

This is a self-archived version of an original article. This version may differ from the original in pagination and typographic details.

Author(s): Do, Jessie; Salimi, Mitra; Baumeister, Stefan; Sarja, Milla; Uusitalo, Outi; Wilska, Terhi-Anna; Suikkanen, Johanna

Title: Consumption and planetary well-being

Year: 2024

Version: Published version

Copyright: © 2023 the Authors

Rights: CC BY-NC-ND 4.0

Rights url: <https://creativecommons.org/licenses/by-nc-nd/4.0/>

Please cite the original version:

Do, J., Salimi, M., Baumeister, S., Sarja, M., Uusitalo, O., Wilska, T.-A., & Suikkanen, J. (2024). Consumption and planetary well-being. In M. Elo, J. Hytönen, S. Karkulehto, T. Kortetmäki, J. S. Kotiaho, M. Puurtinen, & M. Salo (Eds.), *Interdisciplinary Perspectives on Planetary Well-Being* (pp. 128-140). Routledge. <https://doi.org/10.4324/9781003334002-13>

9

CONSUMPTION AND PLANETARY WELL-BEING

Jessie Do, Mitra Salimi, Stefan Baumeister, Milla Sarja, Outi Uusitalo, Terhi-Anna Wilska and Johanna Suikkanen

Unsustainability in consumption and business

Marketing, consumption, and planetary well-being

Consumption or the acquisition of goods and services has reached a level that the planet cannot sustain from the viewpoint of securing long-term human well-being, let alone securing the prospects of nonhuman well-being. Satisfying human needs depletes resources on a scale that compromises the well-being of nonhuman species. Marketing is the engine that stimulates consumption (Kotler, 2011) and, consequently, the use of enormous amounts of natural resources. The interconnected areas of consumption and marketing have important roles in facilitating the transition towards sustainable consumption (McDonagh and Prothero, 2014) that respects planetary well-being (Kortetmäki *et al.*, 2021).

Due to the increasing awareness of the current ecological crisis and the risks it poses, companies integrate sustainability into their strategies and practices. Nevertheless, in the quest for business growth, revenues, and returns on investment, companies continue to feed excessive consumption (Gabler, Landers and Richey, 2021), subordinating ecological concerns to these goals. As marketing and consumption have severe adverse effects on PW, sustainable marketing, which reduces the damage, can even be considered an oxymoron. Concern for nature is seldom present in marketing definitions and practices, with a few exceptions. Macro-level, critical marketing approaches have been called for to foster harmonious relationships between marketing, consumption, and nature (McDonagh and Prothero, 2014). Martin (2013, p. 18) stressed the role of nature by defining sustainable marketing as “a process of creating, communicating and delivering value to customers in ways that ensure maintaining and recovering both natural and human capital”.

Apart from emphasizing that marketing should be ecologically sustainable, socially just, and economically enduring, she stated that it has persuasive power and can thus be used to encourage everyone to pay attention to nonhuman needs. Persuasive communicative tools can aid in mainstreaming consumption patterns that do not compromise many species' opportunities to achieve well-being. Instead of endlessly fostering the growth of the demand for and consumption of eco-efficient goods and services, sustainable marketing should acknowledge the systemic view and the delicate balance between human and nonhuman needs to support rather than endanger ecosystem processes.

Companies seeking to comply with the PW premises can take more or less effective alternative routes to marketing. Usually, companies opt to make incremental changes, focusing on single sustainability actions, such as increasing their eco-efficiency or adding green products to their product ranges (Press, 2021). However, single acts would not address the ecological crisis but would signal weak sustainability, which asserts that natural resources can be exploited to increase profits. Assuming that the benefits of economic growth compensate for the loss of natural resources and ecosystem services (*ibid.*), weak sustainability does not lead to changes in the logic of the growth and depletion of resources.

The strong-sustainability approach rejects substitutability and requires maintaining and protecting the natural capital in the ecosystem (Dietz and Neumayer, 2007). This implies creating systemic changes, respecting the intrinsic value of nature in marketing, and altering everyday consumption practices, including reducing consumption levels (Geels *et al.*, 2015; Press, 2021). Awareness of the negative impacts of excessive consumption has catalyzed alternative markets, the use of second-hand items, sharing, recycling, and the circular economy (CE). Deepening concern about nature gives reason to setting conditions for and boundaries to consumers' and marketers' practices. An example of such a norm is sufficiency, defined by Gossen, Ziesemer, and Schrader (2019, p. 252) as "the absolute reduction of the resources and energy used for consumption by questioning the level of demand". Limited consumption can be hard to achieve when consumers expect certain social and cultural patterns of everyday life dictated by the consumerist culture (Kortetmäki *et al.*, 2021). These demands drive consumers to go beyond the level of consumption that only meets their personal needs and that decreases the possibilities of satisfying nonhuman needs. In these cases, taking incremental steps in sustainability can be a practical way of achieving stronger sustainability over the course of time.

