Justice Concerns in SDG 12: The Problem of Missing Consumption Limits

Katia Vladimirova

1. Introduction

The adoption of Agenda 2030 and the Sustainable Development Goals (SDGs) in 2015 represents an important step taken by humanity towards conceptualizing the vision of future development. Agenda 2030 is the most recent global attempt to flesh out a normative concept of 'sustainability' (Jacob 1994; Griessler and Littig 2005; Amsler 2009) that outlines the different dimensions and priorities of global development. At the heart of Agenda 2030, as well as Agenda 21 before it, are normative aspirational ideas that reflect how we as humans want to see our world evolve in the future. A result of political negotiations, consultations with civil society and other stakeholders, and relying on decades of preceding legal frameworks, this vision essentially builds on assumptions that are deeply intertwined with our morality and values, our understandings of what is good and bad, right and wrong. Agenda 2030 and the SDGs propose nothing less than a pathway to transform the world, and it is critical to have these documents examined, questioned, and challenged, if needed, from an ethical perspective. To date, however, ethical examinations of Agenda 2030 are limited in number and scope (Vasconcellos Oliveira 2018; Klimková 2017).

SDG 12 draws attention to consumption and production patterns as one of the priority areas in sustainable development. Globally, material consumption increased from 27 billion tonnes in 1970, to 87 billion tons in 2015 (the year Agenda 2030 was adopted) and further to 92.1 billion tonnes only two years later, in 2017 (United Nation 2019). The global consumption of natural resources more than tripled over the course of forty-five years, during which the world population only about doubled, from 3.7 billion people in 1970 to 7.3 billion people in 2015 (World Bank 2020). The material footprint per capita continues to grow, from 7.3 tonnes of natural resources 'to satisfy a person's need' in 1970, to 8.1 tonnes in 1990 and to 12 tonnes in 2015 (United Nation 2019, p. 18).

These numbers also mask vast inequalities. While, on average, citizens of developed countries consume 16 tonnes of key resources per capita (ranging up to 40 tonnes in some countries), a person in India consumes on average

only 4 tonnes of the same resources (UNEP 2011). The rate of extraction has accelerated since 2000 and it is projected that, by 2060, global resource extraction could reach 190 billion tonnes if, according to the UN, "no urgent and concerted political action is taken" (United Nation 2019, p.18).

SDG 12 represents an important goal for systemic change to align consumption and production patterns with a normative vision for a sustainable future. A shift towards more sustainable consumption and production patterns has the transformative power to "decouple economic growth from resource use and environmental degradation through improved resource efficiency, while improving people's well-being" (United Nations Statistics Division 2018; UNEP 2011). However, the academic literature suggests that mere resource efficiency improvements are not enough and that the profound large-scale transformation that is required should go beyond the narrowly construed pathway of decoupling (e.g., Alexander et al. 2017; Fletcher and Rammelt 2017).

Questions of allocation—who should be entitled to consume what, how, and, most importantly, how much—are all essentially questions of fair distribution. The reconfiguration of consumption and production patterns is bound to exacerbate existing matters of inequality and wealth distribution and to create new trade-offs and moral dilemmas. To navigate these complex issues, we need to have guidance from our moral theories, among others. Moral philosophers could contribute to the work on changing consumption and production patterns by engaging more actively into discussing matters of (re)distribution associated with this transformation. This position piece suggests several avenues to explore through further ethical inquiries.

2. Consumption and Morality

For centuries, morality played an important role in shaping how and what we consume. According to Trentmann's (2016) seminal work on the history of consumption, at different times morality, embedded in ideology and religion, determined what societies considered frugal or conspicuous, sufficient or excessive, acceptable or unacceptable. Moreover, as one ideological or religious paradigm succeeds the other throughout history, views of how and what we consume may change significantly.

For example, bans on luxury display in the form of dress, carriages or lavish feasts existed in Italy throughout most of the Middle Ages. The Church prescribed that the rich were to look and act modestly in public so as not to ignite envy and cause civil unrest. The morality of the Renaissance era in Italy, however, started to accept and encourage large scale consumption by the rich—with public good as its

final goal. Acts of 'good consumption' at that time were understood as those that transcended the lifetime of the consumer (owner), resulting in the construction of palaces and public infrastructures, such as fountains and squares and the production of exquisite artwork that people still enjoy today (Trentmann 2016, p. 32).

Morality continues to shape our consumption patterns. Initially, the growth of consumer society was defined by considerations of restoring economic systems after a devastating world war. Maintaining peace, while improving the lives of people affected by global humanitarian and economic crises, was the key development priority. After half a century, however, priorities have changed. We are on the cusp of a paradigm shift, as has happened in the past. Today, what defines consumption and lifestyles as 'conspicuous', 'excessive', or 'unsustainable' are no longer only religious, ideological, or economic dogmas but planetary boundaries (Rockström et al. 2009; Steffen et al. 2011), principles of sustainability and embedded social justice (UN Agenda 21, Agenda 2030).

Decisions on how to transform the world to align development paths with a vision of a sustainable future require tough re-examination of our values and understandings of what is good and bad, right and wrong in the context of the global environmental crisis. Morality and ethics, therefore, are critical to sustainability transformations in different areas, including consumption patterns.

