



Circularity as Alterity? Untangling Circuits of Value in the Social Enterprise–Led Local Development of the Circular Economy

Małgorzata Lekan, Andrew E. G. Jonas & Pauline Deutz

To cite this article: Małgorzata Lekan, Andrew E. G. Jonas & Pauline Deutz (2021) Circularity as Alterity? Untangling Circuits of Value in the Social Enterprise–Led Local Development of the Circular Economy, *Economic Geography*, 97:3, 257-283, DOI: [10.1080/00130095.2021.1931109](https://doi.org/10.1080/00130095.2021.1931109)

To link to this article: <https://doi.org/10.1080/00130095.2021.1931109>



© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group, on behalf of Clark University.



[View supplementary material](#)



Published online: 14 Jul 2021.



[Submit your article to this journal](#)



Article views: 2790



[View related articles](#)



[View Crossmark data](#)



Circularity as Alterity? Untangling Circuits of Value in the Social Enterprise–Led Local Development of the Circular Economy



Małgorzata Lekan

Department of Geography
Geology, and Environment
University of Hull
Hull HU6 7RX
UK
m.lekan@hull.ac.uk

Andrew E. G. Jonas

Department of Geography
Geology, and Environment
University of Hull
Hull HU6 7RX
UK

Pauline Deutz

Department of Geography
Geology, and Environment
University of Hull
Hull HU6 7RX
UK

Key words:

circular economy
social enterprise
circuits of value
diverse economy
local economic
development

abstract

In recent years, the circular economy (CE) paradigm has emerged as a mainstream policy discourse having the potential to disrupt linear economic development pathways by extracting and retaining the maximum value from existing resources through their recirculation. Highlighting the diverse circuits of value implicated in local CE development, this article considers how the ecological (material) and extraeconomic (social) premises of CE thinking can be harnessed through mission-driven social enterprises (SEs). Using a case study of a SE project in Graz, Austria, which is engaged in CE activities across the textile, interior design/wood, and food sectors, it proposes a novel heuristic framework for examining the role of circuits of value in constructing alternative circular narratives and local circular economic development trajectories. In doing so, this framework positions SE as an entity entangled in a complex web of interconnected material and social relations and practices that occur across coexisting mainstream and alternative economic spaces of production, exchange, and consumption. By aligning the CE concept with circuits of value, the article further shows the importance of mapping and conceptualizing value flows and feedback loops associated with the local development of the CE in a given spatial and temporal context.

© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group, on behalf of Clark University. This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

Acknowledgments

258 This research would not have been possible without active participation of *heidenspass* staff in the study. We would especially like to express our gratitude to Elfie Pahr and Silvia Jölli for their valuable contributions. The usual disclaimers apply. We would also like to thank the anonymous reviewers for their detailed and insightful comments and suggestions, which enriched the discussion. A previous version of this article was presented online at the 26th International Sustainable Development Research Society (ISDRS) Conference in Budapest, Hungary on July 15, 2020, and one of its parts was published in conference proceedings under the title *Circular spaces of alterity: The interplay of mainstream and alternative economic spaces for inclusive circular economy development*. This research project received funding from the European Union's Horizon 2020 research and innovation program under the Marie Skłodowska-Curie grant agreement No 765198. For more information visit <http://crest.ing.hull.ac.uk>.

The global economy remains dominated by the narratives of growth-driven capitalism, whose extractive and profit-driven nature is associated with climate change and high rates of ecosystem degradation, exceeding the Earth's capacity to restore its finite resources (Rockström et al. 2009). One of the transformative paradigms that challenges the way mainstream economic development currently operates is the circular economy (CE). Although the definition of the CE continues to evolve, building on different disciplines and philosophies (Ellen Macarthur Foundation 2013), it generally refers to regenerative practices whereby "resource input and waste, emission, and energy leakage are minimized by slowing, closing, and narrowing material and energy loops through long-lasting design, maintenance, repair, reuse, remanufacturing, refurbishing, and recycling" (Geissdoerfer et al. 2017, 6). The CE has quickly gained traction among EU policy makers after the European Commission introduced the CE platform and CE Package in 2014 (European Commission 2019). There is also growing worldwide interest in applying the CE to diverse local economic development contexts in order to reduce the carbon footprint associated with the global circulation of material products and services (Bolger and Doyon 2019).