Marketing is based on an anthropocentric ideology that is inconsistent with the needs of nature. Reducing the discrepancies between marketing, consumption, and care for nonhuman species is a move towards marketing that acknowledges PW. Structural and cultural transformations are needed to move production, marketing, and consumption from resource depletion to resource maintenance. Viable steps are mitigating unsustainability, reducing waste, improving resource management through circular supply chains, and adopting alternative consumption practices.

Transgressions in marketing

Humans' dominance over the planet causes lasting alterations to ecosystems. The irresponsible practices of companies are among the most serious hazards, putting a variety of ecological and economic functions in jeopardy. Irresponsibility harms both living entities (*e.g.*, humans and nature) and non-living entities (*e.g.*, brands and businesses). These damaging activities in the marketing area are classified as brand transgression (Aaker, Fournier, and Brasel, 2004), brand misconduct (Huber *et al.*, 2010), and corporate social irresponsibility (Lin-Hi and Müller, 2013). "Brand transgression" is a broader term that can cover both "brand misconduct" and "corporate social irresponsibility".

Aaker, Fournier, and Brasel (2004) define brand transgression as a violation of the implicit and explicit rules in the consumer–brand relationship, and it can be related to performance and value (Dutta and Pullig, 2011). Performance-related transgressions pertain to defective goods or services (*e.g.*, product recalls), whereas value-related transgressions pertain to social or ethical concerns inherent in brand values rather than issues directly connected to goods or services. Value-related brand transgressions have ramifications for the concerned brands' perceived symbolic meanings; thus, their consequences on consumers' and nature's well-being can be more lasting and detrimental. A case of value-related transgression is Ryanair's greenwashing news in 2020: The airline claimed that it has the lowest carbon emission rate among the European airlines, but the Advertising Standards Authority revealed that this claim is misleading and far from reality (British Broadcasting Corporation (BBC), 2020). While some instances of greenwashing are inadvertent and arise from a lack of understanding of what environment-friendliness is, it is often carried out on purpose using a variety of marketing and public relations techniques and misinformation.

Among value-related transgressions, social and environmental unsustainability is common and has the most tangible implications for life on Earth; the researched cases of value-related transgressions involved employee mistreatment and workplace discrimination, corporate fraud, sweatshop factories and child labour, environmental harm and animal abuse, and controversial marketing practices and unethical production (*e.g.*, Ouyang, Yao and Hu, 2020; Xu, Bolton and Winterich, 2021). Unsustainability is "institutionalized" in many of the global conventional business structures and economic systems (Ritala, Albareda and Bocken, 2021). Breaking down these institutionalized patterns and acknowledging that nature and humanity are inextricably linked to each other may be the key to a successful transition to a more sustainable economy, ensuring a future for nature and humans. Incorporating the non-anthropocentric and systemic view of PW into business structures and economic systems is necessary for this change as businesses and consumers need to understand that human and nonhuman entities are interconnected, and our planet will not survive unless the needs of diverse forms of life on Earth are satisfied. Both consumers and nature provide input to companies, and

nature relies on the benign quality of consumers' and businesses' input to nature to continue to exist and be well.

The current marketing and consumption system is part of the problem that threatens PW. We suggest and emphasize that marketing can become a significant part of the solution if it adopts both incremental and radical methods to pursue planet-friendly outcomes. The second part of this chapter discusses various solutions pointing to the continuum from weak sustainability actions to major, system-level transformations as paths to PW.

Solutions to consumption for planetary well-being

Enhancing sustainable consumer behaviour

Sustainable consumption helps restore natural and human resources and reduce the impacts of human consumption on nonhuman needs by adopting alternatives that use fewer virgin resources. It involves a shift to more efficiently produced need satisfiers (Kortetmäki *et al.*, 2021) via waste reduction, product life extension, and reuse and recycling (Maitre-Ekern and Dalhammar, 2019).