To inform academic and public debates and action aimed to transform consumption and production patterns from a moral perspective, it appears logical to seek guidance in the relevant literature on the ethics of consumption and perspectives on its moral dimensions. Surprisingly, though, consumption ethics never emerged as a field of applied ethics, as with bioethics or business ethics. There are some studies that look at 'consumption ethics' as a counterpart to business ethics from marketing and business administration standpoints (Belk et al. 2005; Brinkmann and Peattle 2008; Eckhardt et al. 2010). Another thread of research explores 'ethical consumption' as a recent phenomenon from the points of view of sociology, anthropology, and political science (e.g., Shaw and Newholm 2002; Barnett et al. 2005; Hall 2011). Neither research strand engages normative evaluations or critiques of consumption, but rather studies existing patterns as given.

Fragmented ethical perspectives on consumption can be traced in seminal works by Veblen [1899] (1925), Baudrillard [1998] (1970), Bourdieu (1984), and, more recently, Schor (1991, 1999) and De Graaf et al. (2002, 2014). In the past decade, scholars working on degrowth further criticized overconsumption as part of the dominant growth paradigm (e.g., Kallis 2011, 2019). While timely and powerful, these examples

of the social and economic critique of consumption are distinct from the normative critiques that draw upon moral and ethical theories.

For decades, the Anglo-Saxon philosophical tradition avoided engaging directly with the topic of consumption. This reluctance may be attributed to the dominance of a neoliberal growth paradigm, which considers increasing consumption as an essential driver of prosperity and wellbeing. Moral dimensions of overconsumption by more affluent groups of people remained on the periphery of broader international distributive justice theories. With growing global interconnectedness, normative theories emerged to address how to share resources among countries in a fair manner (e.g., Singer 1972, 2011; Rawls 1999; Pogge 2002). With the rise of the climate change problem, research in climate ethics further developed perspectives on the sharing of limited resources (greenhouse gas emission reduction burdens) among countries (e.g., Shue 1993; Jamieson 1992; Caney 2005; Gardiner et al. 2010).

While these foundational ethical perspectives did not directly aim to reconfigure unsustainable consumption patterns, they proposed different principles and theories regarding the fair distribution of global resources. This body of literature, which mostly supports a sufficientarian perspective, i.e., that everyone should have resources and wellbeing above a certain threshold) could provide useful insights to inform reconfiguration of consumption patterns and flows among countries.

As the statistical data presented in the introduction clearly demonstrates, the main driving force behind unsustainable consumption patterns is overconsumption by the more affluent countries and groups of people who consume not only more than others but also more than they need and more than the planet can sustain. To date, there are very few ethical perspectives that explore the moral dimensions of excessive consumption by the rich, including moral permissibility of consuming above certain thresholds.

One account of justice that could inform further ethical inquiries regarding transforming unsustainable consumption patterns is a recent attempt to question moral permissibility of excessive wealth accumulation, a limitarian approach to upper levels of wealth distribution proposed by Robeyns (2017). Limitarianism, a non-ideal partial account of justice, states that being rich above a certain threshold is morally unacceptable. Robeyns argues that excessive accumulation of wealth by the rich undermines the value of democracy and prevents meeting the urgent needs of more vulnerable and poor populations by re-directing valuable resources (Robeyns 2017, p. 4). Extending limitarian logic to consumption, further research could justify why consumption above certain levels (by individuals or groups of people) is not

morally acceptable and support further debates on how to overcome the 'wicked' problem of excessive consumption.

To conclude this section, ethical perspectives on consumption that build on existing moral theories are limited—especially moral examinations of the upper tail of consumption distribution. Ethics is lagging behind the global political processes described in the following section, which places transforming unsustainable consumption and production patterns among the top development priorities.

3. Consumption and Sustainable Development Politics

Three decades ago, the Brundtland Report (1987) and Agenda 21 (1992) acknowledged unsustainable lifestyles and overconsumption by more affluent countries as one of the key drivers increasing pressure on global natural resources. Under the lead of the United Nations Environment Program, which facilitated the so-called Marrakesh process, at the Rio+20 conference in 2012, countries adopted a 10 Year Framework of Programs (10YFP) on sustainable consumption and production. The goal of 10YFP is to "develop, replicate and scale up sustainable consumption and production policies and initiatives at all levels" (United Nations Environment Program 2012).

The framework includes six program areas that focus on sustainable public procurement, consumer information, sustainable tourism, sustainable lifestyles and education, sustainable buildings and construction, and sustainable food systems (United Nations Environment Program 2012). 10YFP is the first political attempt of this scale to disentangle various strands and dimensions of consumption patterns. It sets priorities for political action, although its implementation at a national level is admittedly limited in some countries (Hobson 2013).

The inclusion of consumption and production patterns into the list of SGDs in 2015 signaled a positive dynamic and acknowledgement of the problem. However, looking closer at SDG 12, its scope and reach leave much to be desired. The goal has 11 targets and 13 indicators that include actions by governments (public procurement), companies (voluntary disclosure of sustainability information), and individuals (access to information about sustainable lifestyles). The goal also covers thematic areas of waste management, management of chemicals, fossil fuel subsidies, and tourism.

