Annual Review of Environment and Resources

Sustainable Living: Bridging the North-South Divide in Lifestyles and Consumption Debates

Bronwyn Hayward1,2 and Joyashree Roy3,4

1Department of Political Science and International Relations, University of Canterbury, Christchurch 8140, New Zealand; email: bronwyn.hayward@canterbury.ac.nz
2Centre for Understanding Sustainable Prosperity, University of Surrey, Guildford GU2 7XH, United Kingdom
3Asian Institute of Technology, Pathum Thani 12120, Thailand; email: joyashree@ait.asia, joyashreeju@gmail.com
4Global Change Programme, Jadavpur University, Kolkata, West Bengal 700032, India

Keywords
sustainable consumption, sustainable living, just transition, climate justice, just consumption, well-being

Abstract
This article presents a critical assessment of the literature on sustainable consumption in the global North and South, in the context of accelerated and megascale transitions that are needed across all human activities, in ways that “leave no one behind,” as envisaged in the United Nations Sustainable Development Goals (SDGs). It challenges two dominant, related research foci: an emphasis on the individual and individual aspirations of the good life, and the policy incrementalism of rational, ecological modernization. Although conceding individuals must act consciously to advance sustainability, nuanced interpretations of collective sustainable living rarely feature in mainstream research. Discussion highlights values of extended family, tribe and community solidarity, and human and nonhuman interrelationships for harmonious, peaceful, spiritual, and material coexistence. Concepts such as Abîma (India), Buen Vivir (South America), Ubuntu (Africa), Hauora (New Zealand), or Shiawase and Ikigai (Japan), for example, can enrich understandings of sustainable living as long-term collective action for sustainable development and reducing climate change.
### INTRODUCTION: WHY A NORTH-SOUTH REVIEW OF SUSTAINABLE CONSUMPTION?

Multiple binary characterizations such as north-south, rich-poor, developed-developing, low-high income, Annex I and Non Annex I countries are used in a variety of research contexts, for example, when analyzing international negotiations, or framing international policy. A north-south binary in particular has been used in multiple ways in political economy literature (1), trade literature (2), and geography (3), especially in discourses of globalization, colonization, and assessments of interconnectedness. A binary also informs much climate debate; for example, Annex I and Non Annex I are specific political binaries that have informed the territorial supply side of greenhouse gas emission inventory reporting, and climate negotiations about burden sharing, common but differentiated responsibility sharing, and technology transfer. The use of north-south binaries has significant challenges and the use of a simple binary of Annex I and Non Annex I has also been contested in international climate negotiations. Critics argue that deploying Annex I and Non Annex I binaries fails to account for emissions from actions that empower the poor in both categories and fails to capture how poverty is multidimensional and not just categorized by low income (4).

Within both Annex I and Non Annex I countries, there are also communities threatened with the possibility of declining investment and loss of jobs and economic returns, who need support for just transitions that cannot be achieved by technological solutions alone (5–7). There is also significant debate around how we can reduce the lifestyle emissions of conspicuous high-carbon consumers in all regions, while allowing space for survival emissions for the poor (8).

These debates underscore why a more nuanced categorization of countries is important for scientific inquiry, climate action, and international negotiations. The use of binaries has led to much confusion and needs some deeper reflection; however, that is not the goal of this article. Although there are many similarities between the impacts of high consumers from various geographic regions, there are also sufficient differences between developed and developing economy experiences for a north-south distinction to retain analytic power. In this discussion, we use the terms global South and North, not as formal geographic regions, but following Bell (9) and Naguib-Pellow (10), we use the term “global South” as a “social designation” for politically, environmentally, and economically vulnerable communities that include socioeconomically underprivileged communities in rich nation contexts, while similarly acknowledging at times “global North” may include highly privileged communities in poor nation contexts (10).
Past Intergovernmental Panel on Climate Change (IPCC) reports have discussed the importance of sustainable consumption in the context of low-carbon lifestyles that reduce use of material resources while supporting human well-being, but have offered little detail about how such approaches can be achieved at scale (11; 12, p. 12). The Global Energy Assessment also acknowledged the crucial importance of changes to lifestyles and consumption patterns and lamented the lack of progress to date (13). The upcoming IPCC Sixth Assessment Report will feature a chapter on demand, services, and social aspects of mitigation that examines how lifestyles, sustainable consumption, and demand-side solutions can contribute to new solution pathways for far-reaching transformation (14).

This critical assessment of the literature provides a typology for understanding how lifestyles and sustainable consumption have been studied in the comparative context of global North and South and the implications of these approaches. We argue that the research lens of the global North, and the policy approaches it informs, needs to be widened beyond a predominant emphasis on rational individual behaviors, and individual material accumulation at point of use, to consider the transformative perspectives inherent in a variety of perspectives of collective sustainable living (15, 16). We also argue that taking a global North and South comparative approach highlights an emerging shift in recent writing toward inclusive, just consumption for strong sustainability. This focus on just consumption—a concept that encompasses both sufficiency (just enough) and justice (17)—together with richer understandings of collective, sustainable living (18), can offer us inspiring visions to motivate action beyond the rhetoric of green growth, consumer education, and the eco-efficiency often associated with weak sustainable consumption. This research suggests that values of generosity, interconnection, and harmony are more likely to mobilize and support collective action for transformative changes in ways that advance human dignity, minimize lock-in effects, and reduce consumption of material resources (15, 19). This intersection of literatures offers a potentially fruitful site for new interdisciplinary perspectives to bridge the research divide between the global North and South (19, 20).

SUSTAINABLE CONSUMPTION: FRAMING IN INTERNATIONAL AGREEMENTS

There are competing discourses about sustainable consumption and ideal ways of living. Before reviewing these, we briefly consider how perspectives of the global North have influenced international framing of the concept of sustainable consumption. In 1992, the United Nations Earth Summit placed sustainable consumption firmly on the international agenda when it noted a “causal” link between wasteful and inefficient postindustrial consumption patterns and environmental degradation (21). The Rio Declaration of the Earth Summit (the United Nations Conference on Environment and Development) stated in Principle 8 that, “to achieve sustainable development and a higher quality of life for all people, States should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies” (22).

However, this promising emphasis on reducing consumption in developed countries was not maintained (23). Global negotiations about sustainable consumption quickly became entwined with debate about population growth in ways that enabled governments of the global North to avoid serious scrutiny of their own responsibilities for increasing production and consumption “for several decades” (24, pp. 1, 9). As a result, there have been few constructive international policies aimed at reducing consumption levels in high-income societies (25). Furthermore, the framing of sustainable consumption shifted over time, from a responsibility of producers for the use of resources in production and manufacturing and sales to a responsibility of individual consumers (26) to respond appropriately to market signals (27).
In 1995, Norway hosted a Symposium and Ministerial roundtable on sustainable consumption in Oslo. Those meetings acknowledged the need to use goods and service in ways, “that respond to basic needs and bring a better quality of life, while minimizing the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardize the needs of future generations” (28, p. 235). However, there was significant ambiguity in the Oslo documents (29), which reflected an ongoing tension between weak and strong perspectives of sustainable consumption (23). The term “weak sustainable consumption and production” (16, 24) has been increasingly associated with the policy approach of “ecological modernization” (30–32). Viewed from this perspective, the focus of ecological modernization is on sustaining economic growth using efficient consumption and production techniques including, for example, technological improvements, product design, decoupling of energy use, and targeted consumer behavior changes (33, 34). Critics of ecological modernism contrast this approach with “strong sustainable production and consumption,” where consumption is significantly reduced in a wider context of reducing overall rates of material growth and ecological degradation (16, 24, 35, 36). Since the 1992 Earth Summit, many analysts have noted that the policies of weak sustainable consumption have received “some attention” in international agreements but policies that would advance strong sustainable consumption are “…almost entirely absent from political debates,” existing only in the “marginal sectors of society and research, or as a symbolic reminder in official documents” (23, p. 263).

