



Sustainability: Science, Practice and Policy

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/tsus20

Democratizing provisioning systems: a prerequisite for living well within limits

Julia Steinberger, Gauthier Guerin, Elena Hofferberth & Elke Pirgmaier

To cite this article: Julia Steinberger, Gauthier Guerin, Elena Hofferberth & Elke Pirgmaier (2024) Democratizing provisioning systems: a prerequisite for living well within limits, Sustainability: Science, Practice and Policy, 20:1, 2401186, DOI: 10.1080/15487733.2024.2401186

To link to this article: https://doi.org/10.1080/15487733.2024.2401186

© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



0

Published online: 24 Sep 2024.

C	
L	
L	0
_	

Submit your article to this journal 🖸



View related articles



View Crossmark data 🗹

RESEARCH ARTICLE

OPEN ACCESS (Check for updates

Tavlor & Francis

Taylor & Francis Group

Democratizing provisioning systems: a prerequisite for living well within limits

Julia Steinbergera 🝺, Gauthier Guerin^b 🝺, Elena Hofferbertha 🝺 and Elke Pirgmaiera 🍺

alnstitute of Geography and Sustainability, Faculty of Geosciences and Environment, University of Lausanne, Lausanne, Switzerland; ^bCatalyst Collective Ltd, Cornholme, Todmorden, United Kingdom

ABSTRACT

The core challenge of the 21st century, of achieving good living conditions for all, while bringing resource use and emissions down within planetary limits, is likely to be technically feasible. However, current political and economic trends perpetuate extractive practices and growth imperatives, where decisions that benefit vested interests at the expense of humanity and life on Earth are hidden behind capitalist market logics. To break this deadlock, we argue economic democratization is necessary, bringing crucial economic decision-making into the sphere of democratic deliberation. We review existing proposals and argue that economic democracy requires more fundamental rethinking of social, political, and economic relations. We then explore these in three thematic areas: the deepening of democracy, the importance of provisioning systems, and the provisioning logics within organizations. We conclude with a call to action for a revived coalition of environmental and social movements, focused on the crucial task of democratizing the economy through its provisioning systems and organizations.

ARTICLE HISTORY

Received 6 November 2023 Accepted 2 September 2024

KEYWORDS

Economic democracy; human needs: provisioning systems; organizational logics

Introduction

Achieving good living conditions for all within planetary limits is likely to be technically feasible (Millward-Hopkins et al. 2020). The attainment of this goal therefore mainly hinges upon politico-economic systems. The dominant capitalist political-economy regime is steered toward profitmaking rather than need satisfaction and sustainability, perpetuating extractivist practices and unequal outcomes (Pirgmaier 2020). Living well within limits thus depends above all on a fundamental shift of capitalist economies toward economic democracy (Johanisova and Wolf 2012).

At a very general level, we share a classical understanding of democracy "as rule by the demos, by the plebes, by the people themselves" (Barber 1974). We propose that democratic deliberation should extend into the sphere of economic decision-making, involving the expansion of people's capacities to participate in and shape decision-making, governance, and ownership structures in the economy.

We defend democracy and participation as essential for social-ecological transformation on several grounds. First, democratic processes are pivotal to foster support for a transformation that lives up to the scope, speed, and scale required to prevent large-scale ecological and social collapse (Büchs and Koch 2019). Second, there is evidence for processes of democratic deliberation to develop "positions which are more ambitious, and a more comprehensive response to the climate crisis, than national governments" (Willis, Curato, and Smith 2022). Third, democratizing ownership and control over essential resources and decision-making structures can weaken socially and environmentally destructive dependencies that characterize capitalist economies, for example the necessity of firms to make profit and expand to secure economic survival (Johanisova and Wolf 2012; Hofferberth 2021; van Griethuysen 2012; Barry 2021). Finally, we oppose authoritarian solutions not only on moral grounds, but because there is no guarantee these interventions would necessarily be better able to deal with social, economic, and ecological disruptions (Willis, Curato, and Smith 2022; Fiorino 2022).

Rooting our approach in the heterodox economics tradition, we focus on provisioning systems which provide the goods and services for society's needs (Jo

CONTACT Julia Steinberger 🖾 Julia.Steinberger@unil.ch 💽 Institute of Geography and Sustainability, Faculty of Geosciences and Environment, University of Lausanne, Lausanne CH-1015, Switzerland

^{© 2024} The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

and Todorova 2017). We break with mainstream-economics approaches limited to the "allocation of scarce resources between competing ends" (Pirgmaier 2017) since these approaches neglect unequal power relations, which are a central motivation for democratizing the economy.

In heterodox economics, social provision is the purpose of the economy (Gruchy 1987) and provisioning systems are its building blocks, since they "mediate the relationships between biophysical resource use and social outcomes" (Fanning, O'Neill, and Büchs 2020). Provisioning systems are cross-sectoral networks of production and distribution of goods and services. They are defined by the object of consumption that they produce (or constrain). The reorganization of provisioning systems holds great potential for economic democracy, not least because of increasing evidence that high-quality public provisioning of essential goods and services is conducive to both people's needs satisfaction and lower energy use (Baltruszewicz et al. 2021; Gough 2017; Vogel et al. 2021). We argue that the democratization of provisioning systems is a central element of such reorganization.

Our proposal for democratizing provisioning systems builds on existing approaches for the socialecological transformation of politico-economic systems, and seeks to alleviate some of their shortcomings. Predominant macroeconomic interventions focus on the important aspects of monetary and fiscal policy to boost or constrain economic activity rather than the reorganization of provisioning of goods and services. Contemporary Green New Deals include visions for the transformation of housing, transport, and energy, but fail to address decisionmaking (Aronoff et al. 2019; Ajl 2021). Recent proposals for democratic ecological planning focus on general principles and mechanisms (Hahnel 2021; Legault and Tremblay-Pepin 2023), but neglect the specificities of provisioning systems (such as their relation to human need satisfaction or their impacts on workers, end-users, and communities). The same applies to proposals for Universal Basic Services (UBS) and institutional transformation through democratically controlled organizations, which also remain vague on ownership and decision-making (Coote and Percy 2020; Balmer and Bernet 2015; Hinton 2021a). Meanwhile, proposals for economic democracy often are limited to one-size-fits-all worker cooperatives, for instance (Schweickart 2011), neglecting the diversity of provisioning systems and organizational forms (Michie, Blasi, and Borzaga 2017; Hinton 2021b).

This article is based on an exploratory narrative literature review (Sovacool, Axsen, and Sorrell 2018),

guided by the expertise of the authors. We put forward three thematic lenses, each offering pointers for transformative change. The next section elaborates why capitalist economies are unfit to deliver decent lives for everyone within planetary boundaries and outlines avenues for moving toward economic democracy. The third section hones in on the centrality of provisioning systems for needs- and sufficiency-oriented provisioning and argues for consideration of provisioning systems specificities. In the fourth section, we elaborate an analytical framework to conceptualize the institutionalization of provisioning logics in organizations and identify institutional arrangements delivering need satisfaction instead of profit-making. The final section concludes.

The case for democratizing provisioning systems

Our case for democratizing provisioning systems is two-fold. We first describe the democratic deficit of the politico-economic sphere under capitalism and explain why it is not fit for purpose for delivering decent lives for everyone within planetary boundaries. We then offer some reflections on how to transform toward economic democracy as a lived reality in which people unlearn passive citizenship and relearn active political participation in daily life, including social provisioning.