Despite addressing a seemingly wide range of activities, SDG 12 is vague or silent on a number of issues critical to transforming consumption patterns. In the most comprehensive critical account of SDG 12 to date, Bengtsson et al. (2018) argue that, overall, the goal tends to adopt a perspective that favors 'efficiency' rather than 'systemic' change: targets under SDG 12 serve to improve existing processes and

deliver technological fixes without addressing the root cause of the problem, which is overconsumption by more affluent countries and groups of people. Part of this bias is visible in the disproportionate emphasis on waste management. Three out of eleven targets focus on what is downstream of the economy and require no broad changes in production or consumption processes. Importantly, SDG 12 also contains no new political commitments in terms of consumption and upstream resource use or distribution (Bengtsson et al. 2018).

Other (limited) critiques of SDG 12 address the inadequacy of reporting mechanisms intended by the goal. Legal scholars argue that these mechanisms do not account for transboundary impacts of consumption in developed countries in the form of environmental harm in producing countries (Amos and Lydgate 2019). Moreover, civil society organizations criticized the goal for failing to acknowledge corporate dominance and capture that subverts meaningful transformation of consumption and production patterns (Ling 2016).

The most critical gap in SDG 12, however, is the lack of indication of upper limits to consumption, which the following section explores in more detail.

4. The Challenge of Setting Upper Consumption Limits

4.1. Different Interpretations of Limits and Wellbeing

Before moving on to discuss upper consumption limits, it is important to acknowledge that limits to consumption may be understood and interpreted differently. Spengler (2016) distinguishes between two types of sufficiency (or limits), delineating debates from practical environmental science on maxima consumption levels that are framed in terms of biophysical limits of the planet and discussions in abstract justice theory on minima standards of consumption that are required for a life of dignity. Spengler argues that for decades, these debates developed without interacting with each other—although they both address limits required by sustainability.

As Section 2 shows, existing ethical and normative perspectives on global resource distribution adopt exactly this minima-centered sufficentarian approach and do not engage actively with the maxima-related debates. Sustainable consumption levels, therefore, can be defined based on present perspectives as a range that would ensure that the poorest at least reach the minimum level of wellbeing according to agreed principles of justice, while the richest do not overconsume above the maximum levels determined by planetary boundaries.

Recently, several attempts have been made to bring together the upper and lower limits of resource consumption. Among them is the concept of 'doughnut economics',

which combines planetary boundaries with minimal standards outlining a safe and fair space for humanity to operate (Raworth 2017). Research demonstrates that no country today can be placed within the 'doughnut': countries with good social systems have bypassed environmental thresholds and countries with the least environmental impact score low on their social threshold indicators (O'Neill et al. 2018). Moreover, none of the four world largest economies (EU, USA, China, and India) operate within the planetary boundaries (Lucas et al. 2020).

Another recent attempt to reconcile minima and maxima consumption limits is the concept of 'consumption corridors' ((Di Giulio and Defila 2019; Defila and Di Giulio 2020; Fuchs 2020). The aim of consumption corridors is to reconfigure consumption within established minima and maxima in a way that would give individuals opportunities to live a 'good life'. This reconfiguration is complicated by the existing power dynamics and institutional bias towards growth (Di Giulio and Fuchs 2014) and the notion of individual freedom of choice and associated negative perceptions of upper limits (Fuchs 2020, p. 299).

Redefining wellbeing and the idea of 'good life' are central to reconfiguring consumption patterns within existing biophysical or socially constructed limits. Various research strands explore possible ways for this re-definition (Gough 2017; Kjell 2011; Hämäläinen 2014; Princen 2003, 2005; Steinberger and Timmons Roberts 2010; Schäpke and Rauschmayer 2014; Bottery 2012; Bocken and Short 2016; Vita et al. 2019; and Sahakian et al. 2019). Moreover, a growing body of degrowth literature criticizes growth as the ultimate indicator of prosperity and suggests ways to improve wellbeing (and limit overconsumption) by introducing basic income, environmental and consumption taxes, capping working hours, and exercising control over advertising (Kallis 2011; Kallis et al. 2014; Martínez-Alier et al. 2010).

In the presence of the rich literature that recognizes the need to formulate consumption limits and reconfigure consumption patterns by redefining what wellbeing means, it is surprising that Agenda 2030, the world's vision of a sustainable future, avoids any meaningful discussion of upper limits and makes no mention of consumption limits in SDG 12. The following sections explore why this may be the case.

4.2. From Planetary Boundaries to Upper Consumption Limits

Agenda 2030, in its Preamble, states that parties "are determined to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations" (United Nation

2015; Agenda 2030 Preamble, p. 5). Further, the document states that parties "envisage a world in which every country enjoys sustained, inclusive and sustainable economic growth and decent work for all ... [a] world in which consumption and production patterns and use of all natural resources—from air to land, from rivers, lakes and aquifers to oceans and seas—are sustainable" (United Nation 2015, p. 7).

While on the surface, Agenda 2030 incorporates intra- and intergenerational justice concerns and demonstrates transformative ambition, the impact of these statements becomes questionable without defining what 'sustainable' levels of consumption, production, natural resource use, or growth are. 'Sustainable' implies upper limits; and yet, neither Agenda 2030 nor SDG 12 discuss restrictions to consumption or growth, not to mention much needed reductions in material overconsumption in affluent countries. Rather, it appears the narrative aims to reconfigure consumption under the umbrella of 'inclusive growth', which implies that there is still ecological capacity for increase (Bengtsson et al. 2018).

