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Challenges for the degrowth transition: The debate about wellbeing

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ABSTRACT

Degrowth scholars and activists have convincingly argued that degrowth in developed nations will need to be part of a global effort to tackle climate change, and to preserve the conditions for future generations' basic needs satisfaction. However, the barriers to building a broader degrowth movement appear to be very entrenched at present. To improve the political feasibility of degrowth it is important to better understand these structural obstacles and develop arguments and strategies to address them. To contribute to the degrowth debate we focus in this paper on current generations in rich countries and their concerns about possible short- to medium term wellbeing outcomes of degrowth. In particular, we highlight the 'growth lock-in' of current societies and how a transition away from this model might therefore affect wellbeing. We also argue that taking the basic human needs framework as a new 'measuring rod' for wellbeing outcomes is suitable for a degrowth context, but likely to clash with people's current expectations of ever improving health and wellbeing outcomes. We propose that deliberative forums on future needs satisfaction can help establish a 'dialogue' between current and future generations which could support cultural shifts on wellbeing thinking which will be much needed for advancing the cause for degrowth.

1. Introduction

There are strong empirical and ethical arguments for degrowth — understood as a voluntary, democratically negotiated, equitable downscaling of societies' physical throughput until it reaches a sustainable steady-state (Alexander, 2012; Latouche, 2010; Schneider et al., 2010). From an environmental perspective, the main argument for degrowth is that thresholds for specific biophysical processes such as climate change, biodiversity and the nitrogen cycle are already being approached or have been crossed (Steffen et al., 2015). In the case of climate change there is little evidence that greenhouse gas emissions can be decoupled from economic growth in absolute terms (e.g. Jackson, 2011: ch.8; Ward et al., 2016). If we as a global society do not manage to achieve climate reduction targets set by the United Nations Framework Convention on Climate Change, there is a strong likelihood that future generations' ability to satisfy basic needs, e.g. related to food and water security or safe environments, will be affected (IPCC, 2013; Watts, 2017). Since economic growth is one of the main drivers for rising emissions (and increasing depletion of non-renewable resources), it seems evident that a transition to degrowth would make an important contribution to climate change mitigation, and hence to our moral obligation to preserve future generations' rights to basic needs fulfilment (Gough, 2017; O'Neill, 2018).

The degrowth movement of course recognises that the proposed changes would require a fundamental social transformation. It thus highlights that degrowth should be regarded as an opportunity to "repoliticise" society (e.g. Asara et al., 2015; Muraca & Döring, 2018). Even though the academic and activist degrowth community has expanded over the last few years, evidenced by a growing

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number of degrowth conferences, initiatives and academic publications, the degrowth idea remains marginalised within the political mainstream and wider public debates and has not yet sparked a "repoliticisation" of the broader public. This has been increasingly recognized in degrowth circles. Buch-Hansen (2018) and Koch (2018), for example, address the lack of political support from a critical political economy angle, while other degrowth authors highlight the stabilising role that growth has played for modern societies (Petridis et al., 2015: 178, Rosa et al., 2017), or discuss the growth paradigm's deep embeddedness in people's minds and bodies (Göpel, 2016; Welzer, 2011).

This paper seeks to make a contribution to the degrowth debate by emphasising the need for better understanding the social and cultural barriers behind the lack for broader social and political support for degrowth, as well as the urgent need for deeper deliberative, democratic involvement of the public within these debates. We highlight the ways in which growth and wellbeing are currently being regarded as strongly coupled by the majority of politicians and the population. The answer to the question of whether or not the comparatively high levels of objective and subjective wellbeing that Western countries presently enjoy can be maintained during degrowth is therefore of utmost importance if the degrowth movement is to gain the required momentum to turn its concepts and ideas into practice. Even more fundamentally, a change in collective meanings and understandings of wellbeing and needs can play an important role for 'decoupling' current dynamics between growth and wellbeing. The paper therefore highlights the requirement for degrowth-oriented deliberative processes to include a focus on wellbeing concepts and perceptions of needs, taking future generations' needs into account (Alexander, 2012; Latouche, 2010; Schneider et al., 2010).

The paper is structured as follows: The first part reviews the arguments that degrowth proponents have put forward on the ways in which degrowth can maintain or even improve wellbeing. It also outlines why the basic needs approach is most suitable for conceptualising wellbeing in a degrowth context. The second part considers additional challenges to maintaining or even improving current levels of wellbeing under degrowth: first, what are the implications of the ways in which current societies are 'locked into' growth? How might this impact on wellbeing during transitions to degrowth? Second, which wellbeing standards are compatible with degrowth while balancing the differences in wellbeing interests between presently rich versus poor countries and, particularly, those of current versus future generations? How acceptable might these criteria be to contemporary electorates of Western countries? Finally, we initiate a policy-oriented discussion of how the wider public may be 'taken on board' the degrowth journey in democratic and deliberate ways and, consequently, gain assurance in a corresponding economic, ecological and social transition.

2. Degrowth and wellbeing—the debate so far

Many contributors to the degrowth discourse emphasise that degrowth can maintain or even improve human wellbeing. A prime example for this view is Schneider et al.'s (2010: 511) often-cited definition of degrowth as 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". This understanding of degrowth also draws on early growth criticisms, for instance by André Gorz who stated that it is now a sign of "realism" to "advocat[e] greater wellbeing through the inversion of growth and the subversion of the prevailing way of life" (Gorz, 1980: 14).