Unmasking the democratic deficit in capitalist economies

Provisioning systems under capitalism are predominantly characterized by for-profit business logics. These provisioning logics are supported by neoliberal market ideology (Brown 2019), and thus presented as necessary, and often desirable, for social stability and human well-being. The compulsion of profit accumulation and reproduction/expansion of exchange value, rather than use value, or social and ecological values (Nelson 2022), is structurally grounded in unequal power relations between producers and profiteers.¹

A democratic economic system would have the capacity to halt or curb production when demand is satisfied. However, as environmental sociologists Allan Schnaiberg and Kenneth Gould exposed in their "treadmill of production" theory (Gould, Pellow, and Schnaiberg 2008), productivity gains and expansion of production risk precipitating the entire economic system into crisis, if these are not accompanied by increases in demand. The conundrum of capitalism is one of an overproductive system needing to

This economic sphere and logics of capitalist provisioning have a very specific political counterpart. As Ellen Meiksins-Wood (2016) shows, what we know as "democracy" in capitalist economies today has developed, and was designed, in tandem with capitalist forces, with the intention to sustain a propertied oligarchy with the electoral consent of a popular multitude. "Representative democracy" was born as an idea that both embodies and at the same time curtails popular power. Although some curtailment to simple majority rule might entail democratic benefits, such as the protection of minorities, and intersectional considerations, the main idea, according to Meiksins-Wood, is not to enable the exercise of political power for everyone, but to transfer it to a small number of people, who keep serving an elite. The transfer of power to "representatives" often undermines the essence of democracy of governing by the people, for the people, because it creates an inclusive but passive citizen body (Barber 1974; Meiksins-Wood 2016).

Meiksins-Wood illustrates that the emergence of distinct "economic" and "political" spheres as we know them today, is a separation that is unique in history (see also Jessop 2022). The political sphere (as a central state) arose separately from the economic interests of landlords, who then acted to protect the economy from direct state intervention. As a result, political issues such as control over production and appropriation or decisions about the allocation of resources were cut off from the political arena, and therefore left in the hands of those who control corporations (Meiksins-Wood 2016). Under capitalism it has thus become possible to leave exploitative class and property relations between capital and labor largely intact while permitting the formal democratization of civil, social, and political rights (Brown 2019; Meiksins-Wood 2016; Marshall 1950).

The formal separation of polity and economy is misleading, as multiple interdependencies exist between the economic and political, "the market" and "the state. Capital(ism)'s global reach fosters international competition among states, and states are under pressure to create attractive conditions for capital, via weak regulation and low corporate taxation. "These efforts contribute to the perpetuation of the capitalist system and, thereby, systemic pressures which reimpose themselves on the state" (Hofferberth 2021; Copley and Moraitis 2021). Yet, while states are (to varying degrees) dependent on capital, capitalism simultaneously fosters and depends on state action through, for example, the enforcement of property rights through the legal system (Hofferberth 2021; Fine and Saad-Filho 2004) and infrastructure investment. These interdependencies create major challenges for moving toward a politico-economic system that prioritizes social and ecological targets rather than profit for a few by means of planetary destruction.

In the past half century, neoliberal ideology (aided by a large fraction of neoclassical economists) has shaped politics and economics away from democracy (Brown 2019; Meiksins-Wood 2016; Fine and Saad-Filho 2004). The downsides of limited public decision-making in the economic sphere are significant and underlie many current social and ecological crises (Bookchin 2005).

Practicing economic democracy

How could democratic accountability be brought into the economic sphere? By reconceiving democracy, not simply as a political category, but as an economic one, in which active participation and decision-making in the provision of what we all need to live well becomes the core of civic life. Rather than limiting the role of the public sphere (itself narrowly represented by the state) to regulating market failures, economic democracy would place citizen decision-making about production, consumption, resource allocation, investment, and ownership at the center of civic life. This vision thus goes beyond debates focused on distribution, fairness, or welfare.

We cannot assume that people are immediately able to become active economic democratic agents under capitalism. People have been alienated from active economic participation over centuries by highly unequal, complex, and exploitative economic systems. The accumulation of power in economic and political institutions remains biased in terms of appropriating the majority of surplus value for a minority, rather than serving everyone (Barry 2021).

Given this background, what does it entail to transform toward economic democracy? How could people unlearn passive citizenship, and (re)learn active participation in daily life?

Developing new visions of human flourishing

To engage with economic democracy, it is important to create the capacity for redefining common goals. Visioning helps to unite around shared purposes (Güneşer 2021). Common goals could be working together toward shared prosperity and individual flourishing within planetary boundaries (Raworth 2017). Visioning is itself a practice of economic democracy, within spaces where everyone can contribute, and thus foster a sense of shared ownership and responsibility; to create the appetite, willingness, and desire to bring the vision to life. Rather than a final product, visioning is an open and dynamic expression that is continuously discussed and renewed (Güneşer 2021). Transformation does not happen linearly, it is an iterative process (Brown 2017).

In order for such visioning to occur, high quality public spaces in which everyone is welcome to participate are necessary. Liberating time and space to facilitate such practices is an essential part of the struggle for alternative forms of provisioning (Haug 2009).

Training for active democracy

Active self-government is not only representative, but aims for direct involvement and participation in production, education, care, and other areas of social life. Decisions and responsibilities thus occur close to people's lived realities. This necessitates a societal emphasis on lifelong learning and education. Learning in the democratic society is much more learning "on the job" – praxis and reflection become much more intertwined (Nelson 2022; Kropotkin 2009 [1901]).

Taking part in economic democracy requires a markedly different skill-set than that taught in traditional schools and professional training (Kaufmann, Sanders, and Wortmann 2019). Traditional skill-sets involve individual work, rote learning, and competition for grades (Kaufmann, Sanders, and Wortmann 2019; Jensen 2004; hooks 2010). In contrast, economic democracy requires critical, collaborative, and experimental skill-sets. Learning how to experiment with different types of organizations and how to guard against anti-democratic drifts is essential. Active economic democracy thus requires new types of critical training and thinking, as a prerequisite for doing the work of engaged citizenship.

Organizing in ways that prefigure a democratic society

The process of decolonizing minds and bodies from oppression is a continuous collective practice (Thiong'o 1986). It involves learning with each other how to live into the desirable future. At its heart lies a way of relating with "others" – a culture of communication – that reflects the principles and values of a democratic society, such as solidarity, reciprocity, generosity, care, commitment, trust, accountability, and transparency – while not shying away from conflict. In this spirit, the cultural critic, feminist theorist, and writer, bell hooks, advocates that "loving practice is the primary way we end domination and oppression...all great social movements for freedom and justice...have promoted a love ethic" (hooks 2018). This should include the reconfiguration of relations to non-human nature (Kimmerer 2020).

Examples of techniques for creating democratically strong and resilient communities include sociocracy, nonviolent communication, authentic relating, theater of the oppressed, or the drama triangle (Cumps 2019; Boal 2019; Karpman 2014; Day 2021; Rosenberg 2003). These tools can be directed at strengthening and improving the quality and depth of relationships at various levels, from organizations to social movements. The strength of relationships matters for effective and successful social organization (Brown 2017; hooks 2018). Strengthening social movements "would mean going deeper, being more vulnerable and more empathetic" (Brown 2017). The social fabric thus created provides a new set of social relations out of which decisions can grow as to the specific role of private property/ownership, rights-obligations, market relations, money, or the meaning of autonomy. In this vision, how people relate becomes intimately connected with what kind of changes are needed and desired (hooks 2018; Pirgmaier 2022). As bell hooks reminds us: "If all public policy was created in the spirit of love, we would not have to worry about unemployment, homelessness, schools failing to teach children, or addiction" (hooks 2018). If our relation to non-human nature was loving, we could expect much less devastation and destruction.