In his retrospective review of sustainable consumption, Tim Jackson (37) noted that there has been a growing recognition in the global North of the importance of sustainable consumption and production in advancing sustainable development, since the turn of the millennium, particularly in the United Kingdom. While the United Kingdom and the Nordic states have shown significant leadership in sustainable consumption, there have been other promising multilateral, bilateral, and unilateral efforts (38). The Global Energy Assessment (13) knowledge module on lifestyles, for example, highlighted community-scale efforts such as ecological, carbon, and energy footprint reductions, a global commons view, and “sufficiency” norms (17). The sufficiency principle in particular addresses the level of consumption within planetary limits in ways that move beyond reliance on risky or unproven technology and yet remain sensitive to social well-being needs (35).

A variety of new international indicators have also been developed for measuring social progress in association with levels of consumption; these include the Index of Sustainable Economic Welfare (ISEW), the Genuine Progress Indicator (GPI), Sustainable Net Benefit Index (SNBI), the Genuine Happiness Indicator (GHI), and the United Nations Human Development Index (39, 40). These comparative indices of consumption have been promoted as measures of well-being or happiness, and their use has contributed to understanding that in richer communities, where basic necessities are met, there may only be weak correlations between income and well-being beyond a certain level of wealth (39–41). Despite these international insights, mainstream perspectives on sustainable consumption have largely been resistant to calls for reduction of consumption, and consumption rates have continued to rise globally (42, 43).

A promising shift in the international framework for addressing the relationships between sustainable consumption and lifestyles occurred in 2015 when the United Nations agreed on Sustainable Development Goal (SDG) 12 (to ensure Sustainable Consumption and Production). The wider aim of the global goals for sustainable development has been to address more broadly the criticism of previous development agendas that they had failed to “fully integrate the key dimension of sustainable consumption and production, treating sustainable consumption and reduction as an add-on rather than a crucial element of achieving a lower carbon more sustainable future” (44). The SDGs have also been informed by grassroots efforts to achieve more sustainable consumption and production and a growing recognition of the value of setting intermediate goals to long-term sustainability (45).
Although increased international attention on sustainable consumption and production patterns and related indicators is welcome, the implementation of SDG 12 so far has been less encouraging. The focus of the SDGs has largely reinforced a view that consumption should be treated as the outcome of individual choices and behaviors and best addressed, for example, by consumer education rather than production or distribution regulation (46). Critics of SDG approaches to sustainable consumption have argued that business interests have watered down the implementation of SDG 12, drawing the focus away from reducing consumption levels (47). Similarly, other critics argue that the SDGs implicitly emphasize the impact of an “expanding middle class” in the newly emerging economies of the global South and the threat their consumption poses to sustainability. As a result, the SDGs are weighted toward “support” for “developing countries” to strengthen “technological capacity” for sustainable consumption via promotion of “sustainable public procurement practices” and “consumer information and awareness campaigns,” rather than regulation of production and consumption in both the global North and South (47; see also 48, 49).

In 2015, at the time the SDGs were agreed on, the Paris Climate Agreement was also signed. Both the Paris Agreement and the IPCC’s subsequent special report on Global Warming of 1.5°C highlighted the need for far-reaching and rapid transformation of patterns of consumption. For example, the P1 modeled pathway in the IPCC special report is concerned with ways that limit global warming to 1.5°C above preindustrial level without any overshoot. This pathway has highlighted tensions between the weak sustainable consumption assumptions embedded in approaches of technology fixes, efficient use of resources, and individual behavior change and the more far-reaching transformations advocated by strong sustainable consumption voices, calling for reductions in the total level of energy consumption and production of goods and services (50, p. 16). As Future Earth noted, consumption and associated production are already among the key drivers of emissions, especially among industrialized economies; however, there is no indication that we can achieve the scale of emission reductions needed through energy efficiency, technology, and behavior change alone (51). Moreover, there is concern that the investments required for more sustainable infrastructure in development will “use up a significant share” of any 2°Celsius carbon budget, while efforts to raise the standard of living of the world’s poor will also consume a major portion of the available carbon allowance (51).

The recent IPCC special report on global warming of 1.5°C introduced literature from a global South view that highlights per capita consumption comparisons and wasteful consumption (52, 53). Although there is still insufficient research reported from the global South, there are new efforts to bridge deepening divides between the global North and South about sustainable consumption (54). There is tension, for example, between those who argue that greater responsibility rests with high-income communities for reducing consumption and embedded emissions, and those who argue that inaction has also prevailed for a long time in the global South, due to inequality, corruption in governance, and an imperative to “develop now, clean up later” (55, 56).

In this article, we argue that a just-consumption approach, alongside emerging ideas of sustainable living informed by values, has much potential to help bridge the division in consumption approaches between the global North and South as well as help unlock the collective social agency of consumers, governments, and businesses to support far-reaching systemic transformation (56; 57; 58, see also the works of Amartya Sen cited in 59; 60).

INTRODUCING A NORTH-SOUTH TYPOLOGY OF SUSTAINABLE CONSUMPTION

Given the contested framing of sustainable consumption in international governance, and the need to scale up rapid and far-reaching changes, this critical assessment of the literature offers a
research typology as a tool for understanding how lifestyles and consumption have been studied in the global North and South and the implications for these approaches.

The typology identifies the following four broad approaches to sustainable consumption research:

- **Rational consumption approaches**
- **Social consumption approaches**
- **Degrowth approaches to consumption**
- **Just consumption and well living approaches**

Although the first two approaches are more commonly associated with the global North, the latter two resonate more easily with the scholarship and ideas being debated in the global South; however, none alone is sufficient for understanding the far-reaching change that is needed to achieve a just and rapid transformation to a low-energy, low-carbon, and low-resource use world. The global North continues to focus largely on rational, individualist approaches and on culturally bound social practice perspectives, whereas new analysis emerging in the South offers insights into how to reduce consumption justly through actions of collective solidarity informed by values. In the context of a historical legacy of postindustrialization, colonialism, and growing global inequality, these four broad approaches are not mutually exclusive, however (61). The schools of thought they draw from may have differing assumptions about what the problem of sustainable consumption is exactly and how it should be addressed, but these approaches are also constantly evolving.

Recent literature reviews have noted the need for cross-cultural as well as cross-disciplinary discussion in sustainable consumption (55, 62, 63). The typology offered here is based on a discussion of the underlying values-based assumptions, which have informed recent literature on sustainable consumption. These assumptions, in turn, reflect the evolution of ideas in diverse fields including sociology, ethics, political science, and economics alongside community knowledge in both the global North and South.

**RATIONAL CONSUMPTION APPROACHES**

Many reviews have noted the way a focus on the rational consumer has dominated much sustainable consumption research in the global North (55, 56). This approach includes attempts to understand how individuals and businesses can be encouraged, nudged, and incentivized to use products and services efficiently (64–66). From this perspective, sustainable consumption research usually begins with the individual or business as the unit of analysis, and these agents are assumed to be rational and utility maximizing. In line with the tradition of ecological modernization, the rational consumption approach emphasizes efficiency of resource use in production and consumption, the role of technological innovation in influencing behavior change, and supply change and lifecycle management of products alongside consumer education (67, 68).

Over time, the assumptions of ecological modernization have influenced research agendas to focus attention on ways individual consumers can be encouraged to use products and services more efficiently rather than reduce consumption per se (56). Changing individual choices and actions is assumed to result from responses to market signals that incentivize sustainable, rational behaviors (58). This approach has also informed a burgeoning literature on the “value-action gap” and a synergy between economists and psychological research to understand choice behavior (69). For example, research has focused on behavior transformation, social psychology, innovative technology, or integrated policy approaches that encourage efficient use of resources, including nexus approaches to manage the interactions of production and consumption, particularly in the
context of planning for water, food, public health or public transport, housing, and built urban environments (70, 71).

Implicit to rational, ecological modernization approaches to sustainable consumption is a core concern to maintain economic growth by using resources sustainably and efficiently. The UN Environment’s Consumption and Production Unit, for example, has argued that, “policy makers are faced with the challenge to advance sustainability agendas while simultaneously encouraging economic growth” (70, p. XV). Although there are many attempts within the approach to “green” growth, growth itself is assumed as a given.