Two strands of arguments which support this view can be distinguished here, the first focuses on subjective wellbeing (e.g. happiness or life satisfaction), the second on a broader concept of wellbeing based on notions of eudemonia or the 'good life'.

2.1. Growth and subjective wellbeing

Many contributors to the degrowth debate (e.g. Alexander, 2012: 354, Schneider et al., 2010: 512, Sekulova, 2015) argue that happiness does not depend on (rising) GDP per capita. An important reference for this debate is the famous Easterlin (1974) paradox. It showed, initially for the United States, that while higher income was related to higher levels of happiness in cross-sectional analysis (comparing individuals at one point in time), happiness scores aggregated at the national level did not increase over time despite rising levels of GDP. This paradox has since been confirmed in numerous studies for other countries (e.g. Easterlin et al., 2010). This lacking association between happiness (or life satisfaction) and GDP growth over time is usually explained by the positional nature of consumer goods (once everyone else has 'bought into' a certain product, a new and better version is required soon to enhance one's status). It is also explained by "hedonic adaptation" – once new standards are reached, people quickly demand more to remain happy (Frederick & Loewenstein, 1999).

However, the conclusion from the Easterlin paradox that happiness does not depend on (rising) income has been criticised in several ways. Cross-sectional analysis at the individual level still confirms a positive relationship between GDP and subjective wellbeing, even if other factors such as health and social support are controlled for in multivariate analysis (Helliwell et al., 2018: 16). The cross-sectional relationship between income and happiness is especially strong if income is measured on a log (instead of linear) scale (Deaton, 2008). In addition, in the interpretation of longitudinal data of subjective wellbeing and GDP, it often remains unmentioned (most recently by Kallis et al., 2018) that while GDP can in principle increase infinitely, subjective wellbeing is usually measured through survey questions with bounded scales. Hence, it cannot increase over time when a certain level is reached. Some of the rich countries have already reached very high subjective wellbeing scores so that even higher scores are almost impossible to achieve. This methodological issue is at least in part behind the 'paradox' of a seemingly widening gap between subjective wellbeing and GDP over time (Büchs & Koch, 2017: 61).

Furthermore, several studies that make use of cross-national data have also resulted in somewhat different conclusions. O'Neill (2015: 1223), for example, observes a "correlation between biophysical scale and human wellbeing. Countries with a large per capita footprint [which is closely related to GDP] tend to score highly on life satisfaction … while countries with a small per capita footprint

tend to score poorly". Studying 138 countries, Fritz and Koch (2016) demonstrate that subjective wellbeing scores correlate with GDP per capita. And Koch et al. (2017: 75), who compare the advantages and disadvantages of subjective and objective wellbeing approaches and plead for a deprioritisation of subjective wellbeing in degrowth research, conclude that two things appear to be happening at the same time: while, partially due to the mentioned methodological issues (see also Deaton, 2008), subjective wellbeing scores do not increase any further in rich countries over time, the latter nevertheless continue to score much higher than poor countries.

Another important question is how subjective wellbeing responds to *reductions* in income and/or material consumption. One needs to bear in mind here that recessions are of course not equivalent to degrowth as they are involuntary phases of material decline within the existing system. In contrast, degrowth would be accompanied by alternative institutions and cultures that could address potential wellbeing losses. However, both scenarios share a decrease of material throughput and hence of material living standards. Some degrowthers apply the idea of adaptive preferences to the reduction of living standards: "If degrowth translates into a widespread and equitable decline in consumption, this will not necessarily have a negative effect on subjective well-being (…) because of adaptation" (Sekulova, 2015: 114). Two counter arguments need to be considered here, the first relates to potential "loss aversion" (Tversky & Kahneman, 1991). Loss aversion theory states that adaptation to loss is likely to be less successful than adaptation to gain. One early piece of research in this field found that lottery winners did not express higher levels of happiness than people in a control group (contrary to what one could have expected). However, people who had become paralysed in an accident were significantly less happy compared to a control group (Brickman et al., 1978). The authors explain this finding with hedonic adaptation to a new normal amongst lottery winners, compared to a "nostalgically" positive view of the past amongst accident victims. If the theory of loss aversion is right, processes which imply a reduction of (consumption) opportunities may have negative impacts on people's subjective wellbeing compared to processes that offer gains, at least in the short to medium term. Research on the impact of economic contraction on people's subjective wellbeing largely confirms loss aversion theory. For instance, following the 2008 economic crisis, subjective wellbeing decreased in Greece, Syria and Egypt (Diener & Tay, 2015: 139), in the UK and Germany (Mertens & Beblo, 2016), and in transition countries of Eastern Europe, the Caucasus, and Central Asia (Habibov & Afandi, 2015). Similarly, Fanning (2016: 100) correlated change of growth and change of life satisfaction scores for 116 countries between 2005 and 2015. He found that while there was no association between the two measures in countries with positive growth rates (consistent with hedonic adaptation), there was a significant negative association for countries with recessions, which is consistent with loss aversion theory.

However, it might well be possible that people do adapt their preferences to lower material living standards in the longer term – especially if prospects for future improvements are regarded as very low. In such circumstances, this might well be an important coping strategy. The problem with pointing to such adaptive preferences to argue for maintained wellbeing under degrowth, and this is the second argument considered here as put forward e.g. by O 'Neill (2018), drawing on work by Sen (1999), is that such adaptive processes have the potential to mask decreases of living standards below a level which can be regarded as necessary to fulfil basic human needs. Applying a more objective concept and measure of wellbeing would be more appropriate in this situation. We will return to this discussion in more detail in the section on degrowth, eudaemonic wellbeing and universal needs. Before that, we focus on life expectancy and health, which is central to the debate on (objective) wellbeing outcomes.

