

BOOK CHAPTER

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## Communicating Sustainable Consumption

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### Abstract

The increasing growth of consumption indicates that communicating the need to transition towards more sustainable lifestyles has so far been ineffective. Therefore, it is necessary to reorient communication efforts in ways that allow to more effectively create, identify, validate, and share conditions to enable all societal actors to shift towards sustainable consumption patterns. The conditions to do so pertain to power relationships, ethics, culture, infrastructure and economics; all connected by the inherent notion of wellbeing, fulfillment of human needs, and sufficiency. This chapter discusses the particular challenges and potentials of communicating sustainable consumption. It is based on an extensive scoping process by an international working group (part of the Future Earth Knowledge Action Network – Systems of Sustainable Consumption and Production) that aimed at summarizing the current state of research on communicating sustainable consumption and the development of an agenda for future research and practice in this field. This chapter presents some of the key insights from this work.

### Key words

Communication, sustainable consumption, best practices, policies

### 1 Introduction

Communicating Sustainable Consumption is notoriously complex. The concept Sustainable Consumption itself is ambivalent, encompassing consumption on all levels, from individual lifestyles and aspirations towards the cultural notion of consumerism as embedded in the dominant culture of many countries (Di Giulio et al. 2014; Vergragt 2017). Consumption is originally an economic term related to personal expenditure, acquisition, use and disposal of goods and services; when coupled with production, the term also refers to material flows through society.

Today consumption is widely accepted as a key driver of current sustainability problems. Despite years of efforts, it has not yet been possible to change unsustainable consumption patterns to the extent required. As an established instrument in the consumer policy toolbox, communication is traditionally considered as one potentially powerful approach to influence consumer behavior. The question herein is: how can communication more effectively support the transformation toward more sustainable consumption patterns?

This question was the starting point of a scoping review that was carried out by a larger group of researchers and practitioners in the context of Future Earth.<sup>1</sup> The aim was to synthesize the existing literature and develop an agenda for future work in this field. Based on the understanding that communication itself is a complex activity, we emphasize that communication needs to address what is communicated (the content); **to or with whom** is communicated (the addressee; the target group; the stakeholder); **how** it is communicated (e.g. medium, tone, style); and **what is the intended outcome** or function (e.g. change of thinking or behavior, change of structure). Communication can be manipulative, instrumental and coercive, e.g.

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<sup>1</sup> The scoping review was conducted by the Working Group Communication (WGCoCo) that is part of the Future Earth's Knowledge Action Network on Systems of Sustainable Consumption and Production (more information at <https://futureearth.org/networks/knowledge-action-networks/systems-of-sustainable-consumption-and-production>). Besides the authors, these are the other WGCoCo Collaborators (alphabetical order): Valentina Aversano-Dearborn, Deric Gruen, Andre da Paz.

when consumers are allured into buying goods they neither need nor can afford. But it can also be empowering and emancipatory, e.g. when it confronts people with different world views and problem definitions and stimulates higher-order learning processes that may ultimately make them reflect and change their initial problem definitions and frames of meaning. Re-orienting existing ways to consume and produce requires altering mindsets of how we use goods and services in the normative context of sustainability.

## 2 Conceptualizing Sustainable Consumption

The concept sustainable consumption first emerged in the political discourse after the UNCED conference or Earth Summit in Rio de Janeiro in 1992. In Agenda 21 it was stated that “...[t]he major cause of the continued deterioration of the global environment is the unsustainable pattern of consumption and production, particularly in industrialized countries, which is a matter of grave concern, aggravating poverty and imbalances” (United Nations 1992, 4:3).

Agenda 21 (United Nations 1992) contained a chapter (4) on “Changing Consumption Habits,” which focuses on addressing unsustainable patterns of production and consumption; it contends that action is needed to meet the following broad objectives: “to promote patterns of consumption and production that reduce environmental stress and will meet the basic needs of humanity; to develop a better understanding of the role of consumption and how to bring about more sustainable consumption patterns.” (4:7) It developed an action agenda for management, research, policies, and strategies (United Nations 1992, chapter 4).

The term sustainable consumption keeps gaining relevance in the academic discourse. A first and widely quoted definition is from the Oslo Symposium of 1994: “...the use of goods and services 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” (IISD 1995). To quote further: *Sustainable consumption is an umbrella term that brings together a number of key issues, such as meeting needs, enhancing the quality of life, improving resource efficiency, increasing the use of renewable energy sources, minimizing waste, taking a life cycle perspective and taking into account the equity dimension*” (IISD 1995).