Emerging from disciplines, such as industrial ecology, business, and engineering (Korhonen et al. 2018), the principles and practices of the CE have been adopted by corporations to reduce costs and realize competitive advantage by saving raw materials (Lacy and Rutqvist 2016). However, sociospatial aspects of the CE, such as human well-being, local community development, and inclusive growth, tend to be overlooked in mainstream economic development practice and discourse (Hobson and Lynch 2016; Murray, Skene, and Haynes 2017; Ranta et al. 2018; Schulz, Hjaltadóttir, and Hild 2019). As currently framed, research on the CE does not leave much room to interrogate the power relations and norms that underlie efforts to (1) identify alternatives to mainstream production systems and social relations in capitalism, and (2) address the root societal causes of the problems that the CE is expected to tackle (Hobson and Lynch 2016). This has implications for the local development of alternative CE-based solutions, which might be prone to co-optation by the notions of green capitalism and consumerism (Hobson 2016). There is thus a growing need to understand how local transactions, social relations, and, ultimately, circuits of value can be constructed around the CE in a manner that could (in)directly

promote changes in linear economic systems and empower citizens and social enterprises (SEs) to become active agents of sustainable economic development.

In this article, we argue that research into the local development of a socially inclusive CE could benefit from conceptual insights from the economic geography literature on circuits of value (Lee et al. 2004). The concept of circuits of value considered here originates in research on diverse economies, which examines economic activities not so much through the lens of markets and monetary transactions but instead in terms of the social desirability and intrinsic value of everyday economic and extraeconomic transactions (Gibson-Graham 2006). By acknowledging the heterogeneity of emergent forms of economic organization, rather than giving primacy to strictly profit-oriented activities, the literature on diverse economies challenges individualistic market rationality and highlights the complex nature of social relations that shape material and social flows of value or *circuits of value* (Lee 2013). By recognizing monetary and nonmonetary, capitalist and noncapitalist, and formal (regulated) and informal (unregulated) transactions, which in fact underpin value circulation across spaces of production, exchange, and consumption, the literature advocates innovative (albeit not exclusively mainstream) ways of (co)producing, consuming, (re)distributing and exchanging goods and services, which have potential to be within Earth's limits. While some scholars have already attempted to combine debates on the CE with the literature on alternative economic spaces (Hobson and Lynch 2016; Holmes 2018), the integration of the concept of circuits of value into the CE discourse offers a new perspective on CE thinking that recognizes the importance of the flows of material and social (including noncapitalist) value associated with CE practices.

In seeking to fill a gap in current CE research, we develop a novel heuristic framework for investigating the role of diverse circuits of value in shaping alternative pathways for the local development of the CE. This framework is developed and applied in the context of a case study of a SE project¹—*heidenspass*—which operates across the textile, interior design, and food sectors in the City of Graz, Austria. The project emerged out of a need to provide employment to disadvantaged young individuals and embodies a number of activities epitomizing CE thinking such as upcycling of wood, furniture, or textiles, and use of food surplus from retailers. The fact that *heidenspass* is also engaged in various sharing activities (e.g., of food, ideas, and renting of spaces) further reinforces the need to align the CE concept with that of the diverse economy and its constituent transactions, including those highlighted by studies of the sharing economy (Schor et al. 2015). Our primary aim here is to use the case study to map and conceptualize the full diversity of everyday transactions and flows that potentially underpin the local development of the CE. In doing so, the article aims to answer the following research question: *what is the role of SEs in constructing and sustaining circuits of value for the local development of a socially inclusive CE?* Answering this question reveals how the social relations underpinning circulation of value are embedded in, and are shaped by, wider socioeconomic, spatial, and institutional contexts (Granovetter 1985). Authors have called for the implications of context in this sense to be considered with respect to environmental policies traditionally focused on technical requirements for sustainability transitions (Deutz and Lyons 2015) and specifically for CE transitions (Hobson 2016).

¹ As will become apparent later in the article, the definition of *social enterprise* (SE) varies between national contexts. For the sake of expediency we are using this term to describe enterprises, including *heidenspass*, which explicitly incorporate a social mission in their everyday transactions.