An inspiring vision of flourishing for everyone, and practices that guide the way toward it, go a long way to bringing the foundations of a new society to life. In the subsequent sections, we dive in more detail into how human flourishing can be supported by economic democracy within provisioning systems and within institutional structures at the level of organizations.

Provisioning systems and sustainable need satisfaction

In this section, we consider provisioning systems and their role in economic democracy. In heterodox economics, social provision is the purpose of the economy (Gruchy 1987) and provisioning systems are its building blocks, since they "mediate the relationships between biophysical resource use and social outcomes" (Fanning, O'Neill, and Büchs 2020). Provisioning systems are cross-sectoral networks of production and distribution of goods and services. They are defined by the object of consumption they produce (or constrain). Within capitalist economies, systems of provision can be analyzed through the prism of individual commodities (Bayliss and Fine 2020; Fine 2002), induced consumption (Mattioli et al. 2020), or non-monetized provision (Dengler and Plank 2024). In thinking of future societies, need satisfaction is another orientation (Fanning, O'Neill, and Büchs 2020). Social relations, as well as relations between human and non-human nature, shape and are shaped by provisioning systems. It is often necessary to consider the historical development of provisioning systems to understand their current configurations, especially in terms of entanglement with the state (Mattioli et al. 2020; Bayliss and Fine 2020; Haines-Doran 2023).

Alongside an understanding of the general profit orientation of capitalist provisioning, considering the diversity of provisioning systems is necessary for economic democracy for three major reasons: (1) to adapt democratic structures to the specificities of diverse provisioning systems; (2) to avert distinct forms of market-manipulation and power accumulation; and (3) to prevent the exploitation of vulnerable actors, who change depending on the provisioning system. Past proposals of economic democracy often overgeneralize, proposing one-size-fits-all solutions instance (Schweickart 2011), neglecting the diversity of provisioning systems and organizational forms (Michie, Blasi, and Borzaga 2017; Hinton 2021b).

This section bolsters the case for explicit and systematic consideration of provisioning system diversity along three dimensions. First, by summarizing how current capitalist provisioning system specificities shape consumption for profit. Second, by exposing the risks and vulnerabilities of frontline actors: the workers, end-users, and affected communities along supply chains. Finally, by exploring the ways diverse provisioning systems interact with need satisfaction, and thus their potential contribution to human emancipation.

Shaping consumption within capitalism

Provisioning systems can exist in multiple forms, from collective and cooperative to privatized and competitive. In order to avert future pitfalls, we must take into account risks of market manipulation and power accumulation specific to particular provisioning systems. Power accumulation is usually achieved by shaping consumption and instrumentalizing needs. This subsection summarizes present-day capitalist and for-profit examples linked to transportation/mobility, housing/shelter, and agribusiness/nutrition.

First, in transportation/mobility, powerful industries come together to create car dependence (Mattioli et al. 2020). Public funding for road and car infrastructure (acquired through lobbying by automotive and road industries) effectively privatizes public space and creates additional value for private car owners to the detriment of others. Meanwhile, public transportation is actively undermined, via cuts in budgets and removal of infrastructure. Suburban land-use planning focused on single-family homes and spatially segregated zoning creates car-dependent geographies. Advertising and other cultural influences lead to the creation of a cardependence culture. Diverse types of car financing establish yet another layer of entanglement, further entrenching car dependence as a debt trap that car users cannot easily escape (Haines-Doran 2023).

Second, in agrifood/nutrition, subsidies and government support follow the interests of large industrial producers, including staple crops and animal products, and large commodity trading firms (such as Cargill and ADM in the United States). The primacy of these actors leads to state capture and market manipulation, environmental devastation, poor working conditions, and negative public health outcomes. The diets resulting from such subsidies are oriented toward overconsumption of the surplus products of these large industries (Fine 2002; Pollan 2007). Since these surpluses and byproducts are rarely healthy, maladies such as diabetes, cancer, and heart disease plague the people who are subjected to them without any democratic debate or consent (Fine 2002; Pollan 2007).

Finally, in housing/shelter, the protection of private property empires and large-scale developers encourages high rental price accommodation with low consideration of social or environmental priorities. Cost-effective renewable energy or efficiency investments are often not implemented, since these primarily benefit the renter rather than the owner (OECD and IEA 2007). Since private owners control housing markets and regulations, renters are usually powerless to seek rent reductions or safer housing standards, unless organized by renters unions (Marsh 2023).

In each case, the powerful industrial actors mentioned above shape consumption, while evading responsibility for negative human and environmental impacts, from inequality to health to planetary boundaries. Health impacts are particularly widespread, from air pollution and Dieselgate in the case of the car industry, to diabetes and cancer in the agrifood industry, to the health hazards caused by substandard housing in the real-estate industry. The example of the 2017 fire at Grenfell Tower in the UK is a particularly horrific and poignant example of this last case (MacLeod 2018). The diversity of impacts on human well-being of undemocratic provisioning thus needs to be taken into consideration.

Diversity of actor vulnerability

A key aspect of provisioning system specificity relevant to economic democracy, is the exposure of actors to exploitation and vulnerability, which often act as strong barriers to achieving either well-being or flourishing social participation. People exist in diverse roles along production-consumption chains, from extraction, transportation, transformation and manufacturing, retail and delivery, to use and disposal (or more rarely, recovery). For particular provisioning systems, exposure to vulnerability will be different. We explore some general considerations of present cases for workers, community members, and end-users. Obviously, the roles of workers, community members, and end-users overlap within specific persons; the point here is to explore their vulnerabilities through these roles.

First, workers are generally at highest risk in the extraction and construction/manufacturing stages (Abdalla et al. 2017), with significant potential for dangerous exploitation, especially with the locations of extraction far removed from the locations of sale, operation, and use. However, workers in every industry and at every stage are vulnerable to harm and exploitation, even those very close to end-users: see the dangerous working conditions and precarity of workers in the on-demand delivery (or "gig") economy (Taylor et al. 2023) or in domestic help (Theodore, Gutelius, and Burnham 2019) for just two examples. Another generality is that workers whose activities are spatially dispersed, as in domestic help or delivery, will have a harder time forming unions and benefiting from collective bargaining.

Second, community members are affected along supply chains, from locations of extraction, along transportation routes, to the siting and operation of large factories, depots, waste infrastructures, to the use phase (Brulle and Pellow 2006). Within communities, major differences in vulnerability can exist depending on inequalities of income, power, health, disability, age, race, gender, migration status, and so forth. These inequalities and intersectional vulnerabilities should be at the heart of designing community engagement in economic democracy (Crenshaw 2017).

Finally, end-users are obviously most affected at the use stage, via traditional economic concerns regarding the quality, accessibility, and affordability of goods and services, augmented by considerations of economic and physical dependency. These concerns and dependencies will vary according to each provisioning system, from rentier predation in housing to car-dependency in urban planning. Moreover, the creation of dependency and poor quality provision often happens far upstream, at stages of supply chains well beyond end-user awareness or decisionmaking power, with devastating environmental and social consequences (Fuchs et al. 2015; Brand and Wissen 2021).