Since the 1990s a considerable amount of research has been conducted on understanding consumption and lifestyles. The initial consideration of consumption as individual choice-making – and therefore calling for frugality (Botsman and Rogers 2011), voluntary simplicity (Elgin 1982) and sufficiency (Princen 2005) – has been replaced with a much more systemic and complex picture. People consume in order to satisfy such basic material needs as shelter, mobility, clothing and food; but also, to satisfy immaterial needs in a search for a meaningful life, self-realization, status, belonging, and security (Max-Neef 1991). Many recognize Veblen (1899) as one of the earlier scholars addressing conspicuous consumption; and more recently Baudrillard (1998) and Bourdieu (2004) explained how many consumer goods signal status, power, success and identity. Max-Neef (1991) made an important distinction between (material and immaterial) human needs and ways to satisfy them, which he calls satisfiers. According to him, human needs are universal, but satisfiers are culturally determined and can, at least in principle, be influenced (Layard 2005). For instance, mobility is a basic human activity that covers many needs, using a private car is a satisfier, not only for transportation, but also for signaling status, independence and “freedom”. Research into possibilities to fulfill needs with less material goods through services or through various forms of sharing has also become part of the sustainable consumption research field (Evans 2011; Botsman and Rogers 2011).

A transition to sustainable consumption and lifestyles presents a tough challenge. First, in consumer societies, the prevailing business models, political priorities, and dominant culture have been shown to work in tandem to encourage more consumption. Macro level forces, such as global trade, the monetary system, and the debt-driven need for economic growth in a capitalist economy also translate in practice to fostering more consumerist lifestyles (Brown et al. 2017). In addition, the consumers’ lack of awareness about the natural resources used in the manufacture of goods and caring about their ecological meaning is viewed to have led to hyperconsumption (Dolan 2006).

Second, there is the lock-in phenomenon. People find themselves locked-in into unsustainable lifestyles for reasons beyond their control. For instance, in the US a search for affordable housing usually leads to increasingly distant suburbs; suburban lifestyles and inadequate public transport lead to car-dependency; and the housing stock in more affluent communities (which in the US signify better schools) favors large dwellings and other high-footprint consumption practices.

Third, the rebound effect: efficiency measures aimed to save energy, materials, and costs most often result in reinvesting these savings in new economic activities leading to more economic growth, production, and consumption on the macro level (Herring and Sorrell 2008; Bauer and Papp 2009). On the micro level such cost saving by consumers lead often to more spending, leading to increased rather than decreased environmental pressures. Estimates about the magnitude of rebound effect range from 10 to about 60%, depending on the type of rebound effect (IRGC 2013; Gillingham et al. 2014).

This complex nature of consumption is recognized in a definition of sustainable lifestyles provided in a recent report by the United Nations Environment on fostering and communicating sustainable lifestyles: “A sustainable lifestyle minimizes ecological impacts while enabling a flourishing life for individuals, households, communities, and beyond. It is the product of

individual and collective decisions about aspirations and about satisfying needs and adopting practices, which are in turn conditioned, facilitated, and constrained by societal norms, political institutions, public policies, infrastructures, markets, and culture.” (Vergragt et al. 2016, p. 6).

The United Nations Agenda 2030 calls for “Responsible Consumption and Production” as one of its seventeen overarching goals (Goal 12) for sustainable development. This goal declares that SCP is “about promoting resource and energy efficiency, sustainable infrastructure, and providing access to basic services, green and decent jobs and a better quality of life for all. [...] aims at ‘doing more and better with less’” (UN 2016) to increase the quality of life, involving everyone from producer to final consumer by educating consumers and providing them with adequate information to make their consumption choices. Bengtsson et al. (2018) identify two points for understanding SDG 12, the first one, named “efficiency” approach, which relates to products and production methods, technology and information via labels; the second approach is called “systemic”, which advocates for *sufficiency* as it addresses consumption volumes, distribution, and social and institutional changes. Elaborating on the argument that the efficiency approach “contains essential elements of transition to sustainability, it is itself highly unlikely to bring about sustainable outcomes” (Bengtsson et al. 2018, p. 1533), therefore, sufficiency is needed for restructuring existing socioeconomic arrangements. The efficiency approach can be achieved through technology and policy mechanisms; sufficiency requires tapping into the individual motivations, aspirations and willingness to change as well requires cultural systemic changes on institutional and societal levels.

Zooming into the individual level, the discourse of “consumer behavior change” is often the premise to enable sustainable consumption. A common view in this perspective is to address citizens as informed consumers who make deliberate decisions about their everyday consumption choices. The “socially responsible consumers” are citizens with “desire to minimize or eliminate any harmful effects and maximize the long term beneficial impact on society through the acquisition, usage and disposition of products” (Mohr et al. 2001).