Coming up with solutions to unsustainable consumer behaviour requires an understanding of how needs and desires are culturally and socially determined in different societies. It is also important to understand sustainability in light of consumers' generational values and attitudes. Today, it is generally thought that the youngest consumers are the most environmentally conscious; Generation Z is frequently called Generation Green by the media. However, many studies in different cultures suggest that the young generations (Y and Z) do not make the most environmentally friendly purchase decisions. Rather, the older generations (Baby Boomers and Generation X) have been the most sustainable consumers for the past few decades (Wilska, 2002; Kuoppamäki, Wilska and Taipale, 2017; Ham *et al.*, 2021). Young people may have the greenest values and good intentions, but high product prices and the hedonistic pursuit of experiences (Kuoppamäki, Wilska and Taipale, 2017) may enhance unsustainable consumption among them (Ham *et al.*, 2021). Products that have been produced in an environmentally friendly way are often more expensive than non-green products (*e.g.*, fast fashion), and the desire for experiences may lead to unsustainable practices (*e.g.*, travelling). Lifestyles with real non-consumption practices are still rare. However, new trends are emerging among the young, such as preferring second-hand fashion and vegan food (Bedard and Tolmie, 2018).

The perceptions of what is sustainable and what should be done to increase sustainability in consumption vary in different theoretical approaches. The radical view emphasizes individual power and responsibility, whereas the reformist view relies on structural changes in society (Garner, 2000). The radical perspective aims to change the world by changing people or influencing the way they experience the world (Dryzek, 1997). Radical green movements emphasize the need to reduce all

consumption. The reformist approach to green consumerism, on the other hand, relies on the theory of ecological modernization (e.g., Spaargaren, 2011), which regards technical innovations as solutions to environmental problems. The role of a household is seen as effective, especially in minimizing waste, saving energy, recycling, preferring services over goods and promoting a sharing economy.

Another policy approach stream of thought on change of habits that has become popular among policymakers is the so-called nudge (Thaler and Sunstein, 2008) or choice-architecture approach. This approach requires policies, environments, and regulations to nudge individuals to make better choices, with desirable options given as defaults while not restricting the range of options (Keller, Halkier and Wilska, 2016). Nudging is one way of trying to close the gap between people's generally environmentally friendly attitudes and actual purchase behaviours. However, it has been argued that the nudge approach is too narrow. Many studies have suggested that there are several social, emotional, cognitive, and contextual reasons for the gap between green attitudes, intentions, and purchase behaviours (ElHaffar, Durif and Dube, 2020). Social practice theories expand the concept of nudging by suggesting that the motives behind consumer behaviour are complex because consumers are led by "routinised types of behaviour" (Reckwitz, 2002, p. 24). Thus, consumers should not be treated as conscious agents but as carriers of practices whose performance keeps such practices alive (Keller, Halkier and Wilska, 2016).

From the viewpoint of policy, technological innovations, and the persuasion of individuals to choose wiser behaviours are only partial solutions to the sustainability crises. The key solution lies in transforming social practices involving material goods and environments and people's competencies and willingness to do something about the problem (Shove, Pantzar and Watson, 2012; Keller, Halkier and Wilska, 2016). Thus, sustainability should be pursued in public governance, in individuals' everyday practices, in housing and transport, in modes of production and, above all, in the education of the young. In addition, the radical view of reducing all private and public consumption, presented by Dryzek (1997) should get more attention in affluent consumer societies.

Circular economy

The current consumption habits are threatening nonhuman nature. This is due to the fast-paced and ever-increasing production, transport, and consumption of goods, which cause high levels of raw material extraction, wastage, and carbon emissions. Human interference with nonhuman nature seems to be justified by the belief in human dominance over nature and supported by the view that natural resources are infinite. PW is not possible with the current degree and rate of consumption; therefore, the way we consume must be questioned, and new ways to fulfil human needs must be adopted. To some extent, CE could provide solutions for this transition (for CE, see Chapter 10).

The research on CE was previously technology- and engineering-oriented but has since moved towards business model aspects as CE research has increased rapidly in recent years (Sarja, Onkila and Mäkelä, 2021). However, the CE perspective on consumption and consumers has only recently been acknowledged, such as in studies on consumer acceptance of different CE products (Camacho-Otero, Boks and Pettersen, 2018), consumers' consumption behaviour in the CE context (Maitre-Ekern and Dalhammar, 2019) and consumers' CE-related knowledge and understanding (Korsunova, Horn and Vainio, 2021), whereas, the topics of non-consumption and refusing to consume in CE research are less explored.