Scientific evidence clearly signals that ecological capacity for increase does not exist. Since at least the 1970s it has become evident that growth contingent on the extraction of natural resources has limits (Meadows et al. 1972). Yet, forty years later, the UNEP flagship report on decoupling states that one of the major challenges to the decoupling strategy is "to convince policymakers (and the public) ... of the reality of physical limits to the quantity of natural resources available for human use and [limits to] the negative environmental impacts of economic activities" (UNEP 2011, p. xcv).

Over the past ten years, the concept of planetary boundaries has emerged and gained prominence in scientific and policy-making circles. The framework developed by an interdisciplinary group of Earth scientists in Stockholm presents indicators of biophysical limits of Earth in a number of critical areas, including climate change, biosphere integrity, land-system change, freshwater use, phosphorus and nitrogen cycles, ocean acidification, atmospheric aerosol loading, ozone depletion, and emission of novel entities (Rockström et al. 2009; Steffen et al. 2011). Planetary boundaries on biosphere integrity in terms of genetic diversity, biochemical flows in terms of disruption in nitrogen and phosphorus cycles have already been breached 'beyond [the] zone of uncertainty' posing high risk of systemic disruptions. Climate change and land-system change boundaries are 'in [the] zone of uncertainty' posing 'increasing risk' (Steffen et al. 2015). It is important to stress that planetary boundaries are breached as a result of anthropogenic activity, especially industrial and agricultural processes.

Defining sustainable levels of consumption is a complex undertaking which requires rigorous accounting (Wackernagel et al. 2017; Clift et al. 2017). However, research on planetary boundaries in the past few years has substantially advanced our understanding of how to translate the biophysical limits of the planet into more actionable targets and guidance that can be used by governments. Häyhä et al. (2016) propose a three-step framework that includes (1) formulating planetary boundaries as indicators to measure biophysical dimensions (in the form of environmental data and models); (2) translating biophysical limits into indicators to measure socio-economic dimensions (in the form of footprints); and (3) translating socio-economic limits into limits per country according to agreed-upon principles of distributive justice.

According to Häyhä et al. (2016), socio-economic dynamics are nothing but consumption and production patterns—the anthropogenic activities that drive overuse of resources, emissions of GHG, and generation of waste in different forms. These processes are subordinate to the global biophysical limits: if we want to have a livable planet in a Holocene-like state that can support flourishing human and non-human life, we need to limit our socio-economic activity accordingly by transforming unsustainable consumption and production patterns. Biophysical limits indicate how much we can consume (develop, grow), while principles of equity allocate how we should share available safe operating space.

Lucas et al. (2020) build on the framework of Häyhä et al. (2016) and calculate shares of global safe operating space for the four largest global economies (EU, USA, China, and India) based on different principles of distributive justice: grandfathering (current shares of environmental pressure), equal per capita shares, and ability to pay. The study scales down global limits for selected planetary boundaries to national resource budgets and demonstrates that future budgets vary significantly according to selected allocation principles. Allocation of future resource use budgets based on the grandfathering approach yields the most favorable outcomes for the European Union and the United States as it accommodates their existing high material footprint and unsustainable lifestyles as part of the current share of environmental pressure. For China and India, 'equal per capita' and 'ability to pay' approaches resulted in the highest future budgets. The study further suggests that global reduction efforts to stay within the safe operating space imply reductions of CO_2 emissions by 77% compared to the global ecological footprint of 2010 (a 77–101% decrease for the EU and a 77–120% decrease for the US).

The scale of reductions echoes the findings from another cornerstone study that translated the global temperature stabilization goal at 1.5 degrees Celsius from the Paris Agreement into consumption reduction targets for some countries

(Akenji et al. 2019). The *1.5 Degree Lifestyles Report* focused on lifestyle footprints and household consumption and excluded government consumption and capital formation, such as infrastructure. The findings indicate that changes in lifestyles (household consumption) are critical to achieving climate goals and that lifestyle footprints in developed countries need to be reduced 80–93% by 2050 (Akenji et al. 2019). Both Lucas et al. (2020) and Akenji et al. (2019) demonstrate that it is possible to translate global biophysical limits into indicators that formulate upper limits to consumption in terms of socio-economic activities.

While both studies rely heavily on existing climate change literature, including modeling pathways towards emission reductions, planetary boundaries research demonstrates that there are more Earth system processes than climate change that can lead to global environmental degradation. And we need to take all of them into account—especially boundaries that have already been surpassed—when calculating global development budgets within a safe global operating space.

4.3. The Challenge of Moral Corruption

If the goal of Agenda 2030 is, as stated, to protect our planet from degradation, then international sustainable development agreements should integrate scientific findings that indicate the biophysical limits of our planet and translate these upper limits into operational indicators that measure socio-economic activity in relation to environmental impacts. This section provides an ethical perspective on why this has not been done so far.

Since the Kyoto Protocol (1995), biophysical limits in terms of temperature increase and the magnitude of emission reductions have been apparent. Despite the clear biophysical limits imposed by climate change, there has been a continuous increase and acceleration of the industrial and agricultural activities, including resource extraction, that directly feed global GHG levels. It is evident that translating biophysical limits into limits to consumption as socio-economic activity is possible (Akenji et al. 2019; Lucas et al. 2020). The methodologies are admittedly complex and accounting is further complicated by fragmented availability of data for some control variables in scientific models; but, there is clearly a scientific possibility to calculate these upper limits.