Sahakian and Wilhite (2014) challenge this perspective by exploring the “distributed agency in social practices”, understanding consumption as the result of decisions using the body (cognitive processes and physical dispositions, acquired through social experiences, inscribed in space and over time), the material agency and social dimensions that contribute to the social learning of individuals and influence their choice-making processes. Other notions, such as the Consumer Social Responsibility (CnSR) defined as the “application of instrumental, relational, and moral logics by individual, group, corporate and institutional agents seeking to influence a broad range of consumer-oriented responsibilities” (Caruna and Chatzidakis 2014) offer a multi-level view to deconstruct and reflect the ways and contexts that mobilize the “consumer-citizen” towards choices with lower environmental impact and higher social value. An example is provided by Barr et al (2011) who consider practices in “the home”, “the holiday” and “the journey” to contextualize the elements that shape discourses and actions when it comes to consuming, emphasizing how “pro-environmental behaviors” shift according to the sites and settings of consumption practices. On this line, Quazi et al. (2016) argue that the creation of an atmosphere of cooperation between consumers and marketers plays a fundamental role to remind consumers about their social responsibilities and keep a balance between power and responsibilities. Dolan (2002) elaborates on how understanding the development of sustainable consumption as a widespread practice is more complex and requires to analyze the macroprocesses behind to “address the spaces in between actors in terms of their relations and interdependencies [...] connecting the prospects of sustainable consumption with the need to communicate the link between ecological degradation, modern hyperconsumption, and prevailing economic and political institutions” (Dolan 2002, p. 172).

### 3 Communication Modes and Their Contribution to Sustainable Consumption

Communication has been suggested to play a crucial role in changing attitudes, from passive, (partially) aware, individuals or communities, into active and informed agents of change, taking actions to shift one’s lifestyles (European Commission 2012; Schrader 2007). Given the magnitude of systemic changes needed to realize sustainable systems of consumption and production, and cognizant of consumers’ direct (consuming goods and services) and indirect (acceptance of policies) influences on advancing sustainable consumption (Stern 2000), it is crucial that communicators, marketeers, researchers and practitioners go beyond seeking to foster a better understanding of sustainable consumption in societal groups by also promoting public acceptance of respective interventions in people’s lives through communication.

Communication scholars working on sustainability and consumption have stressed that traditional understandings of communication underpinning consumer policy making are too often narrowly focused on strategic, instrumental, and marketing-oriented approaches. More comprehensive understandings conceive of communication as the processes in which representations of the social and natural worlds are exchanged and shared (and therewith: change) (Fischer et al. 2016). Approached in this way, sustainability-related communication is not only sender-oriented and more instrumental and transmissive in nature (communication *of* a particular understanding of sustainable consumption by means of mono-directional 1-way communication), but also as focusing on fostering public deliberation, participation, and discourse, stimulating communication *about* what sustainable consumption could mean by means of 2-way communication.

With the latter more expansive mode come different objectives (e.g., communication *of*: persuasion vs. communication *about*: social learning) (Newig et al. 2013). While both communication *of* and communication *about* sustainable consumption represent valid and needed approaches, the transformative function of sustainability emphasizes communication *for* sustainable consumption and its potential impact for changing systems of production and consumption

into more sustainable ones. This mode of sustainability communication focuses on processes of individual and social sense-making that seek to empower people to take an active role in transformation processes to SCP (Adomssent and Godemann 2011). Such understanding of communication reflects the normative assumptions underpinning the idea of sustainability which entail capacity-building for reflexive, adaptive, and participatory decision-making. This means that it is insufficient to merely make people act in what experts/political leaders have set out to be a 'sustainable' way (Vare and Scott 2007).

A form of communication that is related to communication *for* sustainable consumption and is considered particularly powerful is focused on enhancing individual and collective capacities to learn "our way together to a more sustainable future in dynamic multi-stakeholder situations of uncertainty and complexity" (Blackmore 2009, p. 229). Such processes of "learning collectively to foster systemic change" (Kulundu 2012, p. 47) have been vividly discussed in recent years as *social learning* or *higher order learning*.

By higher order learning we mean reframing the problem definition and changing the interpretive frame among the diverse participants in an initiative. In an earlier paper we defined higher order learning in an interactive project as ".....participants re-examine, and possibly change, their initial perspectives on the societal needs and wants ... as well as the approaches and solutions; examine and place the particular project in a broader context of pursuing a sustainable society; examine, and possibly change, their own perceived roles in the above problem definitions and solution; change views on the mutual relationships among each other relative to the specific project or the broader societal context, including mutual convergence of goals and problem definitions; change their preferences about the social order as well as beliefs about best strategies for achieving them." (Brown and Vergragt 2008, p 113). Such reframing and reconceptualization may be conducive for translation into different contexts and different situations.