The article is organized as follows: first, it conjoins the literature on circuits of value and CE with that of diverse economies in order to set out a new heuristic framework for examining local CE development processes. Next, it considers why a focus on SEs provides a useful means of investigating the material and social circuits of value underpinning the CE. The third section describes the methods used in conducting a qualitative case study of a *heidenspass* SE project in Graz, Austria. The methods included interviews, mapping sessions, and empirical observations supported by videography. This is followed by the findings and discussion section, which interrogates the social structures and (spatial) contingencies underlying circuits of value in local CE development trajectories. Finally, in the conclusion we reflect on how our heuristic framework might help to advance economic geographic research on the CE and inform discourses and practices that support social CE transitions and attendant material flows of resources and circuits of value.

260 Building Alternative Circular Futures: Where Two Worlds Collide

In this section we lay down the foundations for our heuristic framework for investigating the role of circuits of value in developing the local and socially inclusive CE. We, first, initiate a dialogue between the literatures on CE and diverse economies; second, we explore the role of circuits of value in a CE; and, third, we identify SEs as key agents of local CE development.

CE and Diverse Economies: Constructing a Dialogue

The respective concepts of the CE and the diverse economy occupy important niches in contemporary economic development discourse and practice. Each set of literature and its associated concepts has, however, different origins and antecedents.

While the origins of the CE concept can be traced back to formative works, such as Boulding's (1966) *Spaceship Earth* or Meadows et al.'s *Limits to Growth* (1972), Pearce and Turner (1990) were among the first to formally adopt the CE term in an economic model (Winans, Kendall, and Deng 2017). A growing body of literature has subsequently positioned the CE as emerging from the fields of ecological and environmental economics and industrial ecology (Deutz and Ioppolo 2015; Murray, Skene, and Haynes 2017). Shaped and refined by theories, such as biomimicry (Benyus 1997), cradle-to-cradle (McDonough and Braungart 2010), the performance economy (Stahel 2010), or the sharing economy (Sposato et al. 2017), the CE concept has entered mainstream economic discourse and practice as reflected in corporate policies on reducing the use of raw materials. The adoption of CE thinking remains, however, primarily motivated by cost savings and achievement of competitive advantage for firms rather than by extraeconomic premises (Lacy and Rutqvist 2016). A focus upon the latter is integral to diverse economy thinking and practice.

Contrary to the CE concept, the diverse economies literature emerged not as much out of environmental concerns as out of the growing need to represent the diversity of forms of economic organization both within and outside global capitalism (Gibson-Graham 2006). Diverse economies and spaces are portrayed as amounting to more than just marginal, subjugated phenomena or merely as subsystems of an overarching global capitalist economic system. Instead, they are regarded as necessary features of an intrinsically heterogeneous and locally emergent economic landscape comprising a great variety of institutional forms and circuits of value (Gibson-Graham 2006; Lee

2006; Healy 2009; Gritzas and Kavoulakos 2016). By coexisting with mainstream economic institutions in different places, diverse economies are, in fact, inherently tangled up (Lee 2006) in complex social relations, material transactions, and geography. As such, the literature depicts diverse economies as inherently dynamic, performed and always in the process of *becoming*, both organizationally and geographically, rather than as pre-given, static entities. This insight forms the entry point into our own attempt to reconceptualize the CE from the vantage of circuits of value by highlighting the broader institutional and socioecological contexts in which alternative and mainstream economic spaces coexist, and which shape social relations and networks underpinning both economic realms. When referring to the CE, we recognize that the CE itself is comprised of diverse economic practices, circulations, and flows or CEs (cf. Gregson et al. 2015).

Figure 1 illustrates the complex mosaic of economic spaces through which people produce, exchange, and distribute materials and resources both within and outside the mainstream capitalist socioeconomic system. These forms, which can be also referred to as spaces of alterity (Fuller, Jonas, and Lee 2010), may range from consumer and worker cooperatives to bartering or any voluntary work in nonprofits or SEs. The locally specific ways in which these forms emerge further reflect the diversity of social relations, conditions and, more specifically, the coexistence of regulated mainstream market transactions with unregulated nonmarket transactions, paid and unpaid/voluntary labor in particular places (Gibson-Graham 2006).

261

CIRCULARITY AS ALTERITY?