Limits to consumption in the form of indicators capping socio-economic activity are absent from Agenda 2030 and the Sustainable Development Goals. Why, despite the strong connection between climate change, sustainable development, and consumption, have international political processes for thirty years evaded meaningful action to address overconsumption and transform unsustainable

consumption and production patterns? There is a problem of inaction, translation, and framing, which may be explained by what Gardiner (2004, 2011) calls 'moral corruption'.

Influenced by stagnating climate politics of the early 2000s, including the US decision not to ratify the Kyoto Protocol, Gardiner developed a comprehensive ethical framework to understand what obstructs action on climate change. He explained the ethical tragedy of climate change as a combination of three moral 'storms'. A global storm involves ethical issues linked to existing systemic global inequalities and institutional failure. An intergenerational storm concerns our treatment of future generations, including remote future generations in the context of the global crisis, with long-term consequences for humanity. A theoretical storm highlights the inadequacy of our existing moral and political theories to provide guidance on a problem of such temporal and spatial scales, and with such urgency as climate change. Gardiner argues that the three storms collide in a 'perfect moral storm' for humanity, which leads to moral corruption.

Unlike the more habitual use of the term 'corruption', moral corruption refers to the more subtle ways in which we think and speak about a problem that obscure the moral implications of our actions. According to Gardiner's interpretation, moral corruption is a way to avoid engaging with a morally difficult challenge via the following mechanisms: distraction, complacency, selective attention, unreasonable doubt, delusion, pandering, and hypocrisy. In climate change politics, examples of moral corruption can be seen in how some political actors emphasize considerations that make inaction excusable or even desirable, such as uncertainty or simplistic economic calculations with high discount rates at the expense of those considerations that impose an immediate and clear need for action, such as scientific consensus (Gardiner 2011, p. 45).

Gardiner's account of moral corruption may be useful in explaining the failure to translate biophysical limits of our planet into upper consumption limits. For decades, growth that relies on increasing consumption has been the beacon of development. Scientific consensus on the effects of climate change and on the necessary levels of GHG reduction has called for substantial and urgent changes to the unsustainable patterns of socio-economic activity: changes in how and how much we consume and produce. Policymakers were faced with a difficult challenge: temperature stabilization goals essentially implied not only slowing down but curtailing development and growth. Instead of translating biophysical limits into specific limits to socio-economic activity and addressing the problem of overconsumption, international negotiations continued to proceed, leaving references to biophysical limits (such as temperature

stabilization goals and GHG emission reduction) conveniently abstract and complex enough to translate into activities relevant to people's daily lives.

Framing of the problem and the solutions is of critical importance. Consider two scenarios in which governments inform their citizens about a global problem that requires urgent and concerted action by all stakeholders (the global climate crisis). In one, the government communicates that, to address the crisis, the global temperature increase may not bypass 1.5 degrees Celsius. To achieve this, developed countries should limit or reduce their emissions of GHGs. This framing uses abstract scientific data and biophysical indicators to communicate the problem and the solution but does not translate them into limits to the individual and collective socio-economic activity. This approach distracts attention from meaningful action and veils the urgency and profoundness of the required changes. For the daily lives of most people, temperature stabilization goals from the Paris Agreement are of no more relevance than information about the time it takes to get from Mars to Venus or the exact number of pi.

Imagine another scenario in which biophysical boundaries are clearly translated into consumption limits by country (provided stakeholders agree on the allocation principles among countries). In this scenario, every government can present their citizens with a national 'consumption' quota (as opposed to a 'GHG mission reduction' quota)—how much of the global resources the country and its citizens can consume per year, for example. Citizens would also know their individual 'consumption budgets' (agreed based on the principles of distributive justice to account for different kinds of inequalities), with clear information on the environmental and social impacts of different socio-economic activities.

Such framing clarifies possible ways forward, making obscure temperature stabilization goals or limits to reactive nitrogen emissions more relevant to peoples' daily lives. When limits to socio-economic activity are formulated, growth as a pathway for development becomes inadequate, obsolete and, perhaps, even morally unacceptable. This simplistic scenario comparison does not account for power dynamics, systemic inequalities, and the challenge of entitlement re-distribution, but it gives an idea of how different framings hinder or clarify action that, indeed, should be collective and urgent.

A double track of climate change politics and sustainable development politics over the course of the 1990s and 2000s indicates, in a way, separating discussions of biophysical limits (translated in climate politics as far as GHG emission reduction by country) from conversations on how to reframe practices that enable and encourage economic growth in a more 'sustainable' way. When the two tracks finally merged

in 2015 in the SDGs, the real, biophysical limits got lost behind the notion of 'inclusive' or 'green' growth that envisages both reductions in global emissions and continuous growth of the global economy. The idea of decoupling growth from the use of resources creates an illusion that there is a way to resolve the problem of overconsumption without limiting it.

It is precisely this illusion, the evasiveness, vagueness of language and definitions, that calls out moral corruption in Agenda 2030 and the SDGs. Leaving the term 'sustainable' conveniently undefined or putting the weight of transformation on decoupling strategies without acknowledging physical limits to resources—in Gardiner's terms, the parties to Agenda 2030 are 'passing the buck' of filling the blanks and dealing with the difficult moral choices onto future generations.