In a social learning perspective, communication in the context of SCP is challenged to overcome two often contested modes of traditional communication approaches: first, to extend traditional mono-directional forms of communication that focus on conveying issues around SCP defined by experts, scientists and elites to broader lay audiences. To stimulate social learning, communication is challenged to stimulate discourses about a range of issues that concern diverse social actors and provide different perspectives on societal transitions (Brown and Vergragt 2008), and second, to take broader standpoints on the interrelatedness of individual behavioral change and societal transitions. The way that change is manifested across societies, its meanings, ways and consumption purposes, has to be analyzed for creating the connections that appeal to the individual feelings and rationalities (Dolan 2002) In such situations, social experiments where various social actors with different worldviews collaborate on the local level in concrete projects and engage in processes of deep and mutual social learning, could possibly provide powerful examples that may be diffused through peer-to-peer exchanges rather than traditional 'communications' (Vergragt et al. 2016).

## 4 Review of Practices and Policies

### 4.1 Introduction

Communication is essential to processes of individual and communal agency, it provides information and motivation towards actions for change. It thus features as a key approach in several policy initiatives and activities seeking to seed social mobilization for SCP. The common assumption or normative foundation of many of these approaches can be characterized by a few key concepts: agency and empowerment. Individual agency is often defined as a sense of ownership that relates to the "ability to imagine and affect desired change" (Thompson et al. 2011, p. 357) and is intrinsically related to the ways individuals make their lifestyle choices.

In our view of the field, three distinct avenues emerge that have been prominently addressed and targeted as breeding grounds for driving social innovation towards SCP: bottom-up innovation in real-life contexts (social experiments and real-world laboratories), traditional formal and informal contexts for consumer learning (media, advertisement and education), as well as new possibilities of transcending traditional boundaries in communicating for SCP that come along with the development and maturation of new media (information and communication technologies).

### 4.2 Social Experiments and Real-World Laboratories

A recent report for UNEP (Vergragt et al. 2016) has developed a new approach taking successful experiments in sustainable living as case studies to learn how to frame and to communicate sustainable lifestyles. In the report, 16 lifestyle experiments and campaigns are described and analyzed. From the analysis and through literature research, a 4-step strategic approach emerged based on eight principles that need to be observed in order to create a successful experiment.

These principles are, summarized:

- Engage in participatory, relevant, and grounded ways;
- focus on aspirations;
- set clear goals and demonstrate sustainability results;
- consider the systemic nature of lifestyles;
- take advantage of life stages and transitions;
- accommodate the diversity in lifestyles;
- show that lifestyles extend beyond individual action; and,
- learn and adapt to changing conditions.

In the report these principles are grounded and illustrated by examples from the case studies. The case studies themselves show the principles in operation and show that application of most, if not all principles enables a successful experiment. In addition, the case studies provide messages for communicating to a wider audience.

One of the case studies, Kislábnyom (small footprint) in Hungary, presents the involvement of community members in interactive activities aimed at promoting long-lasting behavior changes resulted in higher order learning. The participants were low- and medium-income community members who have traditionally – mostly out of economic necessity – lived low carbon footprint lifestyles: growing their own foods, sharing, swapping, bartering, reusing, repurposing, and so on. But they did not think of themselves as green, because they associated the term with more expensive specialized goods and services. When asked about it, the community members said that they were not sufficiently affluent to be green. The small-scale initiative consisted of interactive training sessions with groups of families around the country, small footprint competitions for households, celebratory community events, planting of native fruit trees, and taking collective responsibility for emissions associated with program-related events. The organizing NGO Green Dependent identified many behaviors that households were already taking that could be expanded on, and reframed how participants thought about the issue by promoting the idea that low income lifestyles are inherently sustainable. The effort created a feeling of pride among participants and reframing of their view on their frugal lifestyles as green and ecologically sustainable. This is a prime case of higher order learning through a small-scale initiative. This approach to communicating SCP through evaluating and promoting existing sustainable lifestyle practices needs to be further developed and tested, but it provides potentially a fruitful alternative to more traditional campaign for promoting sustainable consumption or lifestyles.

Another approach to foster social learning and collective sense-making is visioning as a means of communication. It has often been claimed that a strong positive future vision is mobilizing for individuals and social actors to develop strategies how to realize such a vision in practice. So far, however, it remains unclear how visioning can be effectively used to intervene towards SCP.

Some work on this area has already started through processes of backcasting or “looking back from the future” (Quist 2007). This participatory methodology enables to critically rethink existing vision of consumption and wellbeing and use creativity to transcend existing paradigms towards the creation and realization of a new, desirable vision (Quist 2007; Quist et al. 2011). Yet the effective transition from visions to actions is still a challenge, particularly in terms of measuring the impact of the actions undertaken. Herein lays a challenge for future work in the field.