2.2. Growth and life expectancy

Research on the relationship between income and life expectancy has also generated mixed results. At the individual (e.g. Chetty et al., 2016) and cross-national level (e.g. Pritchett & Viarengo, 2010), there is strong evidence for a positive relationship between income and life expectancy, especially if income is measured on a log scale as rises in life expectancy are lower at higher levels of income. In contrast to subjective measures of wellbeing, life expectancy has been steadily rising over time across the globe. Developing countries have been catching up rapidly in their levels of life expectancy, while it also continues to grow in developed countries, if at a slower pace (e.g. Pritchett & Viarengo, 2010; Felice et al., 2016). However, there are cases in which life expectancy has remained high without much economic growth (e.g. Japan), or increased despite low levels of income (e.g. Costa Rica). This indicates that income is not the only factor that influences life expectancy (Preston, 1975) and that its impact is highly mediated (Riley, 2001: 122). For instance, (national) income is being invested in public health systems, sanitation, and education which significantly contribute to rising life expectancy. Some of these innovations have diffused across the globe, including to poorer countries (Riley, 2001: ch. 4), supporting higher life expectancies there despite low incomes.

Research on economic contraction and life expectancy or mortality has generated contrasting results, too. Again, it is important to stress here that recession and degrowth are not equivalent as explained above. Some studies find negative impacts from recessions on people's health and life expectancy. For instance, people who suffer job loss and a related decrease in income are generally in poorer health compared to their counterparts (e.g. McKee-Ryan et al., 2005). Health-harming behaviours, and certain illnesses and causes of death seem to increase during recessions. For instance, studies found that mental health often deteriorates during recessions (e.g. Zivin et al., 2011) while smoking, alcohol consumption, as well as suicides increase (Breuer, 2015). This can translate into decreasing life expectancy, as it happened in Russia (Gavrilova et al., 2000) and Central and Eastern Europe (Cornia et al., 2000) following the economic crises triggered by the collapse of communist regimes in the early 1990s (Hertzman & Siddiqi, 2000). The example of Russia is particularly extreme: life expectancy dropped by more than five years in the early 1990s (Parsons, 2014: 2). This was unprecedented for a country not at war and is only comparable to one other example in modern times: sub-Saharan Africa which faced a similar decrease of life expectancy due to the HIV/AIDS epidemic (Parsons, 2014).

Other studies, and these are the ones usually highlighted in the degrowth literature (e.g. Borowy & Aillon, 2017; De Vogli & Owusu, 2015), show that life expectancy can improve during recessions (Gerdtham & Ruhm, 2006; Stevens et al., 2015) or does not

need to be affected to nearly the same extent as seen in Russia or other Eastern European countries in the early 1990s. Life expectancy also remained fairly stable in Cuba, despite a severe economic crisis following the collapse of the Soviet Union (Borowy, 2013). One explanation for these findings is that there are fewer work- and traffic-related accidents, and fewer deaths from air pollution (due to decreased manufacturing and traffic) during recessions (Granados & Ionides, 2017). Another explanation is that spending on health services is often counter-cyclical which could link to higher death rates during times of growth, especially amongst the elderly and residents in nursing homes (Stevens et al., 2015 for 1972–2006 in the US). The specific situation in Cuba has been explained by a well-resourced health system, cooperative social institutions as well as low social inequality (Borowy, 2013). This indicates that institutional and cultural contexts can play an important role in cushioning potential health impacts of economic contraction. Having said that, many of the studies on recession and life expectancy have used relatively short time periods. It will therefore be important to examine more long-term effects as they have been shown to be significant and negative in some cases (e.g. Sullivan & von Wachter, 2009).

The fact that many developing countries have seen rising levels of life expectancy suggests that gains in life expectancy can be achieved at relatively low levels of income through investments in basic infrastructures, immunisation programmes and education. However, expensive health technologies are likely to have contributed to rising life expectancies in rich countries in later stages of life through early detection and management of diseases. Some authors have questioned whether such expensive health technologies can be spread to all countries in the world (Riley, 2001: 108). Continued levels of investment in health research might also be required to maintain levels of life expectancy, for instance due to rising incidences of microbial resistance against drugs and the development of new pathogens through mutation. Correspondingly, degrowthers have criticised the highly technology- and medicalisation-focused health systems in developed nations, partly driven by private profit interests, and called for alternative health models which utilise traditional medicine and more decentralised, collective and open source health technologies and research (Borowy & Aillon, 2017). While it seems that such developments are indeed required in a context of shrinking material and financial resources, it remains unclear how they would impact on life expectancy trends, and how acceptable they would be to the public, which is likely to expect continuous life expectancy improvements.