This short discussion of affected workers, community members, and end-users provides a strong impetus for inclusion of the most affected actors within decision-making. From this perspective, frontline actors, including workers, community members, and end-users, should be considered as core stakeholders within economic democracy applied to provisioning systems. This consideration informs our proposals in the next section.

Provision and need satisfaction

Current capitalist provisioning is not primarily directed at the purpose of enabling human flourishing, or even satisfying basic needs. Instead, capitalist provisioning logics instrumentalize human needs to enforce consumption of products and accumulation of profits, often through "need satisfier escalation," where needs are instrumentalized in the drive toward overproduction and overconsumption (Brand-Correa et al. 2020). While this drive is general, the specific implementation varies by provisioning system. In housing, it is done through rentierism; in mobility, spatial/infrastructure through dependence and car-acquisition debt; in agrifood, through the creation of addiction to sugars and fast food which are moreover often artificially cheap due to misplaced government subsidies. In the case of public services, such as water, electricity. and public transportation, the instrumentalization of need satisfaction is often done through the mechanism of privatization (Bayliss, Mattioli, and Steinberger 2021).

In our research on the resource requirements of well-being in the "Living Well Within Limits" research project, we learned that well-being, conceptualized as multi-dimensional need satisfaction, relies on provisioning systems to different degrees (Vogel et al. 2021; Baltruszewicz et al. 2021; 2023). Accessible and affordable healthcare, education, and social care, as well as networked infrastructure (electricity, water, sanitation, mobility) emerge as extremely important (Vogel et al. 2021; Baltruszewicz et al. 2021). Quite often, these social and physical infrastructures are lumped together under the umbrella term "public services." These are shared types of production and consumption, and thus economic democracy should have a clear focus on public services, where workers, communities, and end-users all come together.

Mobility, food, and housing, as well as other core services such as communication systems, have direct, clear links to human-need satisfaction. Their provision should be considered from the perspective of human rights, guaranteeing minimal affordable access to such services, for example as in UBS or foundational economy frameworks (Coote and Percy 2020; Gough 2019; Bärnthaler, Novy, and Plank 2021).

By centering questions of human flourishing and emancipation in democratized provisioning systems, it is quite possible that less consumption is preferable to more, through the elaboration of sufficient and efficient infrastructure, technologies, and ways of life. Such potential futures are, for instance, modeled through the Decent Living Standards framework which connects human needs to energy and material-service requirements (Millward-Hopkins et al. 2020; Rao and Min 2018; Kikstra et al. 2021). Although Decent Living Standard models are agnostic regarding decision-making processes, they rely on universal access to highly efficient technological standards for housing and appliances, as well as shared infrastructures for health, education, communication, mobility, and so forth.

By analyzing economic democracy and provisioning system choices through the lens of universal human-need satisfaction, several focal points come to the fore: the potential of radical resource use (and hence environmental impact) reduction, the consideration of diverse types of vulnerability and exposure to deficient or harmful provisioning, and the emancipatory potential of transformed decision-making within provisioning systems. Within each provisioning system, the interplay of public investment/subsidies, infrastructure, and relations of economic vulnerability changes will need to be addressed by diverse democratic institutions.

Shifting provisioning logics through democratizing institutions

This section explores the relationship between the democratization of institutions and provisioning

logics operated by organizations. First, we propose a framework to describe the institutional structuration of different logics in relation to the governance model of organizations. Second, using this framework, we then identify the specific institutional characteristics that lock-in profit-maximization logics characteristic of capitalist provisioning. Finally, we move onto establishing which changes in institutional arrangements are necessary: (1) to remove the for-profit incentive; (2) to escape some of the systemic pressures reinforcing the drive for profit and commodification; and (3) to structurally lock-in a provisioning logic directly aimed at meeting human needs.

The institutional structuring of provisioning logics

We consider institutional arrangements through the definition of stakeholder roles common to many organizational forms in the economy, be these private shareholder firms, worker-owned businesses, consumer cooperatives, or public bodies. Those roles are workers, investors, end-users, financial owners, and community members. Each role is characterized by the exchange relationships that arise from engagement with an organization in terms of benefits received and contributions provided (Table 1).² Benefits and contributions may be of a financial (e.g., wages, investments, dividends), or social nature (e.g., labor, usefulness of product). We also introduce the risks and vulnerabilities associated with each of those roles.

We propose the following principle regarding the institutional structuring of provisioning logics: that production and consumption tend to be organized to maximize the benefits that accrue to actors who hold ultimate control over the running of operations. Within organizations, such control is in the hands of those at the top of the hierarchy (e.g., shareholders) with the power to appoint directors and executives, who will run operations to maximize their benefits. In practice, single actors may embody several roles,

Table 1. Key organizational stakeholder roles defined through contributions provided, benefits received, and risks incurred.

Stakeholder role	Workers	Investors	End-users	Financial owners	Community members
Function	Production of goods	Finance the production	Use goods and	Own the firm's financial	No specific function, but
	and services	of goods and services	services	value (net assets)	affected by provision processes
Contribution	Time and labor	Capital investments	Money (e.g.,	Nothing beyond	Framework conditions,
			purchases or taxes)	contributions associated with other roles	including infrastructure and social reproduction
Benefits	Wages and occupation/ sense of purpose	Financial return on investment and/or positive socioecological impact	The usefulness of the product/service	Financial return (share value, dividends)	Economic stability and positive socioecological effects of production and consumption activities
Risk and vulnerability	Exploitation	Financial loss	Poor access or quality, health risks, dependency	Loss of assets	Negative impacts from social, economic, or environmental actions of organizations

thus accruing different – and sometimes conflicting – forms of benefits. In the following subsections we demonstrate how this principle gives rise to the diversity of logics present in the economy.

In a capitalist economy, the concepts of "financial ownership" and "decision-making/ultimate control" are usually (and often legally) tied to one another and merged into the single idea of "ownership" (Gerber and Gerber 2017). Here we analyze them separately in relation to their impact on the provisioning process. Importantly, where decision-making is seen as an inherent function of social (hence economic) organizing, financial ownership is a mere economic convention which does not have to play a role in provisioning. Moreover, private financial ownership of corporate bodies means organizations themselves carry exchange value, thus creating profit incentives at the organizational level.

The definition of these roles in relation to decision-making provides an institutional analytic frame to compare organizational forms with regard to their provisioning logics. The aim is to help make sense of the organizational diversity in the economy in a systematic way and beyond broad categorizations such as public versus private, social enterprises or cooperatives, since these distinctions fail to capture sufficient specificities for guiding economic transformation (Hinton 2021a). Importantly, this approach intends to inform the design of suitable models for a post-growth economy, with specific attention to prioritizing social over financial benefits, while minimizing vulnerabilities.

The institutional structuring of for-profit logics

Within our framework, capitalist forms of organizations can be characterized by three main institutional features: (1) decision-making power is ultimately associated with financial ownership (power of shareholders); (2) investment is the condition for financial ownership (regardless of how the investment is acquired); and (3) decision-making power is related to the scale of financial ownership, itself proportional to the size of investment. Thus, financial benefits are structurally associated with decision-making by being tied to both the financial owner and investor roles. A common example of such organizational forms are public or private limited liability companies.

Under this arrangement, financial owners may interact with an organization purely as investors, in which case financial return becomes the only form of benefit (and therefore the only criterion) entering decision-making. This would result in provisioning logics solely geared toward profit maximization to ensure best return in the form of share value and/or dividends. However, the investor-owner may also embody the role of worker, producer, end-user, or community member (e.g., in small family-owned businesses), thus diluting the for-profit-only incentive and resulting in a more complex logic.