### 4.3 Learning Through Media, Advertisement and Education

Despite rapid changes in communication technologies and practices in the twenty-first century, the media (especially advertisement) and formal education still function as two key avenues for consumer learning and socialization. SCP policy has placed much emphasis on promoting Education for SCP that has established itself as a distinct field of practice and study. Prominent international examples are the 10-year Framework of Programs on SCP ([www.unep.org/10yfp](http://www.unep.org/10yfp)) and the activities of networks such as PERL (Partnership for Education and Research about Responsible Living) (e.g. active learning methodology toolkits; [www.englishm.no/project-sites/living-responsibly](http://www.englishm.no/project-sites/living-responsibly)) or SCORAI (Sustainable Consumption Research Action Initiative - [www.scorai.org/teaching](http://www.scorai.org/teaching)). Several advancements were made in the past decades in re-orienting educational systems towards sustainable development, including the formation of thematically focused networks, production of educational resources and development of curricula and policies, some of these including education for SCP. However, these are topics that still remain largely marginalized in educational systems across the world. Progress is impeded by the inter- and transdisciplinary nature of SCP that transcends the traditional boundaries between subjects and professional communities and networks. This is an open opportunity for communication efforts.

The role of media in all forms strongly influences systems of SCP. The advancement of hyper-targeted advertisement, the inseparability of digital life and advertising, the comparisons engendered by social media, and much more are critical questions that communication studies can address. Social media provides SCP practitioners with the opportunity to experiment with online-communication tools. There is an increasing amount of information about sustainability and its relation to lifestyles, nonetheless, commercial media still fail to integrate the content of sustainability messages with “normal” content, preserving the notion that sustainability is only for just a few (tree huggers, hippies, etc.) or is something too radical that the average citizen has no role to play.

Advertisement is at large still endorsing consumption traits based on acquisition of more material goods rather than thinking about sufficiency. It is important that communicators, either as media makers, producers, marketing organizations and advertisers, harness the message of sustainable lifestyles through the use of efficient existing formats that raise aspirations (i.e. soap operas) as well as exploring new formats (bloggers, via social media, etc.) that bring sustainable lifestyles to different type of audiences, making the topic more inclusive and tailored to the different aspirations and contexts of the consumer. On way to achieve this, is proposed by Rettie et al (2012), who suggest that the sustainable choice of actions are both subjected as a product-placement strategy and gradually introduced as the “normal” action, being also emphasized by endorsements of well-known people. Examples showcasing how SCP can be weaved in to these media formats are entertainment-education (Reinermann et al. 2014) or movies/documentaries (McGreavy and Lindenfeld 2014). The Working Group on “Communication for Sustainable Consumption” (WgCoCo) developed a strategy to bring forward collaborative approaches on communication. This strategy is based on two pillars: knowledge and action. Both are related to the frames, topics, narratives, modes, formats, and instruments of communication, exploring their impacts on

engagement, empowerment, and action for more sustainable systems of consumption and production. The processes in which representations of the social and natural worlds are exchanged and shared (and therewith: changed – Fischer et al. 2016). Such understanding of communication reflects the normative assumptions underpinning the idea of sustainability which entail capacity-building for reflexive, adaptive, and participatory decision-making. This means that it is insufficient to merely make people act in what experts/political leaders have set out to be a “sustainable” way.

Given their immense power, turning the media, advertisers and marketers into allies to communicate sustainable lifestyles is of critical importance for the advancement of a more impactful communication for SCP. First examples of how media makers’ expertise in presenting content in ways that speak the target audience’s language and appeal to it can be used for strategic communication have been piloted (see e.g. UNEP 2005), but need to be carried further.

#### 4.4 Information and Communication Technologies

We are living in times where face-to-face communication is one of the many options to communicate with others, virtual spaces and other possibilities, risks and potentials are emerging to transform our practices. In the search for approaches to tap into the sense of agency of individuals and spur change towards SCP, new information and communication technologies are considered to bear great potentials. The latest developments on new technologies from the areas of Artificial Intelligence (AI), augmented reality (AR) and virtual reality (VR) are described as a groundbreaking technological revolution, with socio-cultural effects, possibilities and risks that are comparable with the introduction of the Internet. The current scientific literature reaches from well-argued warnings (further intensification of the consumer society, new dependencies of young people, increasing addictions to games and pathological gambling, commercialization of free-time) to the description of the enormous potential that AI, mixed realities or use of AR and VR hold, e.g. for the communication of environmental and social responsibility and sustainable lifestyles. The so-called “generation alpha” (children born after 2010) are tech-savvy, hyper-connected and prone to have every aspect of their life digitalized; how these dynamics will change consumption, is still a grey area. The potential for new learning processes, intercultural communication or awareness building is yet to be explored.