2.3. Degrowth, eudaemonic wellbeing and universal needs

There is a third perspective from which degrowthers argue that degrowth can support people's wellbeing. This perspective stresses some of the negative impacts that growth-oriented consumer capitalism can have on people's wellbeing: status competition, and the pressure to perform have been found to contribute to stress and the development of mental health conditions (James, 2007; Kasser, 2002; Offer, 2006); capitalism's emphasis on individual gain, market relations and competition is feared to undermine moral and social capital and put a strain on family and community relations (Douthwaite, 1999; Daly & Cobb, 1989: 50-1, Hirsch, 1976); technological innovations are seen to threaten people's jobs (Douthwaite, 1999); against the "trickle down" hypothesis, growth is seen as having failed to eradicate hunger, poverty and global inequality (Collier, 2007; Piketty & Saez, 2014); and finally, the environmental implications of growth – the pollution of air, water and soil, effects of climate change on health and livelihoods – have negative impacts on people's wellbeing. Hence, this perspective argues that a transition away from growth-oriented consumer capitalism can address these negative implications and thus achieve better wellbeing outcomes. Some of the concerns that are frequently voiced against degrowth have also been addressed: the main ones are that economic contraction would lead to rising unemployment and inequality. Here it is argued that employment levels can be maintained through working time reduction and active labour market policies; and poverty and inequality be reduced through redistributive policies (Victor & Rosenbluth, 2007). Marxian degrowthers argue that degrowth would dismantle current models of business ownership and management, and instead introduce a cooperatively managed economy in which decision-making and incomes are more evenly shared (Lange, 2018: 486).

These considerations lead us to ask which concepts are best suited to discuss and assess the relationship between wellbeing and degrowth. As we have seen above, both subjective and objective approaches have been relevant for evaluating wellbeing, and both have their respective merits and justifications which have been discussed in the degrowth literature (e.g. Muraca, 2012). Even though the improvement of the objective quality of life through the supply of clean water, food, housing, health promotion, etc. is widely accepted as a primary goal in research and policy-making, precisely which objective living conditions are most relevant is far from self-evident. This is why happiness researchers pay more attention to individual satisfaction with objective conditions (Layard, 2005). The problematic aspect of this view is that subjective perceptions of wellbeing are to some extent the result of psychological and social adaptation processes that interfere with the wellbeing gains or losses that may have occurred through economic and societal processes. However, such complex processes are difficult to measure and would require long-term panel studies, which are expensive, take time and are correspondingly rare, or qualitative in-depth research of small groups, which are not representative of larger populations. On top of the adaptation problem, there is evidence of cultural bias that likewise affects the ability of 'happiness' to provide a measure of wellbeing across countries and times. When national values of individualism are correlated with reported wellbeing, cultures representing a "modesty bias" (Gough, 2015), as in some East-Asian countries, report lower wellbeing scores than most Western countries, where the promotion of happiness is much more part of the way of life. Because of seemingly pervasive psychological and social adaptation processes and methodological issues with the measurement of subjective wellbeing we argue here that objective wellbeing concepts and measures, and specifically human need approaches, provide a superior theoretical basis for raising issues of wellbeing within environmental limits and beyond growth.

While human needs theories, which are part of eudaemonic understandings of wellbeing (Lamb & Steinberger, 2017), can be traced back to Aristotle, the two most systematic and influential approaches have been (independently) tabled by Doyal and Gough (1991) and Max-Neef et al. (1991) in the early 1990s. Even though there are some differences between their accounts of human

needs, both argue that human needs are 'objective' in the sense that their fulfilment contributes to human wellbeing due to the "objective physiological and psychological requirements of human beings" (Gough, 2017: 45), that is, independently from subjective perceptions. Both also argue that human needs in their general form are universal which means that they apply to all people across time and space.

One of the main differences between Doyal & Gough's and Max-Neef's concept of human needs is that the former arranges needs in a hierarchical system whereas Max-Neef simply specifies a range of needs along four different dimensions without a clear hierarchy. The ultimate need in Doyal and Gough's scheme is "minimally impaired social participation", and the two main basic needs through which this is achieved are physical health and "autonomy of agency" (through mental health, cognitive understanding and opportunities to participate) (Gough, 2017: 43). Below this are a range of universal needs satisfiers which have to be met to fulfil these "higher" needs, including adequate nutritional food and water, adequate protective housing, non-hazardous work and physical environments, appropriate healthcare, security in childhood, significant primary relationships, physical security, economic security, safe birth control and child-bearing, and basic education (Gough, 2017). The needs identified by Max-Neef et al. (1991: 32-3), each of which can be expressed through needs satisfiers in the four dimensions of being, having, doing and interacting, include: subsistence, protection, affection, understanding, participation, idleness, creation, identity and freedom. Hence, despite many differences in details, both accounts distinguish general needs from needs satisfiers. While, as just stated, general needs are seen as objective and universal, the specific ways in which needs are satisfied can be culturally and historically specific and variable (Doyal & Gough, 1991: 69-75; Max-Neef et al., 1991: 16-8).[1]

Needs theorists have argued that needs (in contrast to mere preferences or wants) can establish rights and obligations (e.g. Gough, 2017: 47). Therefore, the concept of universal needs is a suitable basis to argue that current generations have a moral obligation to ensure that future generations will be able to fulfil their needs (e.g. by mitigating climate change, for which degrowth is likely to be an important vehicle). For instance, it follows from Gough's parsimonious definition of universal basic human needs that these will be the same for future people as those of the present. "Future people will have needs for affiliation, cognitive and emotional expression, understanding and critical thought" (Gough, 2015: 1203). From here it can be argued with O'Neill (2011: 33) that "each generation needs to pass down the conditions" for future generations to be able to meet these needs as just outlined. Even though the present generation may be largely ignorant about the "detailed nature and quantum of need satisfiers that future peoples in future contexts will require" (Gough, 2015: 1204), Doyal and Gough (1991: 230–236) nevertheless stress that all economic and political systems would need to be assessed according to their ability to supply sufficient and appropriate need satisfiers. However, due to climate change and ecological overshoot, it is possible that less than the "optimal generalizable satisfaction of basic needs" (Gough, 2014: 378) can actually be achieved. Society would then need to find ways to debate possible offsets between the satisfaction of the needs (and wants) of current and future generations. As a guideline Gough (2017: 174) suggests that needs of the present "should always take precedence over the basic needs of the future" but "basic needs of the future should take precedence over the extravagant luxury of the present".