It is possible to conceptualize different degrees of for-profit logics with respect to the specificity of the institutional setup, and this even within a similar legal form. However, the systematic interlocking of financial benefits with decision-making found in capitalist institutions implies at least some form of profit incentive, and as such is understood as a key structuring element of profit maximization in the economy. In the next subsection, we suggest potential ways to weaken this link and to institutionally entrench a provisioning logic aimed at meeting human needs.

The institutional structuring of socially useful provisioning

In order to focus economic activity toward meeting society's needs, we posit that provisioning systems logics should aim at directly optimizing the use of products in how they are conceived, accessed, and consumed, instead of profit (Clark and Foster 2010; Koch 2015; Mellor 2017).

We use the analytical approach developed in the prior subsection to search for institutional arrangements that prioritize the social usefulness (use value) of production instead of the exchange value of organizations. According to this framework, such a logic shift requires the social usefulness of production to be the overarching form of benefits associated with decision-making. This implies simultaneously dissociating decision-making from stakeholders with financial benefits and associating it with those individuals and entities benefiting from the social usefulness of production.

Table 1 shows three forms of financial benefits entering the provisioning process, that of owners, investors, and workers. How can those financial benefits be removed? First, it is necessary to prevent the transfer of organizational financial assets to natural persons through legally binding rules. For instance, this can be done via adding statutory asset locks and non-redistributions of profit clauses into the incorporation documents of legal entities. Establishing such rules removes the role of the financial owner altogether. Second, investments must be made in forms that do not give rise to decision-making rights (e.g., loans as opposed to voting shares). These first two criteria concur with how Jennifer Hinton conceptualizes the overarching distinction between for-profit and not-for-profit businesses in his relationshipto-profit theory (Hinton 2020). Third, wages must be disconnected from the financial performance of a firm so that work can also escape the for-profit incentive. These three criteria conceptualize the decommodification of the economic process at the organizational level (in that it prevents treating organizations as vehicles for financial gain), which we argue is of fundamental importance for ecological economics and post-growth transitions (Gerber and Gerber 2017; Gerber 2016; O'Neill and Uebel 2015).

End-users are the stakeholder group benefiting most from the usefulness of production. They are also the individuals who provide income (purchases or taxes) and hence enable any financial return to be realized. Therefore, putting end-users in control of decision-making, while ensuring there are no mechanisms for them to extract financial benefits as owners, structurally (as opposed to normatively) removes the for-profit incentive and allows for the institutional entrenchment of a provisioning logic that prioritizes the social usefulness of production. Conceptually, this corresponds to giving end-users, who collectively capture society's actual consumption needs, the ability to exert their power as economic citizens.

An example of end-user control organizations can be found with fully mutual housing cooperatives in common ownership (Balmer and Bernet 2015; Clapham and Kintrea 1992; Catalyst Collective 2023). End-users (the tenants) are members/shareholders (decision-makers) of the cooperative but with no rights over its residual assets. If the estate value of the cooperative increases through speculation, none of the gain can be distributed. Similarly, if the cooperative dissolves, the assets can only be transferred to an organization with similar rules, and not to any individual. This removes the for-profit incentive and makes prioritization of the service provided (quality accommodation) the only criterion entering decisionmaking. Other examples can be found, ranging from food retail with consumer cooperatives (Holyoake 2016) to the software industry (Stallman 2002; GNU Project 2023). It is clear from these examples that the common principle of end-user control has to be operationalized in different ways, which requires attention to provisioning systems specificities, as outlined in the previous section.

The importance of end-user control to enact a need-based logic is lacking in the post-growth literature, which emphasizes worker control (Hinton 2021b). However, as noted by Jennifer Hinton's analysis of profit and firms, most worker-owned businesses cannot be considered not-for-profit (Hinton 2021b), since private financial ownership and related gains remain unchallenged (Hinton 2020). Moreover, Hinton highlights consumer cooperatives as not-forprofit (Hinton 2021b), which aligns with the present analysis, since consumers are a form of end-users at the level of firms. Complementing Hinton's work on business, our analysis not only deals with the characterization of for-profit and not-for-profit, but conceptualizes the institutional design of other logics. In this subsection we specifically show which criteria are necessary for a logic that optimizes use value.

From an environmental perspective, prioritizing social usefulness does not intrinsically rely on increasing resource use, as opposed to the pursuit of profit (Hinton 2021a). Moreover, organizations that only exist to respond to the needs of end-users have no inherent requirements to always increase customer base or consumption volumes, and are thus largely able to escape the "treadmill of production." Removing profit logics from the provisioning process can be a major leverage point to break key unsustainable lock-ins (Raworth 2017; Gerber and Gerber 2017; Johanisova, Crabtree, and Fraňková 2013), such as the growth imperative (Johanisova, Crabtree, and Fraňková 2013; van Griethuysen 2010). It is however important to highlight that this shift alone may not be sufficient for production-consumption to remain within planetary boundaries.

While end-user control is key, it is not enough to safeguard against the vulnerability of other stakeholders and operationalize a socially just form of provisioning. To protect against the vulnerability to exploitation of workers and community members affected by the provisioning process, areas of decision-making must be specified for all key stakeholders. Additional inclusion of non-human nature should also be considered, either via expert advice (as in the case of citizen assemblies) or inclusion of representatives for future generations and/or non-human nature (Davies 2017).

Moving to end-user (and multi-stakeholder) control would require training, guidance (with support of experts), additional time, and appropriate platforms (such as boards or assemblies either at the level of unions, firms, municipalities, or national governments (Cohen 2016)) to facilitate decision-making for different areas of economic life. We are not proposing that all stakeholders need to provide input in every decision but that they should be given the legal right and the means to do so when necessary.

The practical feasibility of such institutional change is constrained by legislative frameworks that define the purpose, ownership, governance, and financial regulations of organizations. Within these legal constraints, we provide some guiding rules and principles to operationalize a socially useful form of provisioning compatible with post-growth aims: (1) no natural person (individual) is entitled to organizational residual assets; (2) investment may carry limited financial return (e.g., in the form of interest) but no decision-making rights; (3) endusers must have democratic decision-making rights over what is produced and to what standards - this enacts the "democratization of demand"; (4) workers must have executive decision-making power over how production takes place, which implies autonomy over their workplace - this enacts the "democratization of work"; (5) community members must be able to set standards and conditions so that production positively (or at least not negatively) impacts their community - this enacts the "democratization of community regulations." Overarching regulations can then emerge from gathering common needs and issues and best practices from each stakeholder group (Figure 1).

Conclusion

Addressing contemporary social-ecological crises requires changing the logic of provisioning – from a

primacy of profit and growth to a primacy of well-being within planetary boundaries. The democratization of provisioning systems is a central element of this transformation process, bringing the economic into the political realm, expanding the decision-making power of those affected, creating many more spaces for deliberation, and shifting away from private ownership and exploitation toward autonomy and freedom. This proposition requires us to move away from abstract notions and toward systematic and specific examinations: regarding how democratic deliberation can be generalized in our societies and economies, how different provisioning systems contribute to human needs or vulnerabilities, and how organizations can be set up to satisfy needs and prevent power accumulation.

In this article, we map out several directions for moving toward the democratization of provisioning systems. First, we argue for creating more pervasive models of democracy away from interests that are detrimental to the common good. We understand economic democracy as a lived reality in which people unlearn passive citizenship and relearn active participation in the organization of provisioning.