A good example of potential positive impacts are interactive gamification experiments, or the transformation of activities, practices, services, structures, and systems that provide similar motivations and experiences as games do (Hamari, 2019). Together with various other forms of games (persuasive, serious, designed for learning, etc.) gamified processes, products, and services entertain the users and trigger social critique, thus having the potential to become communication interventions themselves to help the users understand larger, more complex, issues that attain them in the “real” world. The energy sector has long experienced gamification as a strategy to reduce consumption in households (Johnson et al., 2017; Fraternali et al., 2019; Mulcahy et al., 2020); however, little has been done to address the rebound effects resulting from these efficiencies (Guillen et al., 2021). In light of this controversy, more research and practical explorations are needed to better understand the applicability of newly designed formats and tools using the latest technologies already used in other communication fields for strategies for social impact towards SCP.

#### 5 Discussion and Further Research

Recent studies have shown that the challenge of climate change cannot be addressed through technological innovation and renewable energy solutions alone (Alfredsson et al 2018; Bengtsson et al. 2018). Next to these ‘efficiency’ measures we need to reflect on, and to communicate a culture of “sufficiency” (Friends of the Earth Europe 2018); i.e. living a good life and achieving well-being with a minimum of materials and energy throughput. Research has shown that human well-being is less dependent on material wealth and more on good health and relationships, and finding meaning in life (Fromm 1976) However, strong political and economic interests keep us in a cycle of economic growth through working, spending, and working more (Schor 2004), creating havoc for the natural resources and ecosystems of the planet. This vicious circle is further reinforced by the dominant advertisement industry and social media, which are funded by the same economic and financial interests. Without addressing these powerful structural and cultural forces there is little chance that a transition to sustainable consumption and lifestyles can be achieved on the large scale that is necessary.

What then is the role of communication in addressing these powerful forces? As shown in this chapter, communication in the context of sustainable consumption must emancipate itself from the traditional consumer information paradigm. It can be more than a one-way street, in which “we” (the experts, the scientists) tell “them” (the “uninformed” consumers) how to change their behavior and lifestyles. More deliberative and transformative communication modes suggest the design and use of communication as a learning process, in which all participants engage with and explore new cultural narratives that help to dematerialize needs satisfaction, e.g. by addressing what we really value as worthwhile in life; and what we can discard of. Unfortunately, such form of higher order learning is hard to achieve in a situation of unequal power relationships. As long as the narrative of “economic growth” is dominant, and as long as we believe that reducing consumption makes us less happy and will create an economic collapse, little will change. The overall research question to topic experts, practitioners and citizens in general, is how to create a learning environment where powerful dominant narratives (economic growth, efficiency, materialism, short-termism) can be deconstructed.

## 6 Reflective Questions

1. Think about a specific consumption practice (like giving presents for birth- days): how can reframing be used to promote more sustainable alternatives?
2. The prevalent mode of operation in the field is still one-way communication directed at private consumers. What could two-way communication approaches look like that target broader systemic changes in consumption?
3. Thinking of an illustrative field in the context of sustainable consumption, select a communication setting of your choice (i.e. a lesson for school child- ren) and develop three different approaches that reflect: communication for, about and of sustainable consumption. What would be the implications of these perspectives for efficient social participation, education and marketing?