In addition to education, this rational approach to sustainable consumption has informed a body of literature that advocates methods of decoupling to increase efficiency of resource use. Decoupling aims to reduce negative environmental or social impacts of processes of both consumption and production, via product dematerialization, decarbonization, energy efficiency, or intensifying production (28). However, both relative decoupling and absolute decoupling literatures largely approach decoupling from a technology-centric perspective; there is little reference to changes that can be made through the interaction of users and their wider social world (72). Many studies also aim to reduce and reuse resources, often styled as a “circular economy” of production and consumption (73). The concept of a circular economy is intended to reduce consumption by promoting resource efficiency and reducing waste, a focus that resonates with a more far-reaching “systems” approach to change; however, the rational objectives and incremental approach to implementing the ideas of circular economics lend themselves to the “reformist” logic of behavioral economics (74).

Ecological modernization has informed a myriad of technological and behavioral change innovations from reducing meat consumption and use of fossil fuel–based privatized transport, or encouraging greater reuse and sharing of resources, products, and services (75, 76). Despite these innovations, critics [including O’Rouke & Lollo (28), previously in this journal; see also Couturier & Thaimai’s (77) critiques] argue that there is little evidence to show these technical reforms have had any significant impact on reducing overall patterns of resource consumption. The rebound effect of more efficiency gains in one sector or area can incentivize unintended consequences of greater spending and resource use in other ways. For example, national rates of consumption have extended beyond the limits of the planet against a background of a growing disconnection between material and social well-being in the global North (58).

There is also increasing recognition in the literature that individual and business behavior is deeply embedded in social norms and influenced by individual consumer habits and wider structures of institutional power, regulation, infrastructure, economic inequality, cultural expectations, and collective social practices that interact to constrain, and in many cases lock in, patterns of unsustainable consumption (78). As a result, from the late twentieth century and early twenty-first century, the literature of sustainable consumption has taken an increasingly social turn, as research, in the global North in particular, has sought to understand the social, economic, and political structures and relationships, in which consumption behavior and social practices are shaped and influenced.

**SOCIAL CONSUMPTION APPROACHES**

Socially embedded perspectives on sustainable consumption seek to understand how everyday life, actions, practices, relationships, and interactions evolve and change in wider social and economic systems. This approach is influenced by research in sociology, anthropology, and technology studies, and the literature from a social consumption perspective has also been called a “reconfigurable” approach, because it seeks to understand and rethink why and how consumption is
This social turn in sustainable consumption literature focuses not only on understanding what individuals do but also on analyzing why and how individuals, firms, policymakers, consumers, public opinion, and nongovernmental actors both influence and in turn are influenced by social and political structures and the diffusion of technological innovation.

The social turn in consumer studies also emphasizes the many complex ways in which consumption can be understood as embedded in interconnected actions and relationships between individuals as they experience and make sense of their world. For example, social approaches to consumption examine how individuals and groups perceive well-being, how consumption patterns change with lifestyle change, and how social norms and cultural values can influence consumer aspirations and actions (30, 79–81). If the rational approach to consumer behavior change examines what people do, the social turn seeks to understand why, by examining the underlying motivations, values, and social processes that influence consumption. Advocates of the social approach to sustainable consumption argue, for example, that changes to consumption patterns are most effective and best understood when they are examined in the context of wider social and economic systems, such as changes in life course, the birth of a new baby, or retirement from work (82).

A particular focus within the broad social approach examines consumption “practices,” (72, p. 688) that is, the study of consumption routines as these occur in “distinct domains of social life,” to identify opportunities to reduce consumption and lessen environmental impact through the action of “knowledgeable and capable agents who make use of the possibilities offered to them in the context of specific systems of provision” (72, p. 688; see also 83–84). The social practice approach to research focuses attention on the habits and “…transformation of sociotechnical systems and daily life practices in domains such as mobility, food, and energy provision and use” (78). Scholars of social practice research tradition argue their focus matters because “…mobility (automobile and air transport), food (meat and dairy), and domestic energy consumption (heating/cooling, lighting, washing, showering, appliances) account for 70–80% of lifecycle impacts in industrialized countries” (26). Practices are often unconscious, everyday actions and habits. Social practice research sheds light on how habits become resistant to change or how, despite these constraints, radical innovations can emerge in “niche,” or “protected space at the edges or outside of existing arrangements” so new ideas and novel approaches can gain social acceptance and legitimacy without government policy or regulation (26).

Although the social turn has offered new insights into the context of sustainable consumption, there are significant criticisms. Socially embedded perspectives run the risk of depoliticizing their accounts of how change happens. For example, failing to attend to the unintended, unjust political consequences of new practices including popular peer-to-peer sharing schemes that can deepen social inequality (85). Moreover, critics (85) argue that the prevailing narratives in social consumption research are dominated by the perspectives of the global North, and often promote “consuming differently” for those with resources and opportunity to be able to make alternative consumption choices rather than anticonsumption in the form of “consuming less” (86). Furthermore, the focus in much social research in the global North continues to be the individual (or aggregates of individuals in the case of social practice research) rather than the influence of social institutions such as tribes and political or religious institutions on consumer behavior, collective action, and world views (87). Critics of the social practice approach also argue that these perspectives underemphasize the role of individual agency in leading system change and the opportunity for democratic intervention, oversight, or regulation of consumption (56, 88). Despite greater understanding of the social influences on consumption, there is ongoing resistance to reducing consumption, and high consumption lifestyles are expanding globally.
These concerns have sparked a variety of new debates in research that explicitly seek to reduce levels of consumption, and it is to these approaches we now turn.

DEGROWTH APPROACHES TO SUSTAINABLE CONSUMPTION

While the rational approach to sustainable consumption focuses on individuals as the agent of change and seeks to reform market processes to make growth more efficient, and the social approach aims to reconfigure the social systems that structure unsustainable behaviors, a third school of thought, inspired by the ideas of degrowth, seeks to challenge the underlying assumptions that human well-being depends on continuous economic growth based on material resources (58, 91–93). Degrowth research aims to show how to reduce consumption and use of energy and material resources while achieving human well-being within the constraints of a finite planet. Informed by the work of postgrowth economics, and ecological economics, these degrowth approaches to sustainable consumption examine how consumption fulfils a variety of social and political purposes beyond merely meeting needs or conveying status (94).

Degrowth focuses explicitly on the political economy including the interactions of individual agents and societal institutions to reduce consumption (95), through, for example, consumption strikes, where efforts to reduce consumption and use of materials is framed as a collective political demand rather than an individual consumer action (96).

The focus of explicitly reducing overall consumption through degrowth has sometimes been termed radical (26). However, in the context of the Paris Climate Agreement and the insights of the IPCC special report on global warming of 1.5°C, challenging growth may be imperative if we are to achieve rapid far-reaching systemic change (97). Thus, the degrowth approach could arguably be viewed as far reaching, transformative, and ultimately more rational than radical. The challenge for degrowth scholars is how to achieve these far-reaching changes, against political resistance, in just and fair ways that advance sustainable development. In this regard, a new turn in degrowth toward just consumption when coupled with the insights of indigenous and global South scholars, into sustainable living, may offer a new way forward for low consumption societies while also achieving socially just and sustainable outcomes.

JUST CONSUMPTION AND SUSTAINABLE-LIVING APPROACHES

The question of how to achieve major system changes that reduce consumption as part of far-reaching climate change mitigation efforts, while leaving no one behind, is an urgent one. There is widespread recognition of the risk that reducing growth and consumption may exacerbate inequality and reinforce injustices particularly in the global South (98). Many communities will struggle to replace the employment opportunities and incomes that were associated with high consumption and production industries (99). Consuming resources within limits also requires communities to meet human development needs (100, 101).

We use the term just consumption for research approaches that seek to reduce consumption and remedy the inequitable social and economic impacts this may impose on communities already bearing other burdens, for example, of inequality and the legacy of colonization, racism, or other forms of social injustice (102, 103). Just-consumption literature is attentive to systemic inequalities
such as the oppression of women or the way new forms of slavery are maintained in the entwined processes of consumption and production, or the processes by which citizens become trapped by high levels of consumption-related debt (104–106).