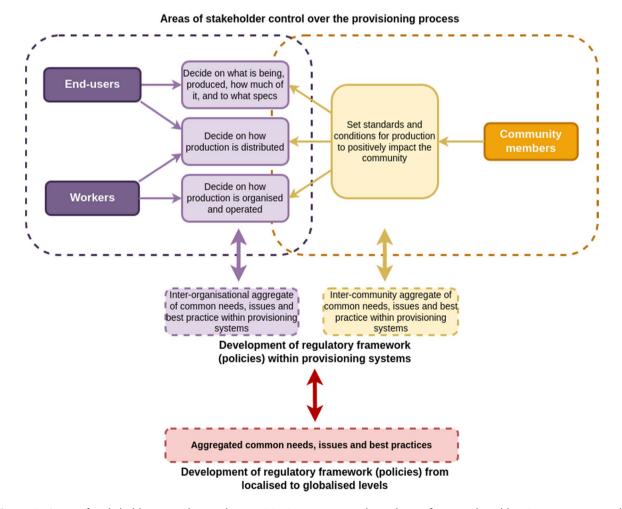


Figure 1. Areas of stakeholder control over the provisioning process and regulatory frameworks addressing common needs, issues, and best practices.

This includes training in active democracy, creating deliberative spaces for new visions of human flourishing to emerge, and organizing in ways that exemplify a democratic society.

We then show why it is important to understand differences of provisioning systems, in terms of their current forms of capitalist power accumulation as well as the ways that different actors are represented and granted decision-making power within them. We advocate for a combination of end-user, worker, and community-member deliberation and control that varies based on specific vulnerability and the risk of different groups in each provisioning system.

Finally, we look at institutional change to address the question of logic shifts. We propose to transform provisioning under capitalism by: (1) direct control by frontline stakeholders (end-users, workers, community members) of specific aspects of the provisioning process, with an emphasis on end-user control to enact a need-based logic; (2) the absence of private financial ownership at the organizational level; and (3) the removal of other financial benefits from decision-making. In this way, it is possible to directly connect production, work, and consumption to social needs and establish a less commodified provisioning process. While these overarching institutional principles can be applied to all provisioning systems, understanding how to do so in specific cases should become one of the core tasks in (applied) ecological economics and degrowth. This article provides highlights of provisioning system diversity and specificity.

One key element to consider for transitioning toward those alternative institutional models is the creation of democratic decision-making spaces that maintain power in the hands of frontline stakeholders. As the United Nations former special rapporteur on extreme poverty and human rights, Philip Alston, stated, "Abandoning people to the private market in relation to services that affect every dimension of their basic well-being, without guaranteeing their access to minimum standards, is incompatible with human rights requirements" (Alston 2019). The democratization of provisioning systems thus appears essential to avoid the dangerous pitfalls of climate and ecological crises due to induced overconsumption coupled with profiting from the instrumentalization of human needs. End-users, workers, and community members should be at the center of decision-making processes that are emancipatory in nature, including emancipation from the dependency of consumption. This article remains by necessity very schematic. Avenues for future research should explore in greater depth what we have only been able to sketch here, namely practices of economic democracy, specificities of distinct provisioning systems, and appropriate organizational models for a post-growth and sustainable future.

Notes

- 1. The term use value refers to the usefulness of a commodity while exchange value describes a commodity's quantitative worth (relative to other commodities) (Kallis and Swyngedouw 2018).
- 2. This entitlement to organizational assets is what Hinton (2020) calls financial rights.

Acknowledgements

We thank three anonymous reviewers, Richard Bärnthaler, Andreas Novy, and other participants in the workshop that gave rise to this special issue for their critical and insightful comments which have strengthened the article.

ORCID

Julia Steinberger () http://orcid.org/0000-0002-5925-9602 Gauthier Guerin () http://orcid.org/0009-0000-5594-9203 Elena Hofferberth () http://orcid.org/0000-0003-1235-3930 Elke Pirgmaier () http://orcid.org/0000-0003-0174-1970

References

- Abdalla, S., S. Apramian, L. Cantley, and M. Cullen. 2017. "Occupation and Risk for Injuries." In *Disease Control Priorities, Third Edition (Volume 7): Injury Prevention and Environmental Health*, edited by C. Mock, R. Nugent, O. Kobusingye, and K. Smith, 97–132. Washington, DC: World Bank.
- Ajl, M. 2021. A People's Green New Deal. London: Pluto Press.
- Alston, P. 2019. Visit to the United Kingdom of Great Britain and Northern Ireland: Report of the Special Rapporteur on Extreme Poverty and Human Rights. New York: United Nations. https://digitallibrary.un.org/ record/3806308/files/A_HRC_41_39_Add-1-EN.pdf.
- Aronoff, K., A. Battistoni, D. Cohen, and T. Riofrancos. 2019. A Planet to Win: Why We Need a Green New Deal. London: Verso.
- Balmer, I., and T. Bernet. 2015. "Housing as a Common Resource? Decommodification and Self-Organization in Housing – Examples from Germany and Switzerland." In Housing as a Common Resource? Decommodification and Self-Organization in Housing – Examples from Germany and Switzerland, edited by I. Balmer and T. Bernet, 178–195. Berlin: Birkhäuser.
- Baltruszewicz, M., J. Steinberger, D. Ivanova, L. Brand-Correa, J. Paavola, and A. Owen. 2021.
 "Household Final Energy Footprints in Nepal, Vietnam and Zambia: Composition, Inequality and Links to Well-Being." *Environmental Research Letters* 16 (2): 025011. doi:10.1088/1748-9326/abd588.
- Baltruszewicz, M., J. Steinberger, J. Paavola, D. Ivanova, L. Brand-Correa, and A. Owen. 2023. "Social Outcomes of Energy Use in the United Kingdom: Household Energy Footprints and Their Links to Well-Being." *Ecological*

Economics 205: 107686. doi:10.1016/j.ecolecon.2022. 107686.