## References

- Adomßent M, Godemann J (2011) Sustainability communication: an integrative approach. In: Godemann J, Michelsen G (eds) Sustainability communication: interdisciplinary perspectives and theoretical foundation. Springer, Berlin, pp 27–38
- Alfredsson E, Bengtsson M, Brown H, Isenhour C, Lorek S, Stevis D, Vergragt P (2018) Why achieving the Paris agreement requires reduced overall consumption and production, sustainability: science. *Pract Policy* 14(1):1–5. <https://doi.org/10.1080/15487733.2018.1458815>
- Barr S, Shaw G, Coles T (2011) Sustainable lifestyles: sites, practices, and policy. *Environ Plann A* 43(12):3011–3029
- Baudrillard J (1998) *The consumer society: myths and structures*. SAGE, London
- Bauer D, Papp K (2009) Book review perspectives: the Jevons Paradox and the myth of resource efficiency improvements. *sustainability: science. Pract, & Policy* 5(1):48–54 Bengtsson M, Alfredsson E, Cohen M, Lorek S,
- Schroeder P (2018) Transforming systems of consumption and production for achieving the sustainable development goals: moving beyond efficiency. *Sustain Sci.* 13:1533
- Blackmore C (2009) Social learning and environmental responsibility. In: Blackmore C, Reynolds M, Smith MJ (eds) *The environmental responsibility reader*. Zed, London, pp 229–235
- Bourdieu P (2004) *Distinction: a social critique of the judgment of taste*. Harvard University Press, Cambridge
- Botsman R, Rogers R (2011) *What's mine is yours: how collaborative consumption is changing the way we live*. Collins, London, p 2011
- Brown HS, Vergragt PJ (2008) Bounded socio-technical experiments as agents of systemic change: The case of a zero-energy residential building. *Technol Forecast Soc Chang* 75(1):107–130
- Brown HS, Cohen MJ, Vergragt PJ (eds) (2017) *Social change and the coming of post- consumer society: theoretical advances and policy implications*. Taylor & Francis, New York
- Caruana R, Chatzidakis A (2014) Consumer social responsibility (CnSR): toward a multi- level, multi- agent conceptualization of the “other CSR.” *J Bus Ethics* 121(4):577–592
- Di Giulio A, Fischer D, Schäfer M, Blättel-Mink B (2014) Conceptualizing sustainable consumption: toward an integrative framework. *Sustainability: Sci, Pract, & Policy* 10(1):45–61. <https://doi.org/10.1080/15487733.2014.11908124>
- Dolan P (2002) The sustainability of “sustainable consumption.” *J Macromarketing* 22(2):170–181
- Elgin D (1982) *Voluntary simplicity: an ecological lifestyle that promotes personal and social renewal*. Bantam Books, New York
- Evans D (2011) Thrifty, green or frugal: reflections on sustainable consumption in a changing economic climate. *Geoforum* 42(5):550–557
- European Commission (2012) *A European consumer agenda - boosting confidence and growth: communication from the commission to the European parliament, the council, the economic and social committee and the committee of the regions COM(2012) 225 final*. Brussels.
- Fischer D, Lüdecke G, Godemann J, Michelsen G, Newig J, Rieckmann M, Schulz D (2016) Sustainability communication. In: Heinrichs H, Martens P, Michelsen G, Wiek A (eds.), *Sustainability science. An introduction*. Springer, Dordrecht, p 139–148
- Fraternali P, Cellina F, Herrera Gonzales SL, Melenhorst M, Novak J, Pasini C, Rottondi C, Rizzoli AE (2019) Visualizing and gamifying consumption data for resource saving: challenges, lessons learnt and a research agenda for the future. *Energy Informatics*, 2(S1)
- Friends of the Earth Europe 2018. *SUFFICIENCY: MOVING BEYOND THE GOSSIP OF ECO-EFFICIENCY* [https://www.foeeurope.org/sites/default/files/resource\\_use/2018/foee\\_sufficiency\\_booklet.pdf](https://www.foeeurope.org/sites/default/files/resource_use/2018/foee_sufficiency_booklet.pdf)
- Fromm E (1976) *To have or to be?* Jonathon Cape, London