The concept of universal human needs has additional characteristics which make it especially interesting from a degrowth perspective: needs are regarded as non-substitutable and satiable. Non-substitutability means different dimensions of human needs satisfaction cannot be traded off against each other: higher safety levels on the streets cannot remedy a lack of water or other nutrient, for instance. Satiability implies that certain thresholds can be identified at which needs can be satisfied and beyond which the employment of additional resources does not substantially add to needs satisfaction (Gough, 2017: 45–6). Hence, needs are by definition few and limited. In contrast to 'wants' and subjective wellbeing measures, which are regarded as 'insatiable' in neoclassical theorising, and which correspond to an economy geared at unlimited monetary growth and exchange value, needs are in principle compatible with an economy based on stable matter and energy throughput and the provision of use values serving as needs satisfiers. We will return in the two final sections to discussing possible implications of these considerations for assessing wellbeing under degrowth.

3. 'Locked' into growth and rising wellbeing expectations?

Having set out in the previous sections the discussion about wellbeing in the degrowth discourse so far, we now examine two additional wellbeing related challenges to the political feasibility of degrowth. First, it can be argued that the dominance of growth-based economics has taken on a 'structural' quality in current societies. This means that a transition to degrowth that can successfully support wellbeing would need to involve very fundamental social, economic, political, cultural and technological changes – some of which are difficult to achieve through political means. Second, these changes would ideally need to happen very fast, to present a meaningful response to the climate change crisis. We argue here that the process of transition itself is likely to bring about challenges for achieving aspired wellbeing outcomes. Third, and based on the argument that the framework of universal basic needs is most appropriate for discussing wellbeing in a degrowth context, we raise the question how well (or not) applying this framework to think about wellbeing aligns with current societies' wellbeing expectations.

[1] In *Human Scale Development*, Max-Neef argued for "development geared toward self-reliance" (Max-Neef et al., 1991: 56). He envisaged this to be facilitated by people's ability to self-determine ways and levels of needs satisfaction through participatory decision-making which crucially builds on the idea of needs satisfiers.

3.1. Growth 'lock in'

Economic growth, as an attribute of market capitalism, has structural properties – it is needed to stabilise modern societies as it provides employment, public sector provision through tax revenues, rising wages, and hence social stability (Petridis et al., 2015: 178, Rosa et al., 2017). Economic growth is organised around and shapes a range of tightly coupled structures, including institutions, norms, discourses, culture, technologies, competences, identities, etc. Historically speaking, growth is a fairly recent phenomenon which only picked up in the 19th century together with the industrialisation of Western economies. In a co-evolutionary process, a range of institutions developed which are now coupled to a growth-based capitalist economy, including the nation state, representative democracy, the rule of law and current legal, financial, labour market, education, research, and welfare systems. These are based on philosophies which emerged to justify and give meaning to these institutions, for instance on individualism, freedom, justice, sovereignty, or power. The embeddedness of the growth-based capitalistic economic system in these co-evolved institutions and ways of thinking makes it difficult to transition to a degrowth system because the change of the economic system would need to involve a parallel transformation of those coupled systems. In Luhmann's words, the constitution of the current system "defuturises" (Luhmann, 1976: 141) the future, it reduces the "openness" of the future; "path dependency" or even "lock-in" are related expressions that capture this idea. Two examples which directly link to people's wellbeing can illustrate this point: the relationship between welfare states and growth, and between growth and people's mind-sets and identities.

The satisfaction of needs is influenced by the character of socio-economic institutions, including the ways in which work, welfare, retirement, health, education and family life are governed; as well as by the structure of the distribution of a range of resources that support health and wellbeing. Welfare state institutions play an important role in these areas in high income economies, and they are closely coupled with economic growth (Bailey, 2015). Rising economic prosperity in the post Second World War period provided the resources for establishing welfare states in Europe and elsewhere, and the funding of current welfare state institutions is closely coupled to economic growth as it largely depends on income-related taxes and social security contributions. The positive relationship between economic growth and welfare states in many ways also works the other way round: welfare states support growth by enhancing the population's health and education levels, providing unemployment and minimum income benefits for people out of work. This helps to increase productivity, maintain consumer demand, and more generally contain and minimise social conflict through redistribution and institutionalised conflict resolution between employers and employees.

Evidently, a fundamental reorganisation of the economic and welfare system would be required under degrowth to sustain investments in health, education, and the reduction of poverty and inequality. This will be crucial in a context of decreasing material and financial resources, because if left unmanaged, this could provide fertile ground for new social conflicts with potentially detrimental implications for wellbeing. Various degrowth authors have made suggestions for alternative welfare institutions and policies, including working time reduction and redistribution as mentioned above (Victor & Rosenbluth, 2007), a basic income (Gorz, 1980; Dietz & O'Neill, 2013: 94), and, from a Marxian perspective, the establishment of a cooperative economy in which businesses will be worker-owned and managed (Blauwhof, 2012). These are all relevant suggestions, however, it should not be underestimated how radical the changes to existing social systems are that these new institutions represent. They challenge deeply entrenched ways of thinking about rights, justice, freedom, private property, individual responsibility, etc. A change of these deeply rooted 'logics' on which these institutions are based is not impossible, but very difficult to steer with political means.