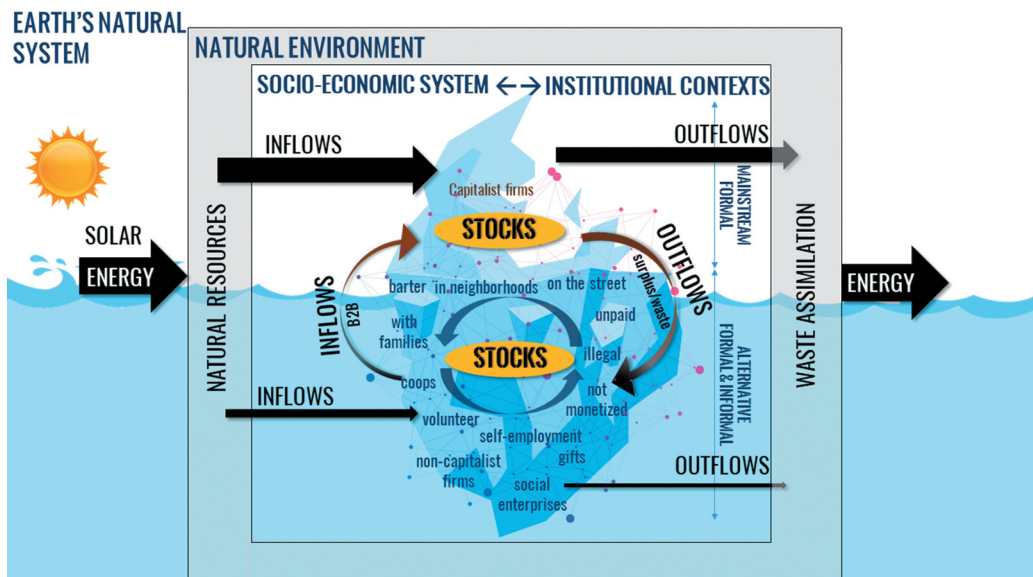


Figure 1. Resource flows across the mainstream and alternative economic spheres: A heuristic framework.

Note: Lead author's design after Community Economies Collective (2021), Laurenti et al. (2018), and Haas et al. (2005). See Cresting ITN (2021) YouTube video to view it in the form of an animated clip. Diverse Economies Iceberg by Community Economies Collective is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

While diverse economies often remain hidden from mainstream local development discourse, studies nonetheless reveal their significance for community development and social and physical well-being (Gibson-Graham 2008). Crucially, diverse economy discourses, practices, and spaces are increasingly becoming more closely aligned with broader environmental and, more recently, CE practices, including reuse, repair, refurbishment, rental, remanufacture, local resource sharing, and recycling (Holmes 2018; Lekan and Rogers 2020). This putative alignment is represented in Figure 1, which attempts to capture how stocks of human, financial, social, and natural capital² flow through, and circulate within, the global capitalist socioeconomic system. Within this system, institutions and enterprises operating in a diverse economy both serve as sinks for resource outflows from the mainstream economy and capture flows of stocks *recirculating* through the diverse economy itself. Just like in nature's design, economic diversity, as embodied in complex socionatural networks and (re)circulation of material flows, can help to boost local community resilience in the face of external economic shocks (Raworth 2017). Indeed, alternative economic spaces often
262 emerge spontaneously from a need to provide a means of survival for communities by, for example, recirculating reusable resources, and redistributing income, capital, and commodities (Fuller and Jonas 2003). It follows that local CE development spaces should not be seen as ideal types so much as a way of understanding how different economic forms emerge to address a variety of pressing economic and socioenvironmental challenges facing particular localities. We next consider how the local development of the CE can be animated by incorporating circuits of value into a novel heuristic framework.

CE and Circuits of Value

It is our contention that the concept of *circuits of value* provides the analytical *glue* conjoining the CE and diverse economies. This concept enables us to investigate and capture in a more concrete fashion those feedback loops and value flows underpinning the (re)circulation of material resources within and through a diverse economy as represented in the heuristic in Figure 1. Circuits of value refer to material and social pathways around which values attached to a given circulating resource are subsequently coproduced, transformed/exchanged, and consumed through relevant economic activities (Lee 2006). These circuits are being constantly reconfigured by social relations and embed multiple, diverse conceptions of value that may include both capitalist (i.e., market-based) and noncapitalist (e.g., social and environmental) values. As Hudson (2004, 462) notes, “economic processes must be conceptualized in terms of a complex circuitry with a multiplicity of linkages and feedback loops rather than just ‘simple’ circuits or, even worse, linear flows.” The same principle in fact also applies to the CE, albeit the CE-related concept of value itself needs to be broadened to encompass its diverse material, social, and spatial forms and its constituent circuits.

