: *Degrowth & Strategy: How to Bring about Social Ecological Transformation*. Mayfly Books, pp. 182–197.
- Pavot, W., Diener, E., 2008. The satisfaction with life scale and the emerging construct of life satisfaction. *J. Posit. Psychol.* 3, 137–152. <https://doi.org/10.1080/17439760701756946>.
- Rahnema, M., 1992. Poverty. In: Sachs, W. (Ed.), *The Development Dictionary: A Guide to Knowledge as Power*. Zed Books, London, pp. 158–176.
- Reyes-García, V., Gallois, S., Pyhälä, A., Díaz-Reviriego, I., Fernández-Llamazares, Á., Galbraith, E., Miñarro, S., Napitupulu, L., 2021. Happy just because. A cross-cultural study on subjective wellbeing in three indigenous societies. *PLoS One* 16, e0251551. <https://doi.org/10.1371/journal.pone.0251551>.
- Richter, K., 2022. *Provincialising Degrowth and Situating Buen Vivir: A Decolonial Framework for the Politics of Degrowth* (PhD Thesis). University of London, Goldsmiths.
- Robra, B., Pazaitis, A., Giotitsas, C., Pansera, M., 2023. From creative destruction to convivial innovation - a post-growth perspective. *Technovation* 125, 102760. <https://doi.org/10.1016/j.technovation.2023.102760>.
- Sahakian, M., Wahlen, S., Welch, D., 2022. (un)sustainable consumption: a contested, compelling and critical field. *Consumpt. Soc.* 1, 244–254. <https://doi.org/10.1332/BYHL7310>.
- Sahlins, M., 1996. The sadness of sweetness: the native anthropology of Western cosmology. *Curr. Anthropol.* 37, 395–428.
- Sahlins, M.D., 2008. *The Western Illusion of Human Nature*. Prickly Paradigm Press, Chicago.
- Sahlins, M., 2017. The original affluent society. In: *Stone Age Economics*. Routledge Classics, New York, pp. 1–37.
- Saito, K., 2022. *Marx in the Anthropocene: Towards the Idea of Degrowth Communism*. Cambridge University Press, Cambridge.
- Salleh, A., 2009. *Eco-Sufficiency & Global Justice: Women Write Political Ecology*. Pluto Press, London.
- Schmelzer, M., Vetter, A., Vansintjan, A., 2022. *The Future Is Degrowth: A Guide to a World beyond Capitalism*. Verso, New York.
- Schumacher, E.F., 1973. *Small Is Beautiful: A Study of Economics as if People Mattered*. Blond and Briggs, London.
- Sekulova, F., 2014. Happiness. In: D'Alisa, G., Demaria, F., Kallis, G. (Eds.), *Degrowth: A Vocabulary for a New Era*. Routledge.
- Selin, H., Davey, G. (Eds.), 2012. *Happiness across Cultures: Views of Happiness and Quality of Life in Non-Western Cultures*. Springer, Netherlands. <https://doi.org/10.1007/978-94-007-2700-7>.
- Shi, D., 2014. Foreword. In: Alexander, S., MacLeod, A. (Eds.), *Simple Living in History: Pioneers of the Deep Future*. Simplicity Institute, Melbourne.
- Skidelsky, R., Skidelsky, E., 2012. *How Much Is Enough? Money and the Good Life*. Other Press, New York.
- Solway, J., 2006. "The original affluent society": Four decades on. In: Solway, J. (Ed.), *The Politics of Egalitarianism: Theory and Practice*. Berghahn Books, New York, pp. 65–77.
- Soper, K., 1993. A theory of human need. *New Left Rev* 1 (197), 113–128.
- Soper, K., 2020. *Post-Growth Living: For an Alternative Hedonism*. Verso, London, New York.
- Spengler, L., 2016. Two types of 'enough': sufficiency as minimum and maximum. *Environ. Politics* 25, 921–940. <https://doi.org/10.1080/09644016.2016.1164355>.
- Sultana, F., 2022. The unbearable heaviness of climate coloniality. *Polit. Geogr.* 99, 102638. <https://doi.org/10.1016/j.polgeo.2022.102638>.
- Syse, K.L., Mueller, M.L. (Eds.), 2015. *Sustainable Consumption and the Good Life: Interdisciplinary Perspectives*. New York, NY, Routledge, Abingdon, Oxon.
- Táíwò, O.O., 2022. *Reconsidering Reparations*. Oxford University Press, Oxford, New York.
- Tévoédjèrè, A., 1979. *Poverty, Wealth of Mankind, Systems science and World Order*. Pergamon Press, Oxford, New York.
- Todd, Z., 2016. An indigenous Feminist's take on the ontological turn: 'ontology' is just another word for colonialism. *J. Hist. Sociol.* 29, 4–22. <https://doi.org/10.1111/johs.12124>.
- Trantas, N., 2021. Could "degrowth" have the same fate as "sustainable development"? A discussion on passive revolution in the Anthropocene age. *J. Political Ecol.* 28. <https://doi.org/10.2458/jpe.2362>.
- Westacott, E., 2016. *The Wisdom of Frugality: Why Less Is More - More or Less*. Princeton University Press, Princeton, Oxford.
- Woodcraft, S., Osuteye, E., Ndezi, T., Makoba, F.D., 2020. Pathways to the 'good life': co-producing prosperity research in informal settlements in Tanzania. *Urban Plan.* 5, 288–302. <https://doi.org/10.17645/up.v5i3.3177>.
- Wu, F., 2020. Modern economic growth, culture, and subjective well-being: evidence from Arctic Alaska. *J. Happiness Stud.* 22. <https://doi.org/10.1007/s10902-020-00335-4>.