This point closely links to the idea that economic growth is not only at the core of various socio-economic institutions but is also very deeply anchored in people's minds, bodies and identities which is likely to make the transition to degrowth additionally challenging. The concept of social practices helps us understand the ways in which agents (and their mind-sets and bodies) and broader social structures are continuously implicated and reproduced in the performance of social life (Büchs & Koch, 2017: ch. 6). From this perspective, economic growth is not just an external premise that actors can decide to act upon or not, but it is a principle with structural properties that is engrained in ways of thinking and acting – for the most part habitually. Growth thus becomes something that is perceived as 'natural' by the vast majority of actors. A range of scholars have argued that the growth paradigm is deeply embedded in people's minds and bodies (Göpel, 2016; Lane, 1991; Welzer, 2011; Büchs & Koch, 2017: ch. 6). This implies that people's identities and life goals are closely aligned with the idea of growth – shaped by ideas of social progress, personal status and success through careers, rising income and consumption. Even seemingly alternative goals such as 'personal fulfilment' can be infused with ideas that remain tied to the growth paradigm, for instance if fulfilment is sought through high consumption and high emissions practices such as extensive long haul travel or expensive hobbies and gadgets. As Meadows (1999) has pointed out, the most effective, but also the most difficult step in system transformation is the shift of paradigms that underpin the system. Again, since this is difficult to influence politically, it presents a major hurdle for a departure from growth-based systems that also maintains wellbeing.

3.2. Implications of rapidly transforming social systems

The social practices lens is also useful for thinking about possible wellbeing implications of rapid social change more generally, and a transition away from a growth-based economy specifically. While the concept of social practices inherently implies the possibility of change (with its focus on agency and creativity), it equally strongly highlights the structural aspects of practices which provide stability and orientation. During times of rapid social transitions, social norms and 'mental infrastructures' often lag behind, creating disorientation, social conflict, and negative impacts on wellbeing (Büchs & Koch, 2017: ch. 6).

Stability of structural dimensions of social practices offers orientation and some extent of predictability of how oneself and other people are likely to act in the future, providing a framework within which flexibility and change are possible. This orienting function of structural dimensions of practices is likely to be an important condition for people to form reasonably stable identities and

relationships – key ingredients for wellbeing. Examples from classical and contemporary sociological and psychological research suggest that different speeds of changing social structures can establish misalignments and disruptions of social practices which can, in turn, negatively influence health and other wellbeing outcomes. For instance, in his classical study, Durkheim presents suicide at least partly as an outcome of a failure of cultural resources to provide meaning and orientation in the context of other, more rapid social changes (Durkheim, 2006; Vega & Rumbaut, 1991: 375). This idea also links to Bourdieu's concept of the "hysteresis effect". Here, Bourdieu emphasises that, especially during phases of social transition, people's habitus and "objective" social circumstances can become disjointed: as a result of hysteresis, dispositions can be "out of line with the field and with the 'collective expectations' which are constitutive of its normality. This is the case, in particular, when a field undergoes a major crisis and its regularities (even its rules) are profoundly changed" (Bourdieu, 2000: 160). This can contribute to a deterioration of people's wellbeing as it makes them feel "out of place" or let them be perceived that way, "plung[ing] them deeper into failure" (Bourdieu, 2000: 161) because they cannot make use of new opportunities or are mistreated or socially excluded by others.

Empirical research which partly builds on the idea of hysteresis has shown that wide-ranging organisational change can have a range of negative effects on people's health and mortality (Ferrie et al., 1998; McDonough & Polzer, 2012). One study found that across 174 countries, several measures of wellbeing and social performance, including life satisfaction, health, safety and trust, voice and accountability, were highest in periods of economic stability, but lower in times of GDP growth or contraction (O'Neill, 2015); and other studies concluded that life expectancy can be negatively affected by both *rapid* economic growth and contraction (Notzon et al., 1998; Szreter, 1999).

Several scholars have recently highlighted the potential for social conflict inherent in (rapid) social change. For instance, Maja Göpel (2016: 49) remarks: "Unsurprisingly, the navigation or transition phase in shifting paradigms as well as governance solutions is marked by chaos, politicization, unease and power-ridden struggles". Wolfgang Streeck has issued similar warnings (Streeck et al., 2016: 169). It is not difficult to see how such scenarios bear the potential of undermining some of the fundamental conditions that are necessary for the satisfaction of basic needs as discussed above, and hence the danger of generating substantial wellbeing losses for current and near-future generations.

In the current context, it is very difficult to imagine that we might be able to observe a rapid and radical cultural change in which people adopt identities and related lifestyles that value intrinsically motivated activities over pursuing satisfaction and status through careers and consumption. Even more worryingly, political events in Europe, the United States and elsewhere since the 'Great Crash' of 2008 indicate that times of negative or stagnant growth can provide a breeding ground for populist, nationalistic and anti-democratic movements. Economic insecurity, a perceived threat of established identities through migrants, and deep mistrust against 'elite' politicians are amongst the main explanations for previously unimaginable events such as the Brexit vote, Trump presidency, and recent electoral successes for far right-wing parties in a range of European countries.