The harsh reality is that we need to drastically reduce consumption in more affluent countries and do so with upper limits but also lower limits of social standards in mind. The room for reconfiguring consumption and lifestyles is very limited. Reconfiguration is bound to cause major socio-economic transformation in developed countries. This is not desirable for the present generation and especially not for those who lead carbon-intensive lifestyles. Framing solutions to the global environmental crisis in terms of abstract biophysical limits confuses and deters action that would inevitably disrupt the existing socio-economic status quo. Failure to formulate consumption limits, therefore, is an ethical failure of our generation and its leaders that is caused by moral corruption.

5. Conclusions and Future Research

Moral corruption is only one of many ethical challenges associated with consumption, and moral and political philosophers could provide valuable contributions to the debate. Among the more obvious avenues for ethical inquiry, there is a need to develop allocation frameworks for safe operating space among and within countries. Such frameworks could build on climate ethics literature but design more appropriate allocation principles for different planetary boundaries (Lucas et al. 2020).

Ethicists could also contribute by further considering different agents of justice—not only states but corporations, groups of people, and individuals—to move the inquiry from the domain of international justice to the sphere of global justice. Distributive justice concerns emerge at every step of the way towards reconfiguring consumption: from decisions on how to divide the global resource 'pie' into country shares to allocating consumption budgets within states and among generations.

More broadly, we are lacking an ethical framework tailored to guide the transformation of consumption and production patterns towards sustainability. Such a framework would extend beyond allocation approaches and principles of distribution to provide a comprehensive justice account of consumption. As a starting point, such an account could question the moral permissibility of overconsumption. Failure to establish, clearly and unequivocally, that overconsumption is morally wrong fuels moral corruption and defers much needed action.

Conflicts of Interest: The author declares no conflicts of interest.

References

Akenji, Lewis, Michael Lettenmeier, Ryu Koide, Viivi Toivio, and Aryanie Amellina. 2019. *1.5-Degree Lifestyles: Targets and Options for Reducing Lifestyle Carbon Footprints*. Hayama: Institute for Global Environmental Strategies, Aalto: Aalto University, D-Mat Ltd.

Alexander, Samuel, Jonathan Rutherford, and Josh Floyd. 2017. *A Critique of the Decoupling Strategy: A Limits to Growth Perspective*. Simplicity Institute.

Amos, Rob, and Emily Lydgate. 2019. Trade, transboundary impacts and the implementation of SDG 12. *Sustainability Science*, 1–12. [CrossRef]

Amsler, Sarah S. 2009. Embracing the politics of ambiguity: Towards a normative theory of "sustainability". *Capitalism Nature Socialism* 20: 111–25. [CrossRef]

Barnett, Clive, Paul Cloke, Nick Clarke, and Alice Malpass. 2005. Consuming ethics: Articulating the subjects and spaces of ethical consumption. *Antipode* 37: 23–45. [CrossRef]

Baudrillard, Jean. 1970. *The Consumer Society*. Paris: Gallimard. First published 1998.

Belk, Russell, Timothy Devinney, and Giana Eckhardt. 2005. Consumer ethics across cultures. *Consumption Markets & Culture* 8: 275–89.

Bengtsson, Magnus, Eva Alfredsson, Maurie Cohen, Sylvia Lorek, and Patrick Schroeder. 2018. Transforming systems of consumption and production for achieving the sustainable development goals: Moving beyond efficiency. *Sustainability Science* 13: 1533–47. [CrossRef] [PubMed]

Bocken, Nancy M. P., and Samuel W. Short. 2016. Towards a sufficiency-driven business model: Experiences and opportunities. *Environmental Innovation and Societal Transitions* 18: 41–61. [CrossRef]

Bottery, Mike. 2012. Leadership, the Logic of Sufficiency and the Sustainability of Education. *Educational Management Administration & Leadership* 40: 449–63.

Bourdieu, Pierre. 1984. *Distinction: A Social Critique of the Judgement of Taste*. Cambridge: Harvard University Press.

Brinkmann, Johannes, and Ken Peattle. 2008. Consumer ethics research: Reframing the debate about consumption for good. *EJBO-Electronic Journal of Business Ethics and Organization Studies* 13: 22–31.

Caney, Simon. 2005. Cosmopolitan justice, responsibility, and global climate change. *Leiden Journal of International Law* 18: 747–75. [CrossRef]

Clift, Roland, Sarah Sim, Henry King, Jonathan L. Chenoweth, Ian Christie, Julie Clavreul, Carina Mueller, Leo Posthuma, Anne-Marie Boulay, Rebecca Chaplin-Kramer, and et al. 2017. The challenges of applying planetary boundaries as a basis for strategic decision-making in companies with global supply chains. *Sustainability* 9: 279. [CrossRef]

De Graaf, John, David Wann, and Thomas H. Naylor. 2002. Affluenza: The all-consuming epidemic. *Environmental Management and Health* 13: 224. [CrossRef]

De Graaf, John, David Wann, and Thomas H. Naylor. 2014. *Affluenza: How Overconsumption Is Killing Us—And How to Fight Back*. San Francisco: Berrett-Koehler Publishers.