Although frequently associated with the global South, just-consumption theory has also been advanced in the global North by feminist philosophers. For example, Iris Marion Young initially asked, “do people in relatively free and affluent countries such as the United States, Canada or Germany have responsibilities to try to improve working conditions and wages of workers in far-off parts of the world who produce items those in the more affluent countries purchase?” (107, p. 365). Young’s ground-breaking work considered the responsibility citizens have for justice to distant others and examined the “antisweatshop” and “No Logo” movements at the turn of the century, which asserted that those in the global North have responsibility with respect to the working conditions of workers in other countries and should take actions to meet their responsibilities (107).

The concept of just consumption also informs a critical, caring approach to sustainable living—not to be confused with the emergence of caring consumption as a marketing tool, which all too frequently has informed feminized portrayals of mothers and women engaged in apparently gratifying acts of consumption to control and care for others” (108). For example, just-consumption values have begun to influence government policy in New Zealand, toward an “economy of kindness” informed by complex, embedded values of kaitiakitanga (guardianship), manakitanga (hospitality), and bauora (holistic wellness) as a way to address the inequality associated with relentless material growth and resource consumption (109,110).

Iris Young argues “...relatively affluent people in the global North” share responsibility for the fate not only of those in their own communities, but for “the faraway workers,” given that “structural processes connect us to them” (107, p. 370). Her work explores what such connections and responsibilities mean. She suggests that there are grounds for the argument that better-off people in some parts of the world have responsibilities toward globally worse off people wherever they are, an idea that also resonates with other feminist challenges to unjust consumption and service relationships across the global North and South (111).

Alongside issues of just consumption, scholars from the global South have been researching how a wide variety of values can inform and sustain sustainable consumption policies, including values of harmonious, peaceful, communal well living. Their perspectives challenge the dominant global North assumptions that sustainable consumption is best supported by values of the good life and social progress measures informed by individual well-being and happiness preferences (112). Concepts such as Buen Vivir and ideas associated with the Quechua peoples of the Andes in South America, for example, convey a different vision of a community ethic of care for others and relationships with the nonhuman world as a desirable way of living (113). Similarly, the values of Sumak Kawsay or well living in the context of indigenous Ecuadorian communities of the Kichwa have informed the Constitution of Ecuador, which pays respect to interrelated values of amasanga, or spiritual energy of the natural world; nunghui, or energy of cultivated gardens and handicrafts; and sunghui, or source of life (113–115). These cosmological elements are a critical community response to the negative impacts of economic growth, and these values also inform legal debate and help to give meaning to collective action to promote sustainable development and fair trade relationships in postcolonial contexts (115).

Others have argued that values such as ahimsa, a concept advocated and experimented at societal scale by Gandhi in India, was driven by the philosophy that human supremacy over lower animals means ethically that “higher should protect the lower and man eats not for enjoyment but to live” (116,117). This value informed Gandhi’s principle of nonviolence (ahimsa) and vision of a society built on kindness, cooperation, and dignity. Scholars argue that ahimsa when expressed...
through authentic everyday practices of yoga, i.e., unity of all life, can also help sustain individual commitments to sustainable consumption by promoting a mindful, nonviolent, healthy, and peaceful way of living (118).

Ubuntu is an African philosophy of human interconnection, respect, and care for future generations that advocates argue can help sustain community efforts to consume more sustainably (119). The interconnection principle of ubuntu resonates with New Zealand, Māori, and Pacific communities concepts of whanau ora and hauora, concepts that reflect multidimensional interconnected values of well-being as extended family well-being and holistic environmental and spiritual health (120–122). Hauora or holistic well-being informs indigenous food consumption and production, within a “nexus of relationships from a place” in which food is imbued with a mauri, or life force, and whakapapa, or genealogy and story (120). A Māori kaupapa or world view of sustainable consumption is informed by related values of tikanga (or an ethical philosophy), that seeks to advance human and nonhuman flourishing through principles of kaitiakitanga, or the care and guardianship of ecological systems over time; whanaungatanga, or equity and respect; and kaikokiritanga, or precautionary management (120).

Similarly, in Tokelau inati is a cultural practice and value that governs the sharing of food and communal resources. As Kupu Kupu (123, p. 157) explains “…when a village engages in communal fishing expeditions, the entire catch is brought back to ‘Te Laulau,’ the traditional area of land where everything is shared, and it is then distributed to the whole village.” This practice in turn reflects a deeper cultural value of Vai Niu a world view that serves as a counterpoint to individualism, and expresses a sense that, “I am not an individual; I am an integral part of the cosmos. I share a divinity with my ancestors, the land, the seas and the skies….I share a tofi (an inheritance) with my family, my village and my nation” (124, pp. 86–87).

From Japan, scholars argue that values like shiawase (delight, peace) and ikigai (fulfillment) are also values that can be invoked to support sustainable consumption in the context of meaningful living (125). Similarly, since the turn of the century, Japan has experienced a surge in the use of the word mottainai (wasteful) in children’s literature, media, popular music, and government policy (126). The concept has been deliberately evoked to open discussion with millennial youth in Japan about values that might inform ways to live meaningful lives in the context of low economic growth and with fewer material possessions (126).

It is often difficult to inspire and sustain strong positive visions of sustainable living. Stepping back to listen to deeper values, which could sustain a sense of community solidarity, has always been a powerful way to support social change. The values embedded in diverse visions of sustainable living discussed here evoke concepts of generosity, reciprocity, care, kindness, community responsibility, and interconnection with the nonhuman and human world. Expressing values can offer authentic pathways to strengthen community relationships and meaningful ways of living. The philosophies and values of the global South can often move beyond universalized, instrumental goals such as individual happiness or the reduction of carbon (115). Values that advance conceptions of communal solidarity can also inform new approaches to informal or popular economies in ways that foster highly interconnected, just, and harmonious relationships (127). Such collective values are rarely considered in dominant approaches to sustainable consumption; however, they offer significant possibilities for enriching our conceptions of sustainable consumption.

There are numerous shared challenges faced by communities of both the global North and South (128). The literature of just consumption and sustainable living draws insight from community lived experience, and from environmental racism literature, alongside writing on degrowth, intergenerational justice, decolonization, and feminism. These connections are promising, potentially moving sustainable consumption from a technical, reformist, often deficit-driven and highly individualized debate toward a new body of intersectionality writing about sustainability, which
rethinks all aspects of consumption processes from production to waste (9, 102). The intersection of just-consumption and sustainable-living literatures may also confront deep, persistent injustices and draw attention to human rights in the context of consumption processes.

The turn in literature toward just consumption and new visions of sustainable living has the potential to bridge the gap between incremental, rational, individualized approaches to sustainable consumption and more nuanced conceptions of meaningful, interconnected, peaceful ways of living collectively. This intersection of ideas acknowledges that cultural difference matters and that as a result there is “no one universally just and ecologically sustainable way” of fulfilling sustainable consumption objectives (103). Being attentive to culturally diverse views of well living can also help shift the discussion about sustainable consumption from a deficit focus (Why aren’t individuals happier within narrowly defined terms of development?) toward preventative actions that sustain diverse ways of living that communities value. Eduardo Gudynas (115) advocates for the concept of *Buen Vivir*, or well living within a community, where community is expanded to include nature. His perspective challenges the idea of development as economic growth, and questions the very foundations of modernity. As Balch (129) contends, “It helps us see the limits of current development models and it allows us to dream of alternatives that until now have been difficult to fulfil.”

The intersection of just-consumption and sustainable-living literatures also creates space for nuanced reflection about the ethical frameworks that are used to assess needs and entitlements. For example, recent approaches to sustainable consumption in the global North suggest appeals to intrinsic or self-transcendental values (e.g., concern for others, connection with nature) may be more effective in motivating citizens of all ages to act in ways that connect social and environmental causes than appeals to individual materialistic or extrinsic values based on reward and approval (e.g., financial incentives, social status) (130). These intersectional value debates are crucial if we are to avoid imposing narrowly conceived or austerity-like consumption cuts on communities in ways that override wider objectives of community solidarity and cause greater suffering, or deeper tensions and resentments between communities.