- Gillingham K, Rapson D, Wagner G (2014) The rebound effect and energy efficiency policy [https://environment.yale.edu/gillingham/GillinghamRapsonWagner\\_Rebound.pdf](https://environment.yale.edu/gillingham/GillinghamRapsonWagner_Rebound.pdf)
- Guillen G, Hamari J, Quist J (2021) Gamification of Sustainable Consumption: a systematic literature review. In Proceedings of 54th Hawaii International Conference on System Sciences, Hawaii, January 5–8, 2021
- Hamari J, Gamification. Ritzer IG, Rojek C (eds) (2019) The blackwell encyclopedia of sociology. Wiley, New York
- Herring H, Sorrell S (eds) (2008) Energy efficiency and sustainable consumption: the rebound effect. Palgrave Macmillan, New York
- IISD (1995) International Institute for Sustainable Development Digital Archive. Oslo ministerial roundtable conference on sustainable production and consumption, 6–10 February 1995, Oslo, Norway. background papers for meeting: elements for an international work program on sustainable production and consumption, Part 1: "The Imperative of Sustainable Production and Consumption". Available online at [www.iisd.ca/consume/oslo004.html](http://www.iisd.ca/consume/oslo004.html)
- IRGC (2013) International Risk Governance Council, the rebound effect: implications of consumer behavior for robust energy policies: a review of the literature on the rebound effect in energy efficiency and report from expert workshop. ISBN 978-2-9700772-4-4. Available: [www.researchgate.net/publication/275207115\\_The\\_Rebound\\_Effect\\_Implications\\_of\\_Consumer\\_Behaviour\\_for\\_Robust\\_Energy\\_Policies](http://www.researchgate.net/publication/275207115_The_Rebound_Effect_Implications_of_Consumer_Behaviour_for_Robust_Energy_Policies)
- Johnson D, Horton E, Mulcahy R, Foth M (2017) Gamification and serious games within the domain of domestic energy consumption: A systematic review. *Renewable and Sustainable Energy Reviews* 73, (February 2016):249–264. <https://doi.org/10.1016/j.rser.2017.01.134>
- Kulundu I (2012) In pursuit of participation: tracking the influence of local action for sustainable development. In: Lotz-Sisitka H (eds) (Re)views on social learning literature: a monograph for social learning researchers in natural resources management and environmental education. Environmental Learning Research Center, Rhodes University, Grahamstown p 39–58
- Layard PRG (2005) Happiness: lessons from a new science. Lane, London
- Max-Neef MA (1991) Human scale development: conception, application and further reflections. The Apex Press, New York
- McGreavy B, Lindenfeld L (2014) Entertaining our way to engagement? Climate change films and sustainable development values. *IJSD* 17(2):123–136
- Mohr LA, Webb DJ, Harris KE (2001) Do consumers expect companies to be socially responsible? The impact of corporate social responsibility on buying behavior. *J Consum Aff* 35:45–72
- Mulcahy R, Russell-Bennett R, Iacobucci D (2020) Designing gamified apps for sustainable consumption: A field study. *Journal of Business Research* 106, (October 2018):377–387. <https://doi.org/10.1016/j.jbusres.2018.10.026>
- Newig J, Schulz D, Fischer D, Hetze K, Laws N, Lüdecke G, Rieckmann M (2013) Communication regarding sustainability: conceptual perspectives and exploration of societal subsystems. *Sustainability* 5(7):2976–2990
- Princen T (2005) The logic of sufficiency. MIT Press, Cambridge
- Quazi A, Amran A, Nejati M (2016) Conceptualizing and measuring consumer social responsibility: a neglected aspect of consumer research. *Int J Consum Stud* 40(1):48–56
- Quist J (2007) Backcasting for a sustainable future: the impact after ten years. Eburon Publishers, Delft NL. ISBN 978-90-5972-175-3
- Quist J, Thissen W, Vergragt P (2011) The impact and spin-off of participatory backcasting: From vision to niche. *At Technological Forecasting and Social Change* 78(5):883–897
- Reinermann J-L, Lubjuhn S, Bouman M, Singhal A (2014) Entertainment-education: storytelling for the greater, greener good. *Int J Sustain Dev* 17(2):176–191
- Rettie R, Burchell K, Riley D (2012) Normalising green behaviours: a new approach to sustainability marketing. *J Mark Manage* 28(3–4), March:420–444
- Sahakian M, Wilhite H (2014) Making practice theory practicable: towards more sustainable forms of consumption. *J Consum Cult* 14:25–44. <https://doi.org/10.1177/1469540513505607>
- Schor J (2004) Interview with Juliet Schor. In: The overspent American: why we want what we don't need. Media Education Foundation. Transcription available at: [https://www.mediaed.org/assets/products/116/transcript\\_116.pdf](https://www.mediaed.org/assets/products/116/transcript_116.pdf). Access date 17 Aug 2012
- Schrader U (2007) The moral responsibility of consumers as citizens. *Int J Innov Sustain Dev* 2(1):79–96
- Stern PC (2000) Toward a coherent theory of environmentally significant behavior. *J Soc Issues* 56(3):407–424
- Thompson TL, Parrott R, Nussbaum JF (2011) The Routledge handbook of health communication, 2nd edn. Routledge, New York



United Nations (2016) Sustainable development goals. Goal 12 Ensure sustainable consumption and production patterns . Accessed 19 Dec 2019. <https://www.un.org/sustainabledevelopment/sustainable-consumption-production/>

United Nations (1992) Agenda 21. Accessed 18 Dec 2019. <https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>  
[https://sustainabledevelopment.un.org/content/dsd/agenda21/res\\_agenda21\\_04.shtml](https://sustainabledevelopment.un.org/content/dsd/agenda21/res_agenda21_04.shtml)

United Nations Environment Programme (UNEP), Futerra Sustainability Communications (2005) Communicating sustainability: how to produce effective campaigns. Nairobi  
Vare P, Scott WR (2007) Learning for a change: exploring the relationship between education and sustainable development. *J Educ Sustain Dev* 1(2):191–198. Retrieved from <https://jsd.sagepub.com/cgi/content/abstract/1/2/191>

Veblen T (1899). Theory of the leisure class. Accessed 18 Dec 2019. <https://www.gutenberg.org/files/833/833-h/833-h.htm>

Vergragt PJ, Brown HS, Timmer V, Timmer D, Appleby DA, Pike C et al (2016) Fostering and communicating sustainable lifestyles: principles and emerging practices. Nairobi

Vergragt PJ (2017) Sustainable consumption: an important but ambiguous concept. In: Meadowcroft J, Fiorino DJ (eds) *Conceptual innovation in environmental policy*. The MIT Press, Cambridge, pp 307–333