3.3. Deliberating basic needs satisfaction

A third point to consider is how current generations' expectations regarding their health and wellbeing prospects may compare to wellbeing standards that are suitable for a degrowth scenario. As discussed above, needs theory is useful here as it provides us with a relevant distinction for assessing wellbeing under degrowth by distinguishing necessities from luxuries, that is, goods and services that are necessary for a basic level of wellbeing, and those that exceed this requirement. By prioritizing the former, need theory provides a bridge between social, global, and intergenerational justice debates. According to Di Giulio and Fuchs (2014), the needs concept also enables us to define a "consumption corridor" between minimum standards, allowing every individual to live a good life, and maximum standards, ensuring a limit on every individual's use of natural and social resources in order to guarantee a good life for others in the present and in the future (Gough, 2017). An important question is how acceptable such new ways of determining people's needs, especially maximum standards, are to current generations who are expecting ever increasing levels of life expectancy, living standards and wellbeing.

One way of empirically operationalizing and addressing this issue politically is to apply the "dual strategy" (Doyal & Gough, 1991) of policy formation which combines the codified knowledge of experts with the experiential knowledge of those whose needs are under consideration. It was developed by needs theorists as a novel way for citizens, experts, government and civil society representatives to work together in democratic and deliberative forums, to identify the goods and services necessary for needs satisfaction within a particular social and cultural context and environmental limits. The point of departure is again that individuals, everywhere in the world, at all times, have basic needs that must be met in order for people to avoid harm, to participate in society and to reflect critically upon the conditions in which they find themselves.

However, there are both minimum and maximum satisfaction levels for human needs. The minimum level can be established via so-called "reference budgets" that have been developed for some European countries to define the minimum budget required for a full participation in society (Goedemé et al., 2015). In principle, such reference budgets could also be developed for maximum levels beyond which further consumption does not significantly contribute to people's wellbeing. Similar to the reference budgets of minimum needs satisfaction levels, social and ecological limits for maximum consumption could be defined, contextualised for local levels, and translated into monetary amounts for individuals or households.

Similarly, Max-Neef's Human Scale Development (HSD) methodology could be taken up to highlight the culturally-specific ways in which universal needs are fulfilled in practice. The inherent diversity allows for the identification and comparison of present and alternative modes of satisfiers and has become an object of in-depth qualitative research. Guillén-Royo, (2016) has compiled contextual, conceptual and empirical aspects of the HSD approach and applied these to sustainability and wellbeing research (see also Hirvilammi et al. (2013) who use the capability approach). Indeed, if exclusively defined by expert knowledge and input, both human

needs and their minimum and maximum satisfaction levels may be considered paternalistic and externally imposed. This is why authors such as Guillén-Royo and Gough highlight the importance of participatory exercises such as consultations, focus groups and deliberative forums in determining specific actions to achieve high levels of wellbeing within planetary limits and in the exploration of the forms that needs satisfiers take within a community. 'Experts' could, for example, contribute to such forums with information on the size of ecological footprints that are within sustainable levels, while the whole forum could deliberate on what kind of lifestyles and production patterns this may allow. It could also identify maximum consumption levels for particular needs and define monetary equivalents for local and/or national levels. The results of such participatory workshops can help to critically review policy goals, behaviours, satisfiers and infrastructures and lead to adaptations of long-term policy planning. Reference budgets, in particular, have the advantage of being socially grounded by drawing on inputs from both citizens and experts (Concialdi, 2018: 11). This could in fact help decrease the fear of wellbeing losses during a planned contraction of the societal matter and energy throughput and increase the legitimacy of maximum needs satisfaction and particularly maximum income levels in the wider population.

4. Discussion and conclusion

This paper aims to make a contribution to degrowth thinking by critically reflecting on common assumptions about wellbeing under degrowth, highlighting important challenges, and offering some ways of addressing them. The motivation for this paper is that current generations' concerns about possible negative wellbeing implications from degrowth represent an important reason for a lack of political support for this movement to date. These concerns and potential challenges to maintaining and improving wellbeing under degrowth need to be addressed head on to advance this movement. We propose that involving the broader public in deliberative processes that review perceptions of wellbeing and needs, taking future generations' needs into account, could be a way to advance the degrowth agenda.

The first part of the paper reflected on thinking about wellbeing within the degrowth debate so far. A challenge for the debate is that there are no historical examples of degrowth, and thus an absence of empirical data that could be examined to study its effects on wellbeing. What we do know is that degrowth will involve a continuous contraction of the material throughput in economies of rich countries until a sustainable steady state is reached, and this is highly likely to coincide with a contraction of GDP, too. We also know that this will need to be accompanied by radically transformed economic, social, cultural etc. institutions which will ensure that this is a democratically shaped and socially just process. We argued in the first part of this paper that degrowth accounts which focus on subjective wellbeing outcomes can be problematic. Evidence of lacking improvements of subjective wellbeing over time despite rising GDP, which is often used to argue that subjective wellbeing is independent from GDP, may well be related to methodological issues. Even if this phenomenon is due to processes of adaptation of preferences, this might not work as well in the short term in times of economic contraction due to loss aversion as suggested by some evidence (Diener & Tay, 2015: 139, Mertens & Beblo, 2016; Fanning, 2016: 100). If it does work in the long term there is the danger that is would mask reductions of living standards below levels that are necessary for needs satisfaction (O'Neill, 2018).