The CE literature has recognized that CE is often understood as waste recycling (Merli, Preziosi and Acampora, 2018) or the trade of second-hand goods (Korsunova, Horn and Vainio, 2021). If CE is considered from such a narrow perspective, opportunities to challenge the fundamental issue of conspicuous consumption are evaded. CE should not be about producing goods more sustainably so that consumers could continue their conspicuous consumption. Without radical changes in consumption habits, CE solutions will not serve PW. Still, a lack of understanding, for instance, of the benefits or characteristics of CE products (Hobson *et al.*, 2021) and a lack of CE product availability or access can hinder CE product adoption. By overcoming these difficulties, perhaps the appreciation of goods will become higher: Once obtained, a product or service is valued more because efforts were made to get it (Nurmi, 2021, p. 53). Of course, the challenge should not be overwhelming, or consumers will be discouraged from pursuing more sustainable options.

From a consumption perspective, CE can connect with PW in practice by challenging consumption habits and demanding closer consideration to what kinds of goods are obtained. To realize more sustainable lifestyles, consumers should follow the CE principles of refusing, reducing, and repairing (Maitre-Ekern and Dalhammar, 2019) and learn to distinguish desires from actual needs. Moreover, consumers have to learn to appreciate pre-owned goods, access over ownership, and service-based solutions (Hobson *et al.*, 2021). While consumers are generally considered in business studies as one-dimensional buyers and users of products, the CE model offers them multiple roles, such as those of a buyer, user, maker, repairer, seller, sharer, and recycler (Korsunova, Horn and Vainio, 2021). This more active agency can help these citizen-consumers understand the need to create a positive impact through their participation and choices and can motivate them to try to create such an impact.

From the citizen-consumers' perspective, perhaps the most important change must take place in their mindsets. PW and CE principles can aid in the transition as they necessitate transformative changes in the knowledge bases and the ways goods are valued. Moreover, humans' appreciation of nonhuman nature and an understanding of their dependence on it are needed.

Digitalization of consumption

The digitalization of consumption can transform sociocultural and technological systems that influence consumption. Digitalization has been identified as a driver of consumer behaviour via e-commerce, the Internet of Things, automation, personalization, and artificial intelligence (AI) (Sima *et al.*, 2020). This accelerates the extractive processes carried out by humans for consumption because it can make purchasing faster and easier. Digitalized consumption may make it challenging for people to see the consequences of their consumption as it makes their relationships with natural resources abstract and thus less traceable. This illuminates the role of humans in realizing digitalized consumption without necessitating other detrimental processes (*i.e.*, massive extraction of resources). While mainstream digitalized consumption has not nurtured sufficiency of humans' resource consumption (Gossen, Ziesemer and Schrader, 2019), which is needed for the survival of other species, numerous initiatives demonstrate determination to transit for sustainability and responsible consumption (Di Vaio *et al.*, 2020). This links sustainable marketing to PW through resource-use reconsideration.

Sustainable marketing has the potential to promote a sufficiency approach to (downscaling) resource consumption by encouraging the thorough reduction of resource use (Gossen, Ziesemer and Schrader, 2019). Using digitalization with the growing amount of data about customer needs, the new communication and distribution platform channels offer novel opportunities for promoting sufficient consumption. These platforms help connect specific consumer needs with the best-matched pre-owned and recycled goods (*e.g.*, in fashion web shops and mobile applications) or the closest zero-emission vehicles (*e.g.*, in electric scooter-sharing services). This enables consumption to involve fewer resources and enhance PW while forming an altruistic, trustworthy, and likeable brand image.

Example of using artificial intelligence for planetary well-being

AI pertains to autonomous and adaptive systems (Roos, 2019) that help users accomplish tasks normally requiring human intelligence (Huang and Rust, 2018). These systems operate using data, algorithms, and robust computers that help make sense of data (Roos, 2019), including consumer data (Huang and Rust, 2018). The impact of AI has been assessed against the accomplishment of 134 targets across the United Nations Agenda for Sustainable Development Goals (Vinuesa *et al.*, 2020), including *responsible consumption and production* (Di Vaio *et al.*, 2020).

Since 2009, AI applications have been increasingly used to conceptualize sustainable products, build a green society through renewable energy consumption, and help airports become resource-efficient and more environmentally friendly while cutting costs (Pusa, 2021), among others. This shows that marketing interventions can use data and digitally generated content for efficient use of resources that are vital for the needs of nonhuman species.