Defila, Rico, and Antonietta Di Giulio. 2020. The Concept of "Consumption Corridors" Meets Society: How an Idea for Fundamental Changes in Consumption is Received. *Journal of Consumer Policy*, 1–30. [CrossRef]

Di Giulio, Antonietta, and Rico Defila. 2019. The Good life and Protected Needs. In *The Routledge Handbook of Global Sustainability Governance*. Edited by Agni Kalfagianni, Doris Fuchs and Hayden und Anders. London: Routledge.

Di Giulio, Antonietta, and Doris Fuchs. 2014. Sustainable consumption corridors: Concept, objections, and responses. *GAIA-Ecological Perspectives for Science and Society* 23: 184–92. [CrossRef]

Eckhardt, Giana M., Russell Belk, and Timothy M. Devinney. 2010. Why don't consumers consume ethically? *Journal of Consumer Behaviour* 9: 426–36. [CrossRef]

Fletcher, Robert, and Crelis Rammelt. 2017. Decoupling: A key fantasy of the post-2015 sustainable development agenda. *Globalizations* 14: 450–67. [CrossRef]

Fuchs, Doris. 2020. Living well within limits: The vision of consumption corridors. In *Routledge Handbook of Global Sustainability Governance*. London: Routledge, pp. 296–307.

Gardiner, Stephen M. 2004. Ethics and global climate change. *Ethics* 114: 555–600. [CrossRef]

Gardiner, Stephen M. 2011. *A Perfect Moral Storm: The Ethical Tragedy of Climate Change*. Oxford: Oxford University Press.

Gardiner, Stephen M., Simon Caney, Dale Jamieson, and Henry Shue, eds. 2010. *Climate Ethics: Essential Readings*. Oxford: Oxford University Press.

Gough, Ian. 2017. *Heat, Greed and Human Need: Climate Change, Capitalism and Sustainable Wellbeing*. Cheltenham: Edward Elgar Publishing.

Griessler, Erich, and Beate Littig. 2005. Social sustainability: A catchword between political pragmatism and social theory. *International Journal for Sustainable Development* 8: 65–79.

Hall, Sarah Marie. 2011. Exploring the 'ethical everyday': An ethnography of the ethics of family consumption. *Geoforum* 42: 627–37. [CrossRef]

Hämäläinen, Timo J. 2014. In search of coherence: Sketching a theory of sustainable well-being. In *Well-Being and Beyond*. Cheltenham: Edward Elgar Publishing.

Häyhä, Tiina, Paul L. Lucas, Detlef P. van Vuuren, Sarah E. Cornell, and Holger Hoff. 2016. From Planetary Boundaries to national fair shares of the global safe operating space—How can the scales be bridged? *Global Environmental Change* 40: 60–72. [CrossRef]

Hobson, Kersty. 2013. 'Weak' or 'Strong' Sustainable Consumption? Efficiency, Degrowth, and the 10 Year Framework of Programmes. *Environment and Planning C: Government and Policy* 31: 1082–98. [CrossRef]

Jacob, Merle. 1994. Toward a methodological critique of sustainable development. *The Journal of Developing Areas* 28: 37–252.

Jamieson, Dale. 1992. Ethics, public policy, and global warming. *Global Bioethics* 5: 31–42. [CrossRef]

Kallis, Giorgos. 2011. In defence of degrowth. *Ecological Economics* 70: 873–80. [CrossRef]

Kallis, Giorgos. 2019. *Limits: Why Malthus Was Wrong and Why Environmentalists should Care*. Redwood City: Stanford University Press.

Kallis, Giorgos, Federico Demaria, and Giacomo D'Alisa. 2014. Introduction: Degrowth. In *Degrowth*. Abingdon-on-Thames: Routledge, pp. 29–46.

Kjell, Oscar N. E. 2011. Sustainable well-being: A potential synergy between sustainability and well-being research. *Review of General Psychology* 15: 255–66. [CrossRef]

Klimková, Andrea. 2017. *Deconstruction and Evaluation of Agenda 2030 and Local Agenda 21 in the Context of Applied Ethics*. Zeszyty Naukowe: Organizacja i Zarządzanie/ Politechnika Śląska.

Ling, Chee Y. 2016. Corporate capture subverts production and consumption transformation. In *Spotlight on Sustainable Development 2016: Report of the Reflection Group on the 2030 Agenda for Sustainable Development*. Quezon City: Social Watch.

Lucas, Paul L., Harry C. Wilting, Andries F. Hof, and Detlef P. van Vuuren. 2020. Allocating planetary boundaries to large economies: Distributional consequences of alternative perspectives on distributive fairness. *Global Environmental Change* 60: 102017. [CrossRef]

Martínez-Alier, Joan, Unai Pascual, Franck-Dominique Vivien, and Edwin Zaccai. 2010. Sustainable de-growth: Mapping the context, criticisms and future prospects of an emergent paradigm. *Ecological Economics* 69: 1741–47. [CrossRef]

Meadows, Donella H., Dennis L. Meadows, Jorgen Randers, and William W. Behrens. 1972. The limits to growth. *New York* 102: 27.

O'Neill, Daniel W., Andrew L. Fanning, William F. Lamb, and Julia K. Steinberger. 2018. A good life for all within planetary boundaries. *Nature Sustainability* 1: 88–95. [CrossRef]

Pogge, Thomas. 2002. *World Poverty and Human Rights*. Cambridge: Polity Press.