Therefore, objective wellbeing concepts and measures are better suited to discuss relations between degrowth and wellbeing. Health, especially life expectancy, has been one of the most important objective wellbeing measures so far. Here we argue that evidence of improving life expectancy during recessions cannot necessarily be applied to degrowth because research in this field has focused on fairly short time periods. However, it is evident that relationships between growth/economic contraction and life expectancy are very complex. Life expectancies have so far continued to rise globally, including in rich countries. Research on the role that economic growth has played for this in the long term, and how its impact has been mediated through various channels (e.g. investment into medical research, innovations in drug development and health technologies; the establishment of complex health care institutions; public education, etc.) needs to be further advanced.

We concluded the first part of the paper by supporting eudaemonic and needs-based approaches to wellbeing. From a eudaemonic wellbeing perspective it has convincingly been argued that many of people's 'real' needs such as meaningful relationships and work, identity, opportunities to shape community life and politics, can be achieved with low resource inputs. The related universal needs perspective is especially useful for this debate. It strengthens the moral argument for degrowth and emphasises the responsibility of current generations to ensure the ability of future generations to fulfil their basic needs. It also draws a helpful distinction between wants and needs – in contrast to wants, needs are satiable and hence less resource intensive. Finally, needs are non-substitutable which means increased income cannot compensate for insufficient needs satisfaction in other areas. This shifts the perspective away from the relevance of income towards creating appropriate institutions that can satisfy different types of needs.

The second part of this paper highlighted some of the challenges that we can expect to face from a transition towards degrowth even if attention shifts towards needs satisfaction. A sociological perspective helps to highlight how very deeply rooted the growth principle has become not only for the economic system, but also for a host of other systems that have co-evolved around growth-based capitalism, including the nation state, democracy, the legal, financial, welfare and associated cultural systems. The challenge for the degrowth transition will be that these co-evolved systems need to transform in tandem if wellbeing is to be maintained. It is not yet well understood how this can be organised and which wellbeing implications this transition may have. The social practices perspective highlights that the coupling of these systems around growth-based capitalism is not just a 'macro' phenomenon which could be changed through policy making, but also a 'micro' phenomenon, embedded in and reproduced by people's minds and bodies through their daily practices. It is this cultural layer of growth 'lock in' that is difficult to change through political means.

In other words, degrowth societies would be societies that are organised according to fundamentally different cultural, social, economic, political and technological principles as the ones that are dominant at the moment, organised around the growth ideology. To emphasise this does not mean to say these current principles and ways in which current institutions are organised around them

cannot change. But it helps to increase our sensitivity regarding the monumental extent of change that lies ahead and the likely challenges that this will bring to satisfy people's (eudaemonic) wellbeing and needs. Radical (and rapid, as it would need to be) social change often involves severe social conflicts as people (especially those in priviledged and powerful positions) have to give up on the material and immaterial benefits, levels of needs satisfaction, identities, and relations to (groups of) other people that the current system is providing them with. When it comes to identities and social relations, Marxists for instance would argue that degrowth would require a dissolution of the distinction between workers and capitalists. A radical transformation of relationships would also be needed in other domains, e.g. between men and women, human and nature, rich and poor countries, current and future generations. The transition to degrowth would need to be organised in ways that carefully manage these conflicts, especially as available material and financial resources will be diminishing over time in this process. An equitable distribution of resources and of decision-making powers will be essential for this process, as the degrowth literature has stressed. A range of very valuable policy proposals have been made that could support these changes, including a reduction of working hours, a basic income, a reform of the financial and monetary system, a cooperatively organised economy, etc. (e.g. Dietz & O'Neill, 2013). In actual fact, there is no shortage of proposals for alternative degrowth policies. The more fundamental challenge is to figure out how to transition towards them, given that they will require radical change in underlying cultural values.

In the last section of the second part of the paper we propose that the establishment of regular deliberative forums that discuss universal needs satisfaction could be one (small and first) step to address this. This could be organised according to a "dual strategy" as proposed by needs theorists (Doyal & Gough, 1991), combining input to consensual decision-making by experts and citizens. We argue that it would be important to add other 'dual' elements here to make these deliberative forums fit for debating universal needs satisfaction under degrowth (and for considering the underlying cultural principles on which this will be based): these forums would need to establish a dialogue between people from rich and poor countries, as well as between 'representatives' of current and future generations. The dialogue between rich and poor people globally is necessary because of their different relations to degrowth – the incomes and material living standards of groups across the world whose basic needs are not currently being met would need to be allowed to rise in the future until their basic needs are satisfied whilst those of the rich will need to decline rapidly. At a country level, degrowth trajectories will need to vary in rich versus poorer countries, even if the current development discourse is being replaced by "post-development" (Rahnema & Bawtree, 1997) approaches. Very importantly, these forums would also need to establish a dialogue between current and future generations as it is the latter's basic needs satisfaction that is at stake and that motivates the call for degrowth in the first place. Whilst future generations of course do not yet exist, the organisation of these forums, and their legitimacy, can be informed by proposals made by deliberative democracy theorists on ways of representing views of future generations in political decision making (e.g. González-Ricoy & Gosseries, 2016; Boston, 2017). We envisage that the discussion of minimum and maximum levels of needs satisfaction and their resource implications in deliberative forums organised around these three dual strategies – experts and citizens, poor and rich groups and countries, current and future generations – would inevitably need to challenge the cultural principles that underpin current social, economic, political and technological systems, and ways in which they would need to change to address the degrowth challenge.

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