Before data technologies are applied, they need to be considered prudently and systemically. The advancement of data technologies calls for more critical evaluation rather than only increasing their convenience for human consumption or reducing the harm that they can cause. It is vital for PW that consumers are aware of data technologies' impacts on their consumption while such technologies are guiding them towards the most sustainable consumption and reduced consumption. Aside from governments' regulatory involvement in limiting unsustainable consumption through legislation and norms, a rigorous assessment of algorithms and consumer agency is critical. As AI is an emerging field, its algorithms are still limited in terms of upholding sustainable consumption. AI applications operate with predetermined product features, thus still limiting sustainable-product recommendations and options for consumers. Algorithm management is vital to ensure that consumption favours the most environmentally friendly products and services among the available options.

It is important to keep in mind that while AI applications can suggest the most environmentally friendly options within a certain product range, they have not yet been enabled to suggest recycling or non-consumption (when these are much more environmentally friendly). Thus, user education is critical in equipping people with the knowledge that they need to be independent and self-determined rather than reliant on and dominated by the evolving technology.

Informing consumers

To further reduce humans' impact on the nonhuman world, humans need to be provided with more credible information about and guidance towards sustainable consumption. Among the tools that can help consumers make better-informed choices are ecolabels.

Ecolabels are environmental claims that define, compile, test, and summarize products' environmental performance and present this in the easiest way possible to close the information gap between consumers and producers regarding products' environmental attributes (Gallastegui, 2002; Rex and Baumann, 2007). For companies, ecolabels are a benchmark for environmental improvement (Bratt *et al.*, 2011) and set stringent criteria that encourage eco-innovation beyond the regulatory requirements. The assumption is that in the long run, the repetition of incremental eco-innovations implemented by companies to meet the existing ecolabel criteria will result in more radical eco-innovations that will improve the state of the environment (Prieto-Sandoval *et al.*, 2016). The requirements that products or services must meet before they can use multi-criteria, third-party-certified ecolabels (Type 1) are a mechanism for integrating the PW approach.

Nevertheless, ecolabels are anthropocentric in the sense that their use does not aim to limit or question consumption, which can compromise PW. On the contrary, a product's ecolabel can justify its increased consumption. The growing popularity of the practice of marketing products based on their environmental attributes

has resulted in the proliferation of ecolabeling schemes used by businesses, such as those in the food, textile, electronics, and tourism industries. In fact, there are over 450 ecolabels being administered privately, publicly, or by nongovernmental organizations, showing varying foci and levels of stringency and various administrative arrangements (Big Room Inc., 2021). This popularity of ecolabels poses a risk of their misuse by companies to greenwash their products by misleading consumers regarding their environmental practices within the company or the environmental performance of their products (Delmas and Burbano, 2011).

Conceptually, ecolabels are tools for showcasing the products with the best environmental performance, but there are limitations to evaluating their real-life impacts (Meis-Harris *et al.*, 2021). Hence, the possible contribution of ecolabels as a means of providing consumer information that supports the transition towards PW cannot be verified in real life. Because there is currently no consensus on the definition of “green product” and on how to determine whether a product can be regarded as such, the different ecolabeling schemes emphasize different aspects of sustainability performance. Although the ISO Type 1 ecolabels take a life cycle approach, other ecolabels focus on only one issue or entail companies’ self-administered declarations, which may be based on varying assessment methods. To counter this lack of harmony among the objectives, requirements, and methods used by ecolabeling schemes, there is a growing idea that ecolabels must have common requirements and certification procedures to be able to jointly address global environmental challenges (Baumeister and Onkila, 2017; Iraldo, Griesshammer and Kahlenborn, 2020).

While it would be in line with the concept of PW to discourage consumption, all living organisms, including humans, do need to consume to ensure their well-being. Informing consumers about the impacts of their consumption choices through ecolabels can help them make better-informed choices, bringing us closer to the realization of PW.

Conclusion

Marketing is often accused of stimulating overconsumption (Gossen, Ziesemer and Schrader, 2019). Nevertheless, businesses are seeking ways not only to mitigate the adverse consequences of unsustainability but also to come up with solutions to the problem of making the production and consumption of goods and services acknowledge the PW criteria. This chapter discussed some solutions, ranging from small incremental improvements to more fundamental changes with significant impacts. Genuine sustainable and environmentally friendly consumption contributes to PW by reducing the resources used for consumption through the re-evaluation of the level of human needs (*ibid.*) or, in PW terminology, the relevant need satisfiers. CE introduces consumers to a new type of agency with multiple roles, values societal transformation and guides consumers’ routinised practices, and ecolabeling could provide an assurance that product information is accurate and reliable, thus facilitating consumers’ sustainable choices. While these are some

ways that consumers can demonstrate respect for nature, Chapter 10 further reflects the role of business in PW.