**CONCLUSION**

This article has examined the literature of sustainable lifestyles and consumption in the context of global North and South and situated this analysis within the context of accelerated and mega transitions that are needed across all human activities to reduce the impacts of climate change and advance sustainable development through attention to the values whereby people relatively imagine and design their future. This approach stands in contrast to changing sustainable consumption through big technology transformations managed by few, which diminishes masses into mere users of technology, or incremental planning, where citizens embedded in their complex relationships with each other and nature are reduced to consumers making rational choices. Global action and global cooperation to advance sustainable consumption needs to be approached by transcending the North-South divides and through the lens of respect for diverse values of well-being and sustainable living. This analysis of the literature also highlights the need for nuanced understanding of intraregional issues and differences in experiences of consumption and the imperative to enhance global cooperation to reduce resource use.

International agreements for SDGs and the Paris Climate Agreement have underscored the importance of meeting human needs and aspirations within the limits of the planet and the atmosphere. To date, there has been a paucity of research examining the diverse ways people aspire to live well and how we might meet these international targets while recognizing how diverse values motivate and inform our visions for action. Achieving and sustaining meaningful lives within a limited carbon budget is a significant challenge, but recognizing that there are significantly
different cultural values and orientations toward sustainable living beyond individualized conceptions of a good life is an important first step in supporting human and nonhuman flourishing within the limits of a finite planet.

### SUMMARY POINTS

1. Sustainable consumption research has been dominated by both a focus on individual aspirations of the good life, a rational incremental approach to policy reform, and/or by focusing on technological solutions driven that have failed to revisit existing values of well living that can help inform and sustain efforts to reduce overall consumption levels.

2. Fairer redistribution of access to and ownership of resources is needed in resource consumption, and far-reaching changes to enable community ownership of resources are needed across all human activities. When these far-reaching reductions and redistributions of resource use are informed by values of reciprocity, just consumption and interconnections informed by aspirations for peaceful living, community solidarity, generosity, and harmony with nature, it is more likely that low consumption policies will advance sustainable development in ways that leave no one behind.

3. Individuals must act consciously to advance sustainability, but nuanced visions of sustainable living informed by local values, sensitive to long-term, collective meaning making, also support sustainable development and offer powerful visions to inspire social change.

### FUTURE ISSUES

1. More research is needed to understand the way culturally nuanced approaches to critical thinking and education for sustainable living can inform community aspirations and legitimate policy processes aimed at reducing carbon emissions and advancing sustainable development.

2. Research gaps also exist with respect to assessments of the macroeconomic effects of large-scale switches to more sufficient lifestyles, adoption of alternative visions of well-being, and sustainable living indices over various times and at various scales. What would it take to achieve significant reduction in demand for, e.g., significant declines in conspicuous consumption of industrially produced food or high fashion, and concern for the conditions of workers in the textile industry? What does healthy living mean for the pharmaceutical industry of today?

3. More research is also needed to understand how alternative values might inform a redistribution of wealth due to shifting preference structures across a range of sectoral activities.

4. How can we break away from political binaries to inform collective action toward common goals of reduced resource consumption and shift existing power structures to address climate change and advance sustainable development?

5. We do not know if or how large reductions in consumption could be embedded in everyday life from an ethical perspective. For example, how can we reduce everyday energy
consumption while ameliorating the burdens on communities who already bear the impact of historical or ongoing oppressions, religious persecution, racism, or colonization?

6. More research is needed that assesses the benefits of preventive actions, e.g., investment in community health care, prevention of pollution of any kind, and spending on communal well living, rather than a narrowly framed deficit focus on actions to enhance individual well-being.

7. Finally, future research could examine intersectional or common cause approaches to sustainable consumption and collective efforts to reduce environmental degradation and advance diverse, locally meaningful experiences of well living.

DISCLOSURE STATEMENT

The authors are not aware of any affiliations, memberships, funding, or financial holdings that might be perceived as affecting the objectivity of this review.