- Barber, B. 1974. *The Death of Communal Liberty: A History of Freedom in a Swiss Mountain Canton*. Princeton, NJ: Princeton University Press.
- Bärnthaler, R., A. Novy, and L. Plank. 2021. "The Foundational Economy as a Cornerstone for a Social-Ecological Transformation." *Sustainability* 13 (18): 10460. doi:10.3390/su131810460.
- Barry, J. 2021. "Green Republicanism and a 'Just Transition' from the Tyranny of Economic Growth." *Critical Review of International Social and Political Philosophy* 24 (5): 725–742. doi:10.1080/13698230.2019.1698134.
- Bayliss, K., and B. Fine. 2020. A Guide to the Systems of Provision Approach: Who Gets What, How and Why. Cham: Springer.
- Bayliss, K., G. Mattioli, and J. Steinberger. 2021. "Inequality, Poverty and the Privatization of Essential Services: A 'Systems of Provision' Study of Water, Energy and Local Buses in the UK." *Competition & Change* 25 (3-4): 478-500. doi:10.1177/1024529420964933.
- Boal, A. 2019. *Theatre of the Oppressed*. London: Pluto Press.
- Bookchin, M. 2005. The Ecology of Freedom: The Emergence and Dissolution of Hierarchy. Oakland, CA: AK Press.
- Brand, U., and M. Wissen. 2021. The Imperial Mode of Living: Everyday Life and the Ecological Crisis of Capitalism. London: Verso.
- Brand-Correa, L., G. Mattioli, W. Lamb, and J. Steinberger. 2020. "Understanding (and Tackling) Need Satisfier Escalation." Sustainability: Science, Practice and Policy 16 (1): 309–325. doi:10.1080/15487733.2020.1816026.
- Brown, A. 2017. Emergent Strategy. Chico, CA: AK Press.
- Brown, W. 2019. In the Ruins of Neoliberalism: The Rise of Antidemocratic Politics in the West. New York: Columbia University Press.
- Brulle, R., and D. Pellow. 2006. "Environmental Justice: Human Health and Environmental Inequalities." *Annual Review of Public Health* 27 (1): 103–124. doi:10.1146/ annurev.publhealth.27.021405.102124.
- Büchs, M., and M. Koch. 2019. "Challenges for the Degrowth Transition: The Debate about Wellbeing." *Futures* 105: 155–165. doi:10.1016/j.futures.2018.09.002.
- Catalyst Collective. 2023. "RRFM14 Housing Co-Op Rules – Catalyst Collective." https://www.catalystcollective.org/ home/housing-co-op-registration/rrfm14
- Clapham, D., and K. Kintrea. 1992. Housing Co-Operatives in Britain: Achievements and Prospects. London: Longman.
- Clark, B., and J. Foster. 2010. "Marx's Ecology in the 21st Century." World Review of Political Economy 1 (1): 142– 156. doi:10.2307/41931871.
- Cohen, M. 2016. The Future of Consumer Society: Prospects for Sustainability in the New Economy. Oxford: Oxford University Press.
- Coote, A., and A. Percy. 2020. The Case for Universal Basic Services. Cambridge: Polity.
- Copley, J., and A. Moraitis. 2021. "Beyond the Mutual Constitution of States and Markets: On the Governance of Alienation." *New Political Economy* 26 (3): 490–508. doi:10.1080/13563467.2020.1766430.
- Crenshaw, K. 2017. On Intersectionality: Essential Writings. New York: The New Press.

- Cumps, J. 2019. Sociocracy 3.0 The Novel. Tielt: LannooCampus.
- Davies, H. 2017. "The Well-Being of Future Generations (Wales) Act 2015 – A Step Change in the Legal Protection of the Interests of Future Generations?" *Journal of Environmental Law* 29 (1): 165–175. doi:10. 1093/jel/eqx003.
- Day, J. 2021. Living Tantra: A Journey into Sex, Spirit and Relationship. London: Watkins.
- Dengler, C., and C. Plank. 2024. "Foregrounding Invisible Foundations: (Eco-)Feminist Perspectives on Provisioning Systems." Sustainability: Science, Practice and Policy 20 (1): 2312667. doi:10.1080/15487733.2024.2312667.
- Fanning, A., D. O'Neill, and M. Büchs. 2020. "Provisioning Systems for a Good Life within Planetary Boundaries." *Global Environmental Change* 64: 102135. doi:10.1016/j. gloenvcha.2020.102135.
- Fine, B. 2002. The World of Consumption: The Material and Cultural Revisited, 2nd ed. London: Routledge.
- Fine, B., and A. Saad-Filho. 2004. *Marx's Capital*, 4th ed. London: Pluto Press.
- Fiorino, D. 2022. "Democracies, Authoritarians, and Climate Change: Do Regime Types Matter?" In *How Democracy Survives: Global Challenges in the Anthropocene*, edited by M. Holm and R. Deese. New York: Routledge.
- Fuchs, D., A. Di Giulio, K. Glaab, S. Lorek, M. Maniates, T. Princen, and I. Røpke. 2015. "Power: The Missing Element in Sustainable Consumption and Absolute Reductions Research and Action." *Journal of Cleaner Production* 132: 298–307. doi:10.1016/j.jclepro.2015.02.006.
- Gerber, J.-D., and J.-F. Gerber. 2017. "Decommodification as a Foundation for Ecological Economics." *Ecological Economics* 131: 551–556. doi:10.1016/j.ecolecon.2016.08.030.
- Gerber, J.-F. 2016. "The Legacy of K. William Kapp." Development and Change 47 (4): 902–917. doi:10.1111/ dech.12238.
- GNU Project. 2023. "The GNU General Public License v3.0 – GNU Project – Free Software Foundation." https://www.gnu.org/licenses/gpl-3.0.html.
- Gough, I. 2017. Heat, Greed and Human Need: Climate Change, Capitalism and Sustainable Wellbeing. Cheltenham: Edward Elgar.
- Gough, I. 2019. "Universal Basic Services: A Theoretical and Moral Framework." *The Political Quarterly* 90 (3): 534–542. doi:10.1111/1467-923X.12706.
- Gould, K., D. Pellow, and A. Schnaiberg. 2008. The Treadmill of Production: Injustice and Unsustainability in the Global Economy. Boulder, CO: Paradigm Publishers.
- Gruchy, A. 1987. The Reconstruction of Economics: An Analysis of the Fundamentals of Institutional Economics. New York: Greenwood Press.
- Güneşer, H. 2021. The Art of Freedom: A Brief History of the Kurdish Liberation Struggle. Oakland, CA: PM Press.
- Hahnel, R. 2021. *Democratic Economic Planning*. London: Routledge.
- Haines-Doran, T. 2023. "The Financialisation of Car Consumption." *New Political Economy* 29 (3): 337–355. doi:10.1080/13563467.2023.2254727.
- Haug, F. 2009. "The 'Four-in-One Perspective': A Manifesto for a More Just Life." *Socialism and Democracy* 23 (1): 119–123. doi:10.1080/08854300802635932.
- Hinton, J. 2021a. "Relationship-to-Profit: A Theory of Business, Markets, and Profit for Social." PhD thesis,

Stockholm University and Université Clermont Auvergne. https://theses.hal.science/tel-04097146.

- Hinton, J. 2021b. "Five Key Dimensions of Post-Growth Business: Putting the Pieces Together." *Futures* 131: 102761. doi:10.1016/j.futures.2021.102761.
- Hinton, J. 2020. "Fit for Purpose? Clarifying the Critical Role of Profit for Sustainability." *Journal of Political Ecology* 27 (1): 236–262. doi:10.2458/v27i1.23502.
- Hofferberth, E. 2021. "Pathways to an Equitable Post-Growth Economy. Towards an Economics for Social-Ecological Transformation." PhD thesis, University of Leeds. https://etheses.whiterose.ac.uk/31117/.
- Holyoake, G. 2016. *The History of the Rochdale Pioneers*. London: Routledge.
- hooks, b. 2010. Teaching Critical Thinking: Practical Wisdom. New York: Routledge.
- hooks, b. 2018. All about Love: New Visions. New York: William Morrow.
- Jensen, D. 2004. Walking on Water: Reading, Writing, and Revolution. White River Junction, VT: Chelsea Green.
- Jessop, B. 2022. "Offes Paradox in the Light of Neoliberalism and Its Paradoxes: Schumpeterian Workfare and Ricardian Austerity." In *Nationalism and Democracy in the Welfare State*, edited by P. Kettunen, S. Pellander, and M. Tervonen, 104–126. Cheltenham: Edward Elgar.
- Jo, T.-H., and Z. Todorova. 2017. "Social Provisioning Process: A Heterodox View of the Economy." In *The Routledge Handbook of Heterodox Economics*, edited by T.-H. Jo, L. Chester, and C. D'Ippoliti, 29–40. New York: Routledge.
- Johanisova, N., T. Crabtree, and E. Fraňková. 2013. "Social Enterprises and Non-Market Capitals: A Path to Degrowth?" *Journal of Cleaner Production* 38: 7–16. doi:10.1016/j.jclepro.2012.01.004.
- Johanisova, N., and S. Wolf. 2012. "Economic Democracy: A Path for the Future?" *Futures* 44 (6): 562–570. doi:10.1016/j.futures.2012.03.017.
- Kallis, G., and E. Swyngedouw. 2018. "Do Bees Produce Value? A Conversation Between an Ecological Economist and a Marxist Geographer." *Capitalism Nature Socialism* 29 (3): 36–50. doi:10.1080/10455752.2017.1315830.
- Karpman, S. 2014. *A Game Free Life*. San Francisco: Drama Triangle Publications.
- Kaufmann, N., C. Sanders, and J. Wortmann. 2019. "Building New Foundations: The Future of Education from a Degrowth Perspective." *Sustainability Science* 14 (4): 931–941. doi:10.1007/s11625-019-00699-4.
- Kikstra, J., A. Mastrucci, J. Min, K. Riahi, and N. Rao. 2021. "Decent Living Gaps and Energy Needs Around the World." *Environmental Research Letters* 16 (9): 095006. doi:10.1088/1748-9326/ac1c2.
- Kimmerer, R. 2020. Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants. New York: Penguin.
- Koch, M. 2015. "Climate Change, Capitalism and Degrowth Trajectories to a Global Steady-State Economy." *International Critical Thought* 5 (4): 439–452. doi:10.1080/21598282.2015.1102078.
- Kropotkin, P. 2009 [1901]. Fields, Factories, and Workshops: Or, Industry Combined with Agriculture and Brain Work with Manual Work. Ithaca, NY: Cornell University Press.
- Legault, F., and S. Tremblay-Pepin. 2023. A Brief Sketch of Three Models of Democratic Economic Planning. Ottawa:

