

Lectio praecursoria

Sufficiency transitions: Realizing consumption changes for environmental sustainability

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1.2 degrees Celsius. That is how much the global mean temperature has risen from pre-industrial levels according to the United Nations (2021). It is quickly approaching the limit of 1.5 degrees Celsius agreed upon in the Paris Agreement in 2015. 1 million. That is the number of species that are facing extinction according to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES, 2019). The global rate of biodiversity loss has been estimated to be tens to hundreds of times higher than the average over the last 10 million years. Four. That is the number of so-called planetary boundaries for which researchers estimate that we have already transgressed what is sustainable. Four out of nine boundaries, including the two most important ones: climate change and biosphere integrity (Rockström et al., 2009; Steffen et al., 2015). 15,364. That is the number of researchers that in 2017 signed a call for urgent action to stop the degradation of the natural environment caused by human activity (Ripple et al., 2017). The scientific community is in agreement on the need for changes to human societies to halt environmental degradation.

Environmental footprint indicators, such as carbon and material footprints, measure the environmental impact of human activities (Čuček et al., 2012). It is in particular the environmental footprints of high-consuming classes in affluent countries such as Finland that require steep reductions. Research has estimated that countries such as Finland need to reduce its material footprint by at least 80% (Lettenmeier et al., 2014). By the year 2050, we need to reduce our carbon footprint by as much as 93% (Institute for Global Environmental Strategies et al., 2019). This is an enormous reduction that will present a massive challenge in the coming decades. How can we achieve the needed reductions in environmental footprints? What changes do we need to make to our ways of living? And, perhaps the most difficult question of all, how can we realize the complex social changes that are needed?

This is the discussion my thesis aims to contribute to. In the thesis I study sufficiency transitions. Sufficiency advocates for consumption-side changes to mitigate environmental degradation. As an approach to (environmentally) sustainable consumption, sufficiency posits that reducing environmental footprints requires substantial changes in consumption patterns among high-consuming classes, including reduced consumption levels (Lorek & Fuchs, 2013). This is in contrast to the currently dominant approaches of efficiency improvements in production, technological innovations, and so-called “greening” of consumption (Lorek & Fuchs, 2013). Sufficiency transitions are the processes needed to change consumption patterns.

So, how can we study such change processes? Sociologist Erik Olin Wright (2013) suggests that any research that seeks social change, such as sustainability research, needs to address four tasks. In my thesis, I have used Wright’s framework to study sufficiency transitions. My work shows how the framework can be applied to study social change in sustainability research.

First, we need to specify the *moral principles* that guide our assessment of the current state of society, as well as desired future states (Wright, 2013). All efforts to change society, such as transitions toward sufficiency, rest on some moral principle(s) that guide our actions. Making these moral principles explicit should be the first step in any analysis of social change. In my thesis, I identify environmental preservation as the primary moral principle of sufficiency: the ultimate goal of sufficiency transitions is to halt environmental degradation and preserve the natural environment.

However, specifying the goal is not enough. We should not accept any moral principle without question. Rather, we need to assess its validity. Normative validity refers to the reasons that we provide in support of a moral principle, and how strong these reasons are assessed to be. In my thesis, I use Maeve Cooke’s (2006) framework to assess normative validity.

Closely related to this first task of research that seeks social change is the second task: developing a *diagnosis and critique* of the current state of society that holds the moral principle as the standard (Wright, 2013). In other words, how well are we currently realizing the goals that we are aiming for? In my thesis, this means analyzing how well we are currently doing in preserving the natural environment. Environmental degradation is well documented (e.g., IPCC, 2014, 2018; Rockström et al., 2009; Steffen et al., 2015) and current efforts appear to be failing in halting environmental degradation (Jackson, 2016; Wiedmann et al., 2015).