LITERATURE CITED

1. Dannreuther C, Lekhi R. 2000. Globalization and the political economy of risk. Rev. Int. Political Econ. 7(4):574–94
2. Gunter B, van der Hoeven R. 2004. The social dimension of globalization: a review of the literature. Work. Pap. 24, Policy Integr. Dep., World Comm. Soc. Dimension Glob. Int. Labour Off., Geneva
3. Faulconbridge J, Beaverstock J. 2008. Globalization: interconnected worlds. In Key Concepts in Geography, ed. N Clifford, SP Rice, G Valentine, pp. 331–43. London: Sage
4. Rajão R, Duarte T. 2019. Performing postcolonial identities at the United Nations’ climate negotiations. Postcolonial Stud. 21(3):364–78
5. Räthzel N, Uzzell D. 2011. Trade unions and climate change: the jobs versus environment dilemma. Glob. Environ. Change 21:1215–23
6. United Nations Environment Programme (UNEP). 2017. The Emissions Gap Report 2017. A UN Environment Synthesis Report. Nairobi: UNEP
7. Stern N. 2007. The Economics of Climate Change—The Stern Review. London: Cambridge Univ. Press
8. Roy J, Pal S. 2009. Lifestyle and climate change: link awaiting activation. Curr. Opin. Environ. Sustain. 1:192–200
9. Bell L. 2019. Place, and processes in waste theory: a global South critique. Cult. Stud. 33(1):98–121
10. Naguib-Pellow D. 2007. Resisting Global Toxics: Transnational Movements for Environmental Justice. Cambridge, MA: MIT Press
11. Intergovernmental Panel on Climate Change (IPCC). 2007. Climate Change Mitigation 2007. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge, UK: Cambridge Univ. Press
12. Intergovernmental Panel on Climate Change (IPCC). 2007. Summary for Policymakers: Climate Change Mitigation 2007. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, ed. B Metz, OR Davidson, PR Bosch, R Dave, LA Meyer. Cambridge, UK: Cambridge Univ. Press
13. Roy J, Dowd A, Muller A, Pal S, Prata N. 2012. Lifestyles, well-being and energy. In Global Energy Assessment: Toward a Sustainable Future, ed. Glob. Energy Assess., pp. 1527–48. Cambridge, UK: Cambridge Univ. Press
14. Intergovernmental Panel on Climate Change (IPCC). 2022. AR6 Synthesis Report Climate Change 2022. Forthcoming. https://www.ipcc.ch/report/sixth-assessment-report-cycle/
15. Zimmerer K. 2012. ‘The Indigenous Andean concept of Kawsay, the politics of knowledge and development, and the borderlands of environmental sustainability in Latin America. *PMLA* 127(3):600–6
16. Hobson K. 2013. “Weak” or “strong” sustainable consumption? Efficiency, degrowth, and the 10 year framework of programmes. *Environ. Plann. C* 31(6):1082–98
17. Princen T. 2003. Principles for sustainability: from cooperation and efficiency to sufficiency. *Glob. Environ. Politics* 3(1):33–50
18. Sahakian M, Seyfang G. 2018. A sustainable consumption teaching review: from building competencies to transformative learning. *J. Cleaner Prod.* 198:231–41
19. Jhagroe S, Loorbach D. 2018. It’s the complexity stupid! In the politics of urban sustainability challenges. In *Routledge Research in Sustainable Urbanism*. New York: Routledge
20. Gabriel C, Bond C. 2019. Need, entitlement and desert: a distributive justice framework for consumption degrowth. *Ecol. Econ.* 156:327–36
21. Hobson K. 2002. Competing discourses of sustainable consumption: Does the “Rationalisation of Lifestyles” make sense? *Environ. Politics* 11(2):95–12
22. United Nations. 1992. *Report on the UN Conference on Environment and Development (Rio de Janeiro, 3–14 June 1992). Annex 1. Rio Declaration on Environment and Development*. A/CONF.151/26 (Vol. I). [http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm](http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm)
23. Fuchs D, Lorek S. 2005. Sustainable consumption governance: a history of promises and failures. *J. Consumer Policy* 28:261–88
24. Cohen M, Murphy J, eds. 2001. *Exploring Sustainable Consumption Environmental Policy and the Social Sciences*. Amsterdam: Elsevier Sci. (Pergamon)
25. Southerden D, Welch D. 2016. Focus: new directions in sustainable consumption. *Discover Society*, Jan. 5. [https://discoversociety.org/2016/01/05/focus-new-directions-in-sustainable-consumption/](https://discoversociety.org/2016/01/05/focus-new-directions-in-sustainable-consumption/)
26. Geels F, McMeekin A, Mylan J, Southerden D. 2015. A critical appraisal of Sustainable Consumption and Production research: the reformist, revolutionary and reconfiguration positions. *Glob. Environ. Change* 34:1–12
27. Jackson T. 2005. *Motivating Sustainable Consumption: A Review of Evidence on Consumer Behaviour and Behavioural Change*. London: Policy Stud. Inst.
28. O’Rourke D, Lollo N. 2015. Transforming consumption: from decoupling, to behavior change, to system changes for sustainable consumption. *Annu. Rev. Environ. Resour.* 40:233–59
29. Baker S. 1996. Sustainable development and consumption: the ambiguities—the Oslo ministerial roundtable conference on sustainable production and consumption, Oslo, 6–10 February 1995. *Environ. Politics* 5(1):93–99
30. Middlemiss L. 2018. *Sustainable Consumption: Key Issues*. London: Earthscan/Routledge
31. Christoff P. 1996. Ecological modernisation, ecological modernities. *Environ. Politics* 5(3):476–500
32. Hajer M. 1995. *The Politics of Environmental Discourse: Ecological Modernization and the Policy Process*. Oxford: Oxford Univ. Press
33. Mol APJ, Sonnenfeld DA. 2000. Ecological modernization around the world: an introduction. *Environ. Politics* 9:3–16
34. Spaagren G. 2000. *Ecological modernization theory and domestic consumption*. *J. Environ. Policy Plann.* 2:323–35
35. Alexander S. 2014. *A critique of techno-optimism: efficiency without sufficiency is lost*. Work. Pap. WP 1/14, Post Carbon Pathways, Work. Pap. Ser., Melbourne, Austr. [http://www.magnusjohnston.ca/uploads/8/4/9/4/84946882/alexander_-_critique_of_20techno_20optimism.pdf](http://www.magnusjohnston.ca/uploads/8/4/9/4/84946882/alexander_-_critique_of_20techno_20optimism.pdf)
36. Spangenberg J. 2014. Institutional change for strong sustainable consumption: sustainable consumption and the degrowth economy. *Sustainability: Sci. Pract. Policy* 10(1):62–67
37. Jackson T. 2014. Sustainable consumption. In *Handbook of Sustainable Development*, ed. G Atkinson, S Dietz, E Neumayer, M Agarwal, pp. 279–90. Cheltenham, UK: Edward Elgar Publ. 2nd ed.
38. Lebel L, Lorek S. 2008. Enabling sustainable production-consumption systems. *Annu. Rev. Environ. Resour.* 33:241–75
39. Jackson T, Marc S. 1999. Consumption, sustainable welfare and human needs—with reference to UK expenditure patterns between 1954 and 1994. *Ecol. Econ.* 28:421–41
40. Kubiszewski I, Costanza R, Franco C, Lawn P, Talberth J. 2013. Beyond GDP: measuring and achieving global genuine progress. *Ecol. Econ.* 93:57–68
41. Maridal J, Palich L, Morgan G, Gardner S, McKinney J, Bolbocean C. 2018. Wellbeing indices: a comprehensive inventory of standards and a review of current comparative measures. *Ecol. Econ.* 149:1–11
42. Bengtsson M, Alfredsson E, Cohen M, Lorek S, Schroder P. 2018. Transforming systems of consumption and production for achieving the sustainable development goals: moving beyond efficiency. *Sustain. Sci.* 13(6):1533–47
43. Eastman JK, Fredenberger B, Campbell D, Calvert S. 1997. The relationship between status consumption and materialism: a cross-cultural comparison of Chinese, Mexican, and American students. *J. Marketing Theory Pract.* 5(1):52–66
44. Le Blanc D. 2015. Towards integration at last? The sustainable development goals as a network of targets. *Sustainable Dev.* 23:176–87
45. Gasper D, Shah A, Tankha S. 2019. The framing of sustainable consumption and production in SDG 12. *Global Policy* 10(1):83–95
46. United Nations Environment Programme (UNEP). 2017. *Consuming Differently, Consuming Sustainably: Behavioural Insights for Policymaking.* Paris: UNEP. [https://sustainabledevelopment.un.org/content/documents/2404Behavioral%20Insights.pdf](https://sustainabledevelopment.un.org/content/documents/2404Behavioral%20Insights.pdf)
47. Gasper D, Shah A, Tankha S. 2019. The framing of sustainable consumption and production in SDG 12. *Global Policy* 10(1):83–95
48. Hughes A, Morrison E, Ruwanpura K. 2019. Public sector procurement and ethical trade: governance and social responsibility in some hidden global supply chains. *Transact. Inst. Br. Geogr.* 44:242–55
49. Hughes A. 2018. Corporate social responsibility and standards. In *New Oxford Handbook of Economic Geography*, ed. D Wójcik, M Feldman, G Clark, MS Gertler. Oxford: Oxford Univ. Press
50. Intergovernmental Panel on Climate Change (IPCC). 2018. Summary for policymakers. In *Global Warming of 1.5°C. An IPCC Special Report on the Impacts of Global Warming of 1.5°C Above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty*, ed. V Masson-Delmotte, P Zhai, H-O Pörtner, D Roberts, J Skea, et al. Geneva: World Meteorol. Org.
51. Future Earth Knowledge-Action Network on Systems of Sustainable Consumption and Production. 2018. *Research and Engagement Plan.* Tokyo: Reg. Cent. Future Earth. [http://futureearth.org/sites/default/files/files/Final%20REP%20206_22_18.pdf](http://futureearth.org/sites/default/files/files/Final%20REP%20206_22_18.pdf)