Marketing can contribute to the efforts to create value for nature and humans by influencing consumers and public policymakers and promoting sustainability as a norm in society (Martin, 2013). There is a growing awareness among consumers, businesses, and policymakers of the adverse consequences of the current business and consumption practices on the planet. Effective communication and marketing tools, such as delivering accurate information through ecolabels and certificates and novel digital means utilizing AI, are necessary for a broader change to take place in consumers' and citizens' knowledge, values, and culture. The solutions presented in this chapter represent partial ways to transform towards PW. Marketing can also be used to create social media communities consisting of companies, consumers, and nature that support and nurture a way of life that respects nature. Effective models and examples of balancing human and nonhuman needs are required, and both businesses and consumers, as well as the education system, should be engaged in producing them.

Various incremental sustainability changes with marginal impacts are relatively easy for consumers and companies to adopt. Small steps are necessary to engage the larger masses of consumers and companies in the short term, and change is feasible if everyone (or at least the majority) participates. However, a radical reduction in natural resource consumption is needed to achieve PW. CE is a comprehensive business model that tackles the overconsumption of natural resources and the excessive waste problem. It not only changes businesses but also prompts and encourages consumers to move beyond being merely buyers and users of products and to adopt multiple roles in the production and consumption system.

Acknowledgements

The authors are grateful to all supporters for their contributions to the writing of this book chapter. They acknowledge financial support from the Kaute Foundation (grant year 2022) and from University of Jyväskylä (grant years 2022).

References

- Aaker, J., Fournier, S. and Brasel, S.A. (2004) 'When good brands do bad', *Journal of Consumer Research*, 31(1), pp. 1–16. <https://doi.org/10.1086/383419>
- Baumeister, S. and Onkila, T. (2017) 'An eco-label for the airline industry?', *Journal of Cleaner Production*, 142(4), pp. 1368–1376. <https://doi.org/10.1016/j.jclepro.2016.11.170>
- BBC (2020) 'Ryanair rapped over low emissions claims', *BBC News*. Available at: <https://www.bbc.com/news/business-51372780> (Accessed: 3 November 2021).
- Bedard, S.A.N. and Tolmie, C.R. (2018) 'Millennials' green consumption behaviour: Exploring the role of social media', *Corporate Social Responsibility and Environmental Management*, 25(6), pp. 1388–1396. <https://doi.org/10.1002/csr.1654>
- Big Room Inc. (2021). *Ecolabel Index*. Available at: www.ecolabelindex.com (Accessed: 18 November 2021).