Despite this, sufficiency is still not seriously considered as an alternative course of action. I felt there was a need to further develop the argument for sufficiency. I asked the question of *Why*: Why should sufficiency transitions be realized? Following calls for more normative analyses in sustainability research (Miller et al., 2014), I developed a normative justification for sufficiency. Together with my co-authors, I analyzed the normative validity of sufficiency as well as current efforts to

halt environmental degradation, collated under the term green growth; we show that sufficiency holds stronger normative validity than current efforts (Sandberg et al., 2019). Our analysis provides a normative argument for focusing efforts to halt environmental degradation on sufficiency.

Now that we have established a reasoning for advancing sufficiency transitions, we can move to the goal itself: sufficiency. According to Wright (2013), the third task of research seeking social change is to identify viable *alternatives* for the future in response to the critique. When the diagnosis of the current state of society shows that the moral principle is not currently met, we need to suggest alternative visions for the future to attain the moral principle. In my thesis, this means that, since environmental degradation is continuing despite efforts to curtail it, we need alternative courses of action to preserve the natural environment. In my thesis, I suggest sufficiency as such an alternative vision for the future.

However, as I was reading the literature on sufficiency, I came to realize that what sufficiency entails is actually not all that clear. It was habitually referred to as reductions in consumption levels as well as changes in consumption patterns (e.g., Fuchs & Lorek, 2005), but it was unclear to me what, specifically, these consumption changes are. I thus asked the question of *What*: What consumption changes does sufficiency entail? I identified four potential types of consumption changes: absolute reductions, modal shifts, product longevity, and sharing practices (Sandberg, 2021). In addition, I used this typology to categorize specific sufficiency practices in four consumption categories: housing, nutrition, mobility, and miscellaneous consumption. Based on my work, I propose to understand sufficiency as follows:

Sufficiency entails consumption changes to reduce the environmental footprint of high-consuming classes, including absolute reductions in the amount of consumption, modal shifts from one consumption mode to one that is less resource-intensive, extending product lifespans, and sharing products among individuals.

Once we know what our vision for the future is, the question becomes how we can realize it. The fourth and final task in Wright's (2013) framework is to provide guidance on how to realize the alternative vision(s) through processes of *transformation*. This means that we need to find ways to make our visions for the future a reality. In my thesis, this is the study of transitions toward sufficiency. We have now arrived at the key question of my thesis, *How*: How can we realize the consumption changes I had just identified as pertinent to sufficiency?

The realization of sufficiency transitions is a complex question that one can only begin to answer within the limits of a thesis. I approached the question in two ways. First, I wanted to better understand the complexity of sufficiency transitions. Previous research had suggested that transitions are complex processes, requiring changes along multiple dimensions (Markard et al., 2012). To better understand this complexity, I identified different barriers that currently prevent sufficiency

transitions, and which need to change (Sandberg, 2021). In addition, I identified actors that participate in the transition processes. Based on my findings, I propose the following:

Sufficiency transitions are changes to societal systems along several dimensions (individual, cultural, economic, political, material), involving a multitude of actors (businesses, policymakers, civil society actors), with the aim of realizing sustainable modes of consumption characterized by sufficiency.

To better understand sufficiency transitions, I then analyzed the role of cultural change in sufficiency transitions. For sufficiency transitions to be realized, changes are likely required to Western consumer cultures (Alexander, 2013), which are built around high levels of consumption. In my thesis, I studied how socio-cultural meanings and norms can be negotiated to normalize sufficiency (Sandberg, 2018). I found that sufficiency can be seen as both a voluntarily made change to consumption patterns and as a change made out of necessity. In addition, I found that sufficiency can either challenge or conform to dominant consumption norms that value high levels of consumption. Which interpretations of sufficiency come to dominate will almost certainly have an impact on whether transitions toward sufficiency become more widespread or remain a marginal undertaking.

Though I have only been able to begin answering the question of how to realize sufficiency transitions in my thesis, I hope that it can be a starting point for further research on sufficiency transitions. Environmental problems such as climate change and biodiversity loss demand urgent action, and an increasing number of researchers recognize the need for sufficiency. Understanding how we can realize much-needed changes in consumption patterns is essential if change is to happen.

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