By embedding noncapitalist values, the concept of circuits of value goes beyond Marx's concept of *circuits of capital* (Fox and Marx 1985). The latter concept denotes pathways around which labor value and commodity value circulate across spaces of consumption, production, and exchange (where commodities and their embodied labor-use value are exchanged into monetary prices/wages, i.e., *exchange value*) through monetary financial transactions and their supporting institutions. In circuits of capital, any generated surplus value, which occurs when the volume and value of production

² By natural capital, we imply resources extracted from the natural environment.

outputs exceed the costs of production inputs, is appropriated by the owner of the means of production and therefore as production outputs. The classical structural Marxist approach to economic development thus focuses on capitalist use values at the service of exchange value and prioritizes the analysis of capital-labor relations at the point of production rather than the wider landscape of social reproduction and consumption and its constituent social relations of power structures (Warde 1992; Lee 2013). This focus is to some extent reflected in Santos's (1977) classic study of *circuits of capital*, which draws a distinction between an *upper circuit*, dominated by mainstream economic activities and organizations (e.g., multinational firms), and a *lower circuit* involving small-scale and informal enterprises, with the latter largely subordinate to the former through socioeconomic relations.

This article casts particular attention on the intersection of lower and upper circuits of capital, and more importantly on the intersection of geographically expansionary circuits of capital with broader, nonmarket conceptions of value. In doing so, it adopts Lee's (2013, 415) definition of value as involving "vital, life-sustaining things, ideas, relations and practices consumed, exchanged and produced." Such a conception of value highlights the potential contribution of corresponding *upper and lower circuits of value* to social reproduction, that is, support for the development of socially necessary conditions that sustain or improve extant social relations, (quality of) human life, and (circular) economic activities (Fox and Marx 1985). It is also in line with Arnould's (2014, 2) definition of value, to which he referred as a "contingent effect of interaction," which is enabled and/or supported by socially necessary resources, thereby to some extent reconciling the satisfaction of social needs with demands for a circular/ecological approach to the protection of the natural environment (O'Connor 1998).

We also acknowledge that (use-)value can further refer to "forms of life, relations, things, thoughts and practices that are held dear and are considered to be inalienable" (Lee 2013, 415). This notion of value is especially relevant in case of diverse (and circular) economies, which postulate that material success is a necessary but insufficient condition in building prosperous societies (Gibson-Graham 2006). In other words, it is vital to acknowledge noncapitalist, intangible values surrounding (alternative) processes of production, exchange, and consumption of value, and which may embody CE principles as well as those embodied in circulating goods, for example, ecological value embodied in waste as a type of revalued good. The latter case challenges the subjective theory of value according to which "the value of goods arises from their relationship to our needs, and is not inherent in the goods themselves" (Menger 1976, 120). For these reasons, the research adopted a subjective value mapping technique as a means of interrogating both the tangible (material) and intangible (subjective) circuits of value (see "Methods"). Overall, this alternative approach to value provides us with an opportunity to reveal and shape diverse, sociocircular economic practices, discourses, and imaginaries, that is, novel notions about nature and extraeconomic purposes of circuits of value surrounding local CE development.

Moreover, our inherently relational concept of circuits of value enables us to move beyond a simplistic taxonomic segmentation of economic activities into mainstream/alternative and capitalist/noncapitalist binary categories (cf. Samers and Pollard 2010). For example, what is alternative to someone is another person's mainstream. In recognizing "socio-spatial anatomy" of economic processes (Hudson 2005, 143), circuits of value hence reflect Heley, Gardner, and Watkin's (2012, 370) multifaceted concept of *compound economy*, which focuses on the "diversity of drivers, values and forms of exchange" as well as "relations and logics that combine in complex ways to produce, reproduce and transform local and regional economic space" (Heley, Gardner,