52. de Coninck H, Revi A, Babiker M, Bertoldi P, Buckeridge et al. 2018. Strengthening and implementing the global response. In *Global Warming of 1.5°C. An IPCC Special Report on the Impacts of Global Warming of 1.5°C Above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty*, ed. V Masson-Delmotte, P Zhai, H-O Pörtner, D Roberts, J Skea, et al. Geneva: World Meteorol. Org.
53. Roy J, Tschakert P, Waisman H, Abdul Halim S, Antwi-Agyei P, et al. 2018. Sustainable development, poverty eradication and reducing inequalities. In *Global Warming of 1.5°C. An IPCC Special Report on the Impacts of Global Warming of 1.5°C Above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty*, ed. V Masson-Delmotte, P Zhai, H-O Pörtner, D Roberts, J Skea, et al. Geneva: World Meteorol. Org.
54. Wherry F, Woodward I. 2018. *The Oxford Handbook of Consumption.* Oxford: Oxford Univ. Press. [http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780190695583.001.0001/oxfordhb-9780190695583](http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780190695583.001.0001/oxfordhb-9780190695583)
55. Wang C, Ghadimi PF, Lim M, Tseng M. 2019. A literature review of sustainable consumption and production: comparative analysis in developed and developing economies. *J. Cleaner Prod.* 206:741–54
56. Capstick S, Whitmarsh L, Poortinga W, Pidgeon N, Upham P. 2015. International trends in public perceptions of climate change over the past quarter century. *WIREs Climate Change* 6:35–61
57. O’Neill D, Fanning A, Lamb W, Steinberger J. 2018. A good life for all within planetary boundaries. *Nat. Sustainability* 1:88–95
58. Jackson T. 2017. *Prosperity Without Growth*. Abingdon, UK: Routledge. 2nd ed.
59. Jackson T. 2009. *Prosperity Without Growth*. London: Earthscan. 1st ed.
60. Cohen M, Szejnwald-Brown H, Vergragteds P. 2017. *Social Change and the Coming of Post-Consumer Society*. Abingdon, UK: Routledge.
61. Goodman M, Redclift M. 2010. *Situating consumption, space and place*. Work. Pap. 20, Environ. Politics Dev. Work. Pap. Ser., Dep. Geogr., King's Coll., Lond. https://www.researchgate.net/profile/Michael_Goodman4/publication/251867983_Situating_Consumption_Space_and_Place/links/5523de170cf223eed380115d.pdf
62. Ceglia D, de Oliveira Lima SH, Leocádio ÁL. 2015. An alternative theoretical discussion on cross-cultural sustainable consumption. *Sustainable Dev.* 23(6):414–24
63. Minton E, Spielmann N, Kahle R, Kim C. 2018. The subjective norms of sustainable consumption: a cross-cultural exploration. *J. Bus. Res.* 82:400–8
64. Brey P. 2017. Sustainable technologies for sustainable lifestyles. In *Philosophy, Technology and the Environment*, ed. D Kaplan, pp. 191–212. Cambridge, MA: MIT Press
65. Hirsch D, Terlau W. 2015. Sustainable consumption and the attitude-behaviour-gap phenomenon—causes and measurements towards a sustainable development. *Int. J. Food Syst. Dyn.* 6:159–74
66. Thaler R, Sunstein C. 2018. *Nudge: Improving Decisions About Health, Wealth and Happiness*. London: Penguin
67. Spaargaren G, Mol A. 1992. Sociology, environment, and modernity: ecological modernization as a theory of social change. *Soc. Nat. Resour.* 5:323–44
68. Carolan M. 2004. Ecological modernization theory: What about consumption? *Soc. Nat. Resour.* 17(3):247–60
69. Thøgersen J. 2017. Sustainable food consumption in the nexus between national context and private lifestyle: a multi-level study. *Food Q. Prefer.* 55(January):16–25
70. Clarke G, Legand A. 2018. Forward. In *Sustainable Consumption: Key Issues*, ed. I. Middlemiss, p. XV. London: Earthscan Routledge
71. Schlosberg D, Rinret S. 2008. Ecological modernisation, American style. *Environ. Politics* 17:254–75
72. Spaargaren G. 2003. Sustainable consumption: a theoretical and environmental policy perspective. *Soc. Nat. Resour.* 16(8):687–701
73. Ellen Macarthur Foundation. 2013. *TowardstheCircularEconomy, Vol.2: OpportunitiesfortheConsumer GoodsSector*. Cowes, UK: Ellen Macarthur Found.
74. Geels F, McMeekin A, Mylan J, Southerton D. 2015. A critical appraisal of Sustainable Consumption and Production research: the reformist, revolutionary and reconfiguration positions. *Glob. Environ. Change* 34:1–12
75. UNECE. 2018. Successful Approaches to Delivering on Sustainable Consumption and Production by 2030. *Regional Forum for Sustainable Development for the UNECE Region 1, March 2018, Geneva*. UNECE, Geneva. http://www.unece.org/fileadmin/DAM/RCM_Website/Concept_note_SDG12_1.pdf
76. Lidskog R, Elander I. 2012. Ecological modernization in practice? The case of sustainable development in Sweden. *J. Environ. Policy Plann.* 14(4):411–27
77. Couturier A, Thaimai K. 2015. *Eating the fruit of the poisonous tree? Ecological modernisation and sustainable consumption in the EU*. Work. Pap. 20/2013, Inst. Int. Political Econ. Berlin
78. Spaargaren S, Van Vliet B. 2000. Lifestyles, consumption and the environment: the ecological modernization of domestic consumption. *Environ. Politics* 9(1):50–76
79. Soper K. 2007. Re-thinking the “Good Life”: the citizenship dimension of consumer disaffection with consumerism. *J. Consumer Cult.* 7(2):205–29
80. Oakley K, Ward J. 2018. The art of the good life: culture and sustainable prosperity. *Cult. Trends* 27(1):4–17
81. Isham A, Gatersleben B, Jackson T. 2018. Flow activities as a route to living well with less. *Environ. Behav.* 51:431–61
82. Burningham K, Venn S, Christie I, Jackson T. 2017. Sustainable consumption in early motherhood. *J. Consumer Ethics* 1(2):82–91
83. Shove E. 2010. Beyond the ABC: climate change policy and theories of social change. Environ. Plann. A 42(6):1273–85
84. Tukker A, Emmert S, Charter M, Vezzoli C, Sto E, et al. 2008. Fostering change to sustainable consumption and production: an evidence based view. J. Cleaner Prod. 16(11):1218–25
85. Martin C. 2016. The sharing economy: a pathway to sustainability or a nightmarish form of neoliberal capitalism? Ecol. Econ. 121:149–59
86. Binkley S, Littler J. 2013. Cultural studies and anti-consumerism: a critical encounter. Cult. Stud. 22(5):519–30
87. Purushotta N. 2019. Expanding research agenda for sustainable consumption and social institutions: a case of South Africa. In Exploring the Dynamics of Consumerism in Developing Nations, ed. A Gbadamosi. Hershey, PA: GIA Global
88. Sayer A. 2013. Power, sustainability and well-being: an outsider’s view. In Sustainable Practices: Social Theory and Climate Change, ed. E Shove, N Spurling, pp. 292–317. London: Routledge
89. Tsan A. 2014. The New Middle Class in China: Consumption, Politics and the Market Economy. New York: Palgrave MacMillan
90. Collier R. 2019. Fashion acolytes or environmental saviours? When will young people have had “enough”? In Just Enough: The History, Culture and Politics of Sufficiency, ed. M Ingelby, S Randalls, pp. 99–115. London: Palgrave Macmillan
91. Schor J, Thompson C, eds. 2014. Sustainable Lifestyles and the Quest for Plenitude: Case Studies of the New Economy. New Haven, CT: Yale Univ. Press
92. Seyfang G. 2009. The New Economics of Sustainable Consumption. London: Palgrave Macmillan
93. Lorek S, Fuchs D. 2013. Strong sustainable consumption governance—a precondition for a degrowth path? J. Cleaner Prod. 38:36–43
94. Cosme I, Santos R, O’Neill D. 2017. Assessing the degrowth discourse: a review and analysis of academic degrowth policy proposals. J. Cleaner Prod. 149:321–34
95. Spash C, Dobernig K. 2017. Theories of (un)sustainable consumption. In Routledge Handbook of Ecological Economics: Nature and Society, ed. C Spash, pp. 201–13. Abingdon, UK: Routledge
96. Fournier V. 2008. Escaping from the economy: the politics of degrowth. Int. J. Sociol. Soc. Policy 28(11/12):528–45
97. Sandberg M, Klockars K, Wilena K. 2019. Green growth or degrowth? Assessing the normative justifications for environmental sustainability and economic growth through critical social theory. J. Cleaner Prod. 206(1):133–41
98. Rodríguez-Labajosa B, Yánez I, Bond P, Greyl L, Munguti S, et al. 2019. Not so natural an alliance? Degrowth and environmental justice movements in the global south. Ecol. Econ. 157:175–84
99. Robinson M. 2018. Climate Justice: Hope, Resilience, and the Fight for a Sustainable Future. London: Bloomsbury
100. Dowler E. 2008. Food and health inequalities: the challenge for sustaining just consumption. Local Environ. 13(8):759–72
101. Raworth K. 2017. Doughnut Economics: Seven Ways to Think Like an Economist. London: Random House
102. Martinez-Alier J. 2012. Environmental justice and economic degrowth: an alliance between two movements. Capitalism Nat. Soc. 23(1):51–73
103. Gabriel A, Bond C. 2019. Need, entitlement and desert: a distributive justice framework for consumption degrowth. Ecol. Econ. 156:327–36
104. Alkon A, Agyeman J. 2011. Cultivating Food Justice: Race, Class, and Sustainability. Cambridge, MA: MIT Press
105. Hughes A, McEwan C, Bek D. 2015. Postcolonial perspectives on global production networks: insights from Flower Valley in South Africa. Environ. Plann. A 47(2):249–66
106. Gold S, Trautrimas A, Trodd Z. 2015. Modern slavery challenges to supply chain management. Supply Chain Manag. 20(5):485–94
107. Young I. 2004. Responsibility and global labor justice. J. Political Philos. 12(4):365–88
108. de Laat K, Baumann S. 2016. Caring consumption as marketing schema: representations of motherhood in an era of hyperconsumption. J. Gender Stud. 25(2):183–19
109. Ardern J. 2019. Opinion: An economics of kindness. Beehive.govt.nz, Jan. 22. https://www.beehive.govt.nz/feature/opinion-economics-kindness