- Bratt, C. *et al.* (2011) 'Assessment of eco-labelling criteria development from a strategic sustainability perspective', *Journal of Cleaner Production*, 19, pp. 1631–1638. <https://doi.org/10.1016/j.jclepro.2011.05.012>
- Camacho-Otero J., Boks C. and Pettersen I.N. (2018) 'Consumption in the circular economy: A literature review', *Sustainability*, 10(8), 2758. <https://doi.org/10.3390/su10082758>
- Delmas, M. and Burbano, V. (2011) 'The drivers of greenwashing', *California Management Review*, 54(1), pp. 64–87. <https://doi.org/10.1525/cm.2011.54.1.64>
- Di Vaio, A. *et al.* (2020) 'Artificial intelligence and business models in the sustainable development goals perspective: A systematic literature review', *Journal of Business Research*, 121, pp. 283–314. <https://doi.org/10.1016/j.jbusres.2020.08.019>
- Dietz, S. and Neumayer, E. (2007) 'Weak and strong sustainability in the SEEA: Concepts and measurement', *Ecological Economics*, 61, pp. 617–626. <https://doi.org/10.1016/j.ecolecon.2006.09.007>
- Dryzek, J.S. (1997) *The Politics of the Earth: Environmental Discourses*. Oxford: Oxford University Press.
- Dutta, S. and Pullig, C. (2011) 'Effectiveness of corporate responses to brand crises: The role of crisis type and response strategies', *Journal of Business Research*, 64(12), pp. 1281–1287. <https://doi.org/10.1016/j.jbusres.2011.01.013>
- ElHaffar, G., Durif, F. and Dubé, L. (2020) 'Towards closing the attitude-intention-behavior gap in green consumption: A narrative review of the literature and an overview of future research directions', *Journal of Cleaner Production*, 275, 122556. <https://doi.org/10.1016/j.jclepro.2020.122556>
- Gabler, C.B., Landers, V.M. and Richey, R.G. (2021) 'Benefits and challenges of developing an eco-social orientation: Implications for marketing practice', *European Journal of Marketing*, 55(4), pp. 1155–1176. <https://doi.org/10.1108/EJM-05-2019-0400>
- Gallastegui, I. (2002) 'The use of eco-labels: A review of the literature', *European Environment*, 12, pp. 316–331. <https://doi.org/10.1002/eet.304>
- Garner, R. (2000) *Environmental Politics: Britain, Europe and the Global Environment*. 2nd edn. London: MacMillan Pub. Ltd.
- Geels, F.W. *et al.* (2015) 'A critical appraisal of sustainable consumption and production research: The reformist, revolutionary and reconfiguration positions', *Global Environmental Change*, 34, pp. 1–12. <https://doi.org/10.1016/j.gloenvcha.2015.04.013>
- Gossen, M., Ziesemer, F. and Schrader, U. (2019) 'Why and how commercial marketing should promote sufficient consumption: A systematic literature review', *Journal of Macromarketing*, 39(3), pp. 252–269. <https://doi.org/10.1177/0276146719866238>
- Ham, C.-D. *et al.* (2021) 'Greener than others? Exploring generational differences in green purchase intent', *International Journal of Market Research*, 64(3), pp. 376–396. <https://doi.org/10.1177/147078532111034108>
- Hobson, K. *et al.* (2021) 'Consumption work in the circular economy: A research agenda', *Journal of Cleaner Production*, 321, 128969. <https://doi.org/10.1016/j.jclepro.2021.128969>
- Huang, M.H. and Rust, R.T. (2018) 'Artificial intelligence in service', *Journal of Service Research*, 21(2), pp. 155–172. <https://doi.org/10.1177/1094670517752459>
- Huber, F. *et al.* (2010) 'Brand misconduct: Consequences on consumer–brand relationships', *Journal of Business Research*, 63(11), pp. 1113–1120. <https://doi.org/10.1016/j.jbusres.2009.10.006>
- Iraldo, F., Griesshammer, R. and Kahlenborn, W. (2020) 'The future of ecolabels', *The International Journal of Life Cycle Assessment*, 25, pp. 833–839. <https://doi.org/10.1007/s11367-020-01741-9>