Research Center on Social Innovation and Transformation. http://innovationsocialeusp.ca/en/crits/publications/ a-brief-sketch-of-three-models-of-democratic-economicplanning

- MacLeod, G. 2018. "The Grenfell Tower Atrocity." *City* 22 (4): 460–489. doi:10.1080/13604813.2018.1507099.
- Marsh, S. 2023. "Rent Rebels: The Tenants Who Fought for Their Rights and Won." *The Guardian*, November 18. https://www.theguardian.com/money/2023/nov/18/rent-rebel s-the-tenants-who-fought-for-their-rights-and-won.
- Marshall, T. 1950. Citizenship and Social Class, and Other Essays. Cambridge: Cambridge University Press.
- Mattioli, G., C. Roberts, J. Steinberger, and A. Brown. 2020. "The Political Economy of Car Dependence: A Systems of Provision Approach." *Energy Research & Social Science* 66: 101486. doi:10.1016/j.erss.2020.101486.
- Meiksins-Wood, E. 2016. Democracy Against Capitalism: Renewing Historical Materialism. London: Verso.
- Mellor, M. 2017. "Ecofeminist Political Economy: A Green and Feminist Agenda." In *Routledge Handbook of Gender* and Environment, edited by S. MacGregor, 86–100. New York: Routledge.
- Michie, J., J. Blasi, and C. Borzaga, eds. 2017. The Oxford Handbook of Mutual, Co-Operative, and Co-Owned Business. Oxford: Oxford University Press.
- Millward-Hopkins, J., J. Steinberger, N. Rao, and Y. Oswald. 2020. "Providing Decent Living with Minimum Energy: A Global Scenario." *Global Environmental Change* 65: 102168. doi:10.1016/j.gloenvcha.2020.102168.
- Nelson, A. 2022. *Beyond Money: A Postcapitalist Strategy*. London: Pluto Press.
- Organization for Economic Co-operation and Development (OECD) and International Energy Agency (IEA). 2007. *Mind the Gap: Quantifying Principal-Agent Problems in Energy Efficiency*. Paris: IEA. http://www.iea.org/ Textbase/publications/free_new_Desc.asp?PUBS_ ID=1954.
- O'Neill, J., and T. Uebel. 2015. "Analytical Philosophy and Ecological Economics." *In Handbook of Ecological Economics*, edited by J. Martínez-Alier and R. Muradian, 48–73. Cheltenham: Edward Elgar.
- Pirgmaier, E. 2017. "The Neoclassical Trojan Horse of Steady-State Economics." *Ecological Economics* 133: 52–61. doi:10.1016/j.ecolecon.2016.11.010.
- Pirgmaier, E. 2020. "Consumption Corridors, Capitalism and Social Change." *Sustainability: Science, Practice and Policy* 16 (1): 274–285. doi:10.1080/15487733.2020. 1829846.
- Pirgmaier, E. 2022. "World, Word, Work." *Environmental Values* 31 (3): 245–252. doi:10.3197/096327122X164 52897197810.
- Pollan, M. 2007. The Omnivore's Dilemma: A Natural History of Four Meals. New York: Penguin
- Rao, N., and J. Min. 2018. "Decent Living Standards: Material Prerequisites for Human Wellbeing." Social Indicators Research 138 (1): 225–244. doi:10.1007/ s11205-017-1650-0.
- Raworth, K. 2017. Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist. White River Junction, VT: Chelsea Green.
- Rosenberg, M. 2003. Nonviolent Communication: A Language of Life. Encinitas, CA: PuddleDancer.
- Schweickart, D. 2011. *After Capitalism*. Lanham, MD: Rowman & Littlefield.

- Sovacool, B., J. Axsen, and S. Sorrell. 2018. "Promoting Novelty, Rigor, and Style in Energy Social Science: Towards Codes of Practice for Appropriate Methods and Research Design." *Energy Research & Social Science* 45: 12–42. doi:10.1016/j.erss.2018.07.007.
- Stallman, R. 2002. Free Software, Free Society: Selected Essays of Richard M. Stallman. Boston, MA: GNU Press.
- Taylor, K., P. Van Dijk, S. Newnam, and D. Sheppard. 2023. "Physical and Psychological Hazards in the Gig Economy System: A Systematic Review." *Safety Science* 166: 106234. doi:10.1016/j.ssci.2023.106234.
- Theodore, N., B. Gutelius, and L. Burnham. 2019. "Workplace Health and Safety Hazards Faced by Informally Employed Domestic Workers in the United States." *Workplace Health & Safety* 67 (1): 9–17. doi:10.1177/2165079918785923.
- Thiong'o, N. wa. 1986. Decolonising the Mind: The Politics of Language in African Literature. London: James Currey

- van Griethuysen, P. 2010. "Why Are We Growth-Addicted? The Hard Way towards Degrowth in the Involutionary Western Development Path." *Journal of Cleaner Production* 18 (6): 590–595. doi:10.1016/j.jclepro. 2009.07.006.
- van Griethuysen, P. 2012. "Bona Diagnosis, Bona Curatio: How Property Economics Clarifies the Degrowth Debate." *Ecological Economics* 84: 262–269. doi:10.1016/j. ecolecon.2012.02.018.
- Vogel, J., J. Steinberger, D. O'Neill, W. Lamb, and J. Krishnakumar. 2021. "Socio-Economic Conditions for Satisfying Human Needs at Low Energy Use: An International Analysis of Social Provisioning." *Global Environmental Change* 69: 102287. doi:10.1016/j.gloenvcha.2021.102287.
- Willis, R., N. Curato, and G. Smith. 2022. "Deliberative Democracy and the Climate Crisis." *WIREs Climate Change* 13 (2): e759. doi:10.1002/wcc.759.