and Watkin 2012, 368). Such an approach helps to reveal how community (local), regional and global economies are interrelated. Similarly, a study conducted by Cannas (2018) demonstrates that alternative local economies can coexist with mainstream, globally connected and monetized economic organizations while at the same time delivering new forms and circuits of value. Likewise, Gibson-Graham (2006) highlights the need for exploring the links between local alternatives and global capitalism rather than allowing knowledge of the processes by which alternative economic spaces proliferate to be obscured by an abstract analysis of capital-labor (class) relations. Nonetheless, such a depiction of the economy raises questions as to what extent alternative CE activities at the local level may be enhanced through stronger linkages between local circuits of value and the regional and global economy (Gritzas and Kavoulakos 2016). This is especially relevant in the CE discourse whereby circular activities are often deemed sustainable when they occur at the local level such that spatial distances between economic spaces of procurement, production, exchange, and consumption are significantly reduced and hence negative environmental externalities lessened (Stahel 2013).

264

SEs as Diverse Circular Economic Spaces in the Making

Until now, the diverse economies literature has examined, *inter alia*, (worker) cooperatives, credit unions, time banks, Local Exchange Trading Systems (Fuller and Jonas 2003; Jonas 2013), households (Domosh 1998) and, more recently, repair cafes (Rosner 2014), makerspaces (Smith 2020), and food swaps (Schor et al. 2016), amongst many others. Many of these forms of economic activity can be categorized as, or are run by, SEs. The definition of SE is, however, fluid and contested, since different actors construct and use it according to their needs (e.g., as a policy tool) (Teasdale 2012). SEs operate across an organizational spectrum ranging from charities with a trading arm and social benefit enterprises to socially responsible commercial enterprises (Bolton, Kingston, and Ludlow 2007). Many are thus distinct from nonprofit organizations by being, at least to some extent, financially independent. SEs seek to maximize social impact by prioritizing the reinvestment of profits to fulfill a social and/or environmental mission over their distribution among shareholders (Longhurst et al. 2016). SEs hence embed both mainstream and alternative characteristics and, depending on the national context, they may be subject to taxation while being eligible for donations.

SEs help to challenge dominant neoliberal practice and discourse in their quest to provide not only symptomatic support to aid the poor and satisfy basic social needs (i.e., shelter or food) but also systemic support to address individual and social challenges (e.g., they may run social and work integration schemes) (Certo and Miller 2008; Kay, Roy, and Donaldson 2016). Studies also reveal that SEs help to “restore community solidarity” and “develop relational assets in business processes” (Kim and Lim 2017, 1427), hence helping focal actors to create and appropriate social value while enhancing social wealth (Mizik and Jacobson 2003). More importantly, they can also deliver environmental value by promoting sustainable, often circular, ways of doing and being (Vickers 2010). This may be possible through their ability to harness positive and negative externalities (e.g., waste) that may be neglected or unrecognized by the government and companies, and may be invisible to the general public (Santos 2012). SEs thus go beyond reproduction of businesses as usual and help to deliver blended value that spans social, environmental, and economic dimensions. We position SEs within a diverse CE perspective such that cross-sectoral collaborations occurring at the nexus of the upper and lower circuits of value, enhance (re-)circulation

of material and nonmaterial resources through monetary and nonmonetary transactions to render socioenvironmental benefits. In short, we focus on SEs as examples of *diverse and circular economic spaces in the making*.

Methods

Informed by critical realist research methods (Sayer 1992), the findings reported here draw on an intensive case study of *heidenspass*—a SE project in the City of Graz in the region of Styria, Austria. The study took place during two visits by the lead author to the University of Graz in May 2019 and November 2019. *Heidenspass* is formally delivered by *Verein Fensterplatz*—an association founded in 2006 in Graz to offer employment opportunities to unemployed youth. The official Austrian enterprise taxonomy does not specifically distinguish the concept of a SE and instead refers to *Socialwirtschaft* (social economy) or *Socialintegrationsunternehmen* (social integration enterprises) that incorporate legal forms such as associations, public benefit limited liability companies, and cooperatives (Anastasiadis, Gspurning, and Lang 2018). Nonetheless *Verein Fensterplatz-Projekt heidenspass* conforms to the broad definition of SE discussed above. SEs are becoming increasingly important players in the Austrian social economy due to growing demographic changes, complex welfare-state reforms, and relatively high rates of municipal waste generation per capita at the EU level (Anastasiadis, Gspurning, and Lang 2018; Eurostat 2018). These challenges, coupled with state (national, regional, and local) support for SEs, open a window of opportunity for locally embedded SE initiatives, such as *heidenspass*, to offer not only social work activities and work integration schemes but also actively and creatively circulate CE practices, ideas, and values.