- Keller, M., Halkier, B. and Wilska, T.-A. (2016) 'Policy and governance for sustainable consumption at the crossroads of theories and concepts', *Environmental Policy and Governance*, 26(2), pp. 75–88. <https://doi.org/10.1002/eet.1702>
- Korsunova, A., Horn, S. and Vainio, A. (2021) 'Understanding circular economy in everyday life: Perceptions of young adults in the Finnish context', *Sustainable Production and Consumption*, 26, pp. 759–769. <https://doi.org/10.1016/j.spc.2020.12.038>
- Kortetmäki, T. et al. (2021) 'Planetary well-being', *Humanities and Social Sciences Communications*, 8, p. 258. <https://doi.org/10.1057/s41599-021-00899-3>
- Kotler, P. (2011) 'Reinventing marketing to manage the environmental imperative', *Journal of Marketing*, 75(4), pp. 132–135. <https://doi.org/10.1509/jmkg.75.4.132>
- Kuoppamäki, S.-M., Wilska, T.-A. and Taipale, S. (2017) 'Ageing and consumption in Finland: The effect of age and life course stage on ecological, economical and self-indulgent consumption among late middle-agers and young adults between 1999 and 2014', *International Journal of Consumer Studies*, 41(5), pp. 457–464. <https://doi.org/10.1111/ijcs.12353>
- Lin-Hi, N. and Müller, K. (2013) 'The CSR bottom line: Preventing corporate social irresponsibility', *Journal of Business Research*, 66(10), pp. 1928–1936. <https://doi.org/10.1016/j.jbusres.2013.02.015>
- Maitre-Ekern, E. and Dalhammar, C. (2019) 'Towards a hierarchy of consumption behaviour in the circular economy', *Maastricht Journal of European and Comparative Law*, 26(3), pp. 394–420. <https://doi.org/10.1177/1023263X19840943>
- Martin, D. (2013) *Sustainable Marketing: Pearson New International Edition*. Pearson.
- McDonagh, P. and Prothero, A. (2014) 'Sustainability marketing research: Past, present and future', *Journal of Marketing Management*, 30(11–12), pp. 1186–1219.
- Meis-Harris, J. et al. (2021) 'What is the role of eco-labels for a circular economy? A rapid review of the literature', *Journal of Cleaner Production*, 306, 127134. <https://doi.org/10.1016/j.jclepro.2021.127134>
- Merli, R., Preziosi, M. and Acampora, A. (2018) 'How do scholars approach the circular economy? A systematic literature review', *Journal of Cleaner Production*, 178, pp. 703–722. <https://doi.org/10.1016/j.jclepro.2017.12.112>
- Nurmi, A. (2021) *Rakastan ja vihaan vaatteita*. Helsinki: Kustantamo S&S.
- Ouyang, Z., Yao, C.N. and Hu, X. (2020) 'Crisis spillover of corporate environmental misconducts: The roles of perceived similarity, familiarity, and corporate environmental responsibility in determining the impact on oppositional behavioral intention', *Business Strategy and the Environment*, 29(4), pp. 1797–1808. <https://doi.org/10.1002/bse.2474>
- Press, M. (2021) 'Developing a strong sustainability research program in marketing', *AMS Review*, 11, pp. 96–114. <https://doi.org/10.1007/s13162-020-00185-6>
- Prieto-Sandoval, V. et al. (2016) 'ECO-labels as a multidimensional research topic: Trends and opportunities', *Journal of Cleaner Production*, 135, pp. 806–818. <https://doi.org/10.1016/j.jclepro.2016.06.167>
- Pusa, M. (2021) *Finavia the optimal airport, Fourkind Helsinki*. Available at: <https://www.fourkind.com/work/finavia-optimal-airport> (Accessed: 12 June 2021).
- Reckwitz, A. (2002) 'Toward a theory of social practices: A development in culturalist theorizing', *European Journal of Social Theory*, 5, pp. 243–263.
- Rex, E. and Baumann, H. (2007) 'Beyond ecolabels: What green marketing can learn from conventional marketing', *Journal of Cleaner Production*, 15, pp. 567–576. <https://doi.org/10.1016/j.jclepro.2006.05.013>

- Ritala, P., Albareda, L. and Bocken, N. (2021) 'Value creation and appropriation in economic, social, and environmental domains: Recognizing and resolving the institutionalized asymmetries', *Journal of Cleaner Production*, 290, 125796. <https://doi.org/10.1016/j.jclepro.2021.125796>
- Roos, T. (2019) 'Elements of AI' [Course lecture]. University of Helsinki. Unpublished.
- Sarja, M., Onkila, T. and Mäkelä, M. (2021) 'A systematic literature review of the transition to the circular economy in business organizations: Obstacles, catalysts and ambivalences', *Journal of Cleaner Production*, 286, 125492. <https://doi.org/10.1016/j.jclepro.2020.125492>
- Shove, E., Pantzar, M. and Watson, M. (2012) *The Dynamics of Social Practice: Everyday Life and How It Changes*. London: Sage.
- Sima, V. et al. (2020) 'Influences of the Industry 4.0 Revolution on the human capital development and consumer behavior: A systematic review. *Sustainability*, 12(4035), 4035. <https://doi.org/10.3390/su12104035>
- Spaargaren, G. (2011) 'Theories of practices: Agency, technology, and culture: Exploring the relevance of practice theories for the governance of sustainable consumption practices in the new world-order', *Global Environmental Change*, 21, pp. 813–822. <https://doi.org/10.1016/j.gloenvcha.2011.03.010>
- Thaler, R.H. and Sunstein, C.R. (2008) *Nudge: Improving Decisions about Health, Wealth, and Happiness*. New Haven, CT: Yale University Press.
- Vinuesa, R. et al. (2020) 'The role of artificial intelligence in achieving the Sustainable Development Goals', *Nature Communications*, 11(1), 233. <https://doi.org/10.1038/s41467-019-14108-y>
- Wilska, T.-A. (2002) 'Me, a consumer? Consumption, identities and lifestyles in today's Finland', *Acta Sociologica*, 45(3), pp. 195–210. <https://doi.org/10.1080/00016990260257184>
- Xu, H., Bolton, L.E. and Winterich, K.P. (2021) 'How do consumers react to company moral transgressions? The role of power distance belief and empathy for victims', *Journal of Consumer Research*, 48(1), pp. 77–101. <https://doi.org/10.1093/jcr/ucaa067>