110. Davis K, Mahuta N, Henare P, Jackson W, Whaitiri M. 2018. Bringing back manaakitanga. Beehive.govt.nz, May 17. https://www.beehive.govt.nz/release/bringing-back-manaakitanga

111. Hochschild A. 2012. The Managed Heart: Commercialization of Human Feeling. Oakland: Univ. Calif. Press

112. Eckersley R. 2017. Letter to the editor: Are indicators telling us the real story of progress? Soc. Indicators Res. 141(2):919–29

113. Coq-Huelva D, Torres-Navarrete B, Bueno-Suárez C. 2018. Indigenous worldviews and Western conventions: Sumak Kawsay and cocoa production in Ecuadorian Amazonia. Agric. Hum. Values 35:163–79

114. Altmann P. 2017. Sumak Kawsay as an element of local decolonization in Ecuador. Latin Am. Res. Rev. 52(5):749–59

115. Gurung EB. 2011. Vivir: today’s tomorrow. Development 54(4):441–47

116. Mahadev D. 2018. M.K. Gandhi: An Autobiography or the Story of My Experiments with Truth. Ahmedabad, Ind.: Navajivan Publ. House (transl. from the Gujarati). http://www.arvindguptatoys.com/arvindgupta/gandhiexperiments.pdf

117. Radhakrishnan S. 2015. Mahatma Gandhi: Essays and Reflections. Mumbai, Ind.: Jaico Publ. House

118. Subrahmanyan C, Gould S. 2013. Achieving sustainable consumption through spiritual practices. Purusharthta J. Manag. Ethics Spirit. 5(2)

119. Etiyibo E. 2017. Ubuntu and the environment. In The Palgrave Handbook of African Philosophy, ed. A. Afolayan, T Falola, pp. 633–57. Basingstoke, UK: Palgrave Macmillan

120. Reid J, Rout M. 2016. Getting to know your food: the insights of indigenous thinking in food provenance. Agric. Hum. Values 33:427–38

121. Kara E, Gibbons V, Kidd J, Blundell R, Turner K, Johnstone W. 2011. Developing a Kaupapa Māori framework for Whānau ora. AlterNative: Int. J. Indigenous Peoples 7:100–10

122. Prendergast K, Schofield G, Mackay L. 2016. Associations between lifestyle behaviours and optimal wellbeing in a diverse sample of New Zealand adults. BMC Public Health 16(62):10

123. Kupu K. 2009. Te Vaka Atafaga: a Tokelau assessment model for supporting holistic mental health practice with Tokelau people in Aotearoa, New Zealand BMPH. J. Community Health Clin. Med. Pac. 15(1):156–63

124. New Zealand Government. 2019. Vai Niu—Pacific health and wellbeing. In He Ara Oranga: New Zealand Government Inquiry into Mental Health and Addiction, pp. 86–87. Wellington, NZ: NZ Gov. https://www.mentalhealth.inquiry.govt.nz/assets/Summary-reports/He-Ara-Oranga.pdf

125. Kumano M. 2018. On the concept of well-being in Japan: feeling Shiawase as hedonic well-being and feeling Ikigai as Eudaimonic well-being. Appl. Res. Q. Life 13:419–33

126. Siniawer E. 2014. Affluence of the heart: wastefulness and the search for meaning in millennial Japan. J. Asian Stud. 73(1):165–86

127. Petropoulou EA. 2018. Social and solidarity economy: the case of an urban consumption co-operative in Greece. PACE 11(1):70–94

128. Carley M, Spapens P. 2017. Sharing the World: Sustainable Living and Global Equity in the 21st Century. London: Routledge. 2nd ed.

129. Balch O. 2013. Buen vivir: the social philosophy inspiring movements in South America. The Guardian, Febr. 4. https://www.theguardian.com/sustainable-business/blog/buen-vivir-philosophy-south-america-eduardo-gudynas

130. Diprose K, Valentine G, Vanderbeck R, Lui C, McQuaid K. 2019. Building common cause towards sustainable consumption: a cross-generational perspective. Nat. Space. 2:203–28
Contents

II. Earth’s Life Support Systems

The State and Future of Antarctic Environments in a Global Context
Steven L. Chown and Cassandra M. Brooks ..................................................... 1

Island Biodiversity in the Anthropocene
James C. Russell and Christoph Kueffer ...................................................... 31

Mammal Conservation: Old Problems, New Perspectives,
Transdisciplinarity, and the Coming of Age of Conservation
Geopolitics
David W. Macdonald ..................................................................................... 61

The State of the World’s Mangrove Forests: Past, Present, and Future
Daniel A. Friess, Kerrylee Rogers, Catherine E. Lovelock, Ken W. Krauss,
Stuart E. Hamilton, Shing Yip Lee, Richard Lucas, Jurgenne Primavera,
Anusha Rajkaran, and Subua Shi ................................................................ 89

III. Human Use of the Environment and Resources

Food Loss and Waste: Measurement, Drivers, and Solutions
Edward S. Spang, Laura C. Moreno, Sara A. Pace, Yigal Achmon,
Irwin Donis-Gonzalez, Wendi A. Gosliner, Madison P. Jablonski-Sheffield,
Md Abdul Momin, Tom E. Quested, Kiara S. Winans, and Thomas P. Tomich ... 117

Sustainable Living: Bridging the North-South Divide in Lifestyles
and Consumption Debates
Bronzyn Hayward and Joyashree Roy .............................................................. 157

Status, Institutions, and Prospects for Global Capture Fisheries
Christopher Castello and Daniel Ovando ....................................................... 177

Illegal Wildlife Trade: Scale, Processes, and Governance
Michael ‘t Sas-Rijkes, Daniel W.S. Challenger, Amy Hinsley,
Diogo Verissimo, and E.J. Milner-Gulland .................................................. 201

Ecotourism for Conservation?
Amanda L. Stronza, Carter A. Hunt, and Lee A. Fitzgerald ......................... 229
Land-Management Options for Greenhouse Gas Removal and Their Impacts on Ecosystem Services and the Sustainable Development Goals
Pete Smith, Justin Adams, David J. Beerling, Tim Beringer, Katherine V. Calvin, Sabine Fuss, Bronson Griscom, Nikolas Hagemann, Claudia Kammann, Florian Kraxner, Jan C. Minx, Alexander Popp, Phil Renforth, Jose Luis Vicente Vicente, and Saskia Keesstra

Sanitation for Low-Income Regions: A Cross-Disciplinary Review
Christopher Hyun, Zachary Burt, Yoshiba Crider, Kara L. Nelson, C.S. Sharada Prasad, Swati D.G. Rayasam, William Tarpeh, and Isha Ray

IV. Management and Governance of Resources and Environment
Co-Producing Sustainability: Reordering the Governance of Science, Policy, and Practice
Carina Wyborn, Amber Datta, Jasper Montana, Melanie Ryan, Peat Leith, Brian Chaffin, Clark Miller, and Lorrae van Kerkhoff

Social Synergies, Tradeoffs, and Equity in Marine Conservation Impacts
David A. Gill, Samantha H. Cheng, Louise Glew, Ernest Aigner, Nathan J. Bennett, and Michael B. Mascia

Toward REDD+ Implementation
Danae Maniatis, Joel Scriven, Inge Jonckheere, Jennifer Laughlin, and Kimberly Todd

Solar Geoengineering: Social Science, Legal, Ethical, and Economic Frameworks
Jane A. Flegal, Anna-Maria Hubert, David R. Morrow, and Juan B. Moreno-Cruz

V. Methods and Indicators
Is Natural Capital Really Substitutable?
François Cohen, Cameron J. Hepburn, and Alexander Teytelboym

Indexes
Cumulative Index of Contributing Authors, Volumes 35–44
Cumulative Index of Article Titles, Volumes 35–44

Errata
An online log of corrections to Annual Review of Environment and Resources articles may be found at http://www.annualreviews.org/errata/environment