Heidenspass's work activities are performed in distinct spaces, namely, a textile workshop, interior design workshop, eatery, two kitchens (one adjacent to *heidenspass* eatery and an open kitchen), and shop (offline and online). The enterprise adopts the following CE practices: (1) upcycling, including repurposing materials such as reclaimed wood or rubber hoses to make furniture; (2) reuse, such as using second-hand sewing machines and ovens as well as food surplus from large retailers that would otherwise go to the landfill; (3) maximization of the use of vacant spaces by renting *heidenspass* premises for its activities and to private companies for events; and (4) repair, which expands the lifespan of *heidenspass*'s homemade products. Cooperation with companies and private customers further enables the enterprise to generate sales income from its services and products. The initiative also receives funds from the province of Styria; the Municipality of Graz; the Ministry of Labor; social affairs, health, and consumer protection; and the Ministry of Education and Science; the European Social Fund; and the Fund Healthy Austria (*Fonds Gesundes Österreich*). By recognizing *heidenspass*'s broad spectrum of economic spaces and associated work activities, materials, and alliances, this case study thus provided an opportunity to develop and apply a set of methods for investigating the diverse circuits of value underpinning the local development of the CE in a particular urban setting.

Interviews

A total of twelve interviews were conducted with thirteen members of *heidenspass* staff during a one-week visit to the organization in November 2019: the CEO, two members from the core team, three key staff members representing the main kitchen and textile workshop, and seven employees. One interview was additionally conducted with a member of the core team during the scoping visit in May 2019. The interviews

lasted approximately thirty to eighty minutes and were conducted in person. They were organized around the following key areas: (1) *heidenspass*'s historic background, mission, and activities in respective work units; (2) opportunities and challenges associated with existing alliances with alternative and mainstream organizations; and (3) *heidenspass*'s broader regulatory and financial context. The interviews provided a detailed understanding of the functioning of the project in terms of mobilization of human and financial capital as well as material resources. All the interviews were recorded, transcribed, and subsequently analyzed, adopting a thematic analysis approach, which enabled identification of key themes emerging from the study and around which the discussion of results is organized.

Mapping Sessions

266 The interviews were complemented with interactive mapping sessions with *heidenspass* employees in order to spark their engagement and better identify and map flows of inputs, outputs, and value outcomes associated with the performed activities. The sessions incorporated the lens of relational reflexivity, which enabled reflection on “the material arrangements and their social meanings in how collective sense making and action emerges” (Allen 2015, 7–8) in the organization. In order to aid the mapping of use and exchange values attached to flows of labor, materials, and money, and ensure that the study also captured intangible perceptions of value outcomes across the social, environmental, and economic dimensions of sustainability, the mapping sessions employed the Value Mapping Tool (VMT) developed by Rana et al. (2013). VMT distinguishes four conceptions of value: (1) *current value proposition* of a company; (2) *value destroyed* (i.e., negative social or environmental impacts), which may be reconceptualized as (3) *value missed* (i.e., underutilized assets, resources, capabilities, and failure to capture value); and (4) *opportunities for new value creation* (i.e., new value-generating activities, relationships, and network reconfigurations). For simplicity, results from this study recognize three conceptions of value whereby *value missed* and *value destroyed* are classified together as *value lost* (see Figure 2). VMT paints a largely enterprise-centric picture as the mapping exercise concerns *heidenspass* employees' perceptions of value outcomes associated with its activities for (1) young employees, (2) private firms, (3) customers, (4) environment, (5) society, and (6) local authorities. The researcher also collected eight customer service feedback forms from the shop and eatery, and these feedback findings were translated into value outcomes specific to customers and complemented the mapping of different *circuits of value*.

Empirical Observations and Corroboration

In order to obtain insights into the workplace-customer dynamics, the researcher also conducted empirical observations in the enterprise setting. These observations were video recorded with the aim of providing a better online narrative for the *offline* impact. Videography additionally enabled (1) corroboration of the results of interviews and mapping sessions and (2) communication of research results to (non)academic audience in the form of animated graphs (see Cresting ITN 2020, 2021