Princen, Thomas. 2003. Principles for sustainability: From cooperation and efficiency to sufficiency. *Global Environmental Politics* 3: 33–50. [CrossRef]

Princen, Thomas. 2005. *The Logic of Sufficiency*. Cambridge: MIT Press, vol. 30.

Rawls, John. 1999. *The Law of Peoples: With, the Idea Of Public Reason Revisited*. Cambridge: Harvard University Press.

Raworth, Kate. 2017. *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*. White River Junction: Chelsea Green Publishing.

Robeyns, Ingrid. 2017. Having too much. *Nomos* 58: 1–44.

Rockström, Johan, Will Steffen, Kevin Noone, Åsa Persson, F. Stuart Chapin III, Eric Lambin, Timothy M. Lenton, Marten Scheffer, Carl Folke, Hans Joachim Schellnhuber, and et al. 2009. Planetary boundaries: Exploring the safe operating space for humanity. *Ecology and Society* 14: 33. [CrossRef]

Sahakian, Marlyne, Patrick Naef, Charlotte Jensen, Gary Goggins, and Frances Fahy. 2019. Challenging conventions towards energy sufficiency: Ruptures in laundry and heating routines in Europe. Paper presented at the ECEEE 2019, Presqu'île de Giens, France, June 3–8. ECEEE 2019 Summer Study.

Schäpke, Niko, and Felix Rauschmayer. 2014. Going beyond efficiency: Including altruistic motives in behavioral models for sustainability transitions to address sufficiency. *Sustainability: Science, Practice and Policy* 10: 29–44. [CrossRef]

Schor, Juliet. 1991. *The Overworked American: The unexpected Decline of Leisure*. New York: Basic Books.

Schor, Juliet. 1999. *The Overspent American*. New York: Harper Perennial.

Shaw, Deirdre, and Terry Newholm. 2002. Voluntary simplicity and the ethics of consumption. *Psychology & Marketing* 19: 167–85.

Shue, Henry. 1993. Subsistence emissions and luxury emissions. *Law & Policy* 15: 39–60.

Singer, Peter. 1972. Famine, Affluence and Morality. *Philosophy and Public Affairs* 1: 229–43.

Singer, Peter. 2011. *The Expanding Circle: Ethics, Evolution, and Moral Progress*. Princeton: Princeton University Press.

Spengler, Laura. 2016. Two types of 'enough': Sufficiency as minimum and maximum. *Environmental Politics* 25: 921–40. [CrossRef]

Steffen, Will L., Johan Rockström, and Robert Costanza. 2011. How defining planetary boundaries can transform our approach to growth. *Solutions: For A Sustainable & Desirable Future* 2: 59–65.

Steffen, Will, Katherine Richardson, Johan Rockström, Sarah E. Cornell, Ingo Fetzer, Elena M. Bennett, Reinette Biggs, Stephen R. Carpenter, Wim de Vries, Cynthia A de Wit, and et al. 2015. Planetary boundaries: Guiding human development on a changing planet. *Science* 347: 1259855. [CrossRef]

Steinberger, Julia K., and J. Timmons Roberts. 2010. From constraint to sufficiency: The decoupling of energy and carbon from human needs, 1975–2005. *Ecological Economics* 70: 425–33. [CrossRef]

Trentmann, Frank. 2016. *The Empire of Things: How We Became a World of Consumers, from the Fifteenth Century to the Twenty-First*. Westminster: Allen Lane Publishing, p. 880.

UNEP. 2011. *Decoupling Natural Resource Use and Environmental Impacts from Economic Growth*. A Report of the Working Group on Decoupling to the International Resource Panel. Athens: UNEP.

United Nation. 2015. *Transforming Our World: The 2030 Agenda for Sustainable Development*. New York: United Nations.

United Nation. 2019. *Special Edition: Progress Towards the Sustainable Development Goals*. Report of the Secretary-General. New York: United Nation, May 8.

United Nations Environment Program. 2012. 10 Year Framework of Programs on Sustainable Consumption and Production Patterns. Available online: https://www.unenvironment.org/explore-topics/resource-efficiency/what-we-do/one-planet-network/10yfp-10-year-framework-programmes (accessed on 10 April 2020).

United Nations Statistics Division. 2018. High-Level Political Forum Goals in Focus. Goal 12: Ensure Sustainable Consumption and Production Patterns. Available online: https://unstats.un.org/sdgs/report/2018/goal-12/ (accessed on 10 April 2020).

Vasconcellos Oliveira, Rita. 2018. Back to the Future: The potential of intergenerational justice for the achievement of the sustainable development goals. *Sustainability* 10: 427. [CrossRef]

Veblen, Thornstein. 1925. *Theory of the Leisure Class*. London: Unwin. First Published 1899.

Vita, Gibran, Johan R. Lundström, Edgar G. Hertwich, Jaco Quist, Diana Ivanova, Konstantin Stadler, and Richard Wood. 2019. The Environmental Impact of Green Consumption and Sufficiency Lifestyles Scenarios in Europe: Connecting Local Sustainability Visions to Global Consequences. *Ecological Economics* 164: 106322. [CrossRef]

Wackernagel, Mathis, Laurel Hanscom, and David Lin. 2017. Making the sustainable development goals consistent with sustainability. *Frontiers in Energy Research* 5: 18. [CrossRef]

World Bank. 2020. Population Data. Available online: https://data.worldbank.org/indicator/sp.pop.totl (accessed on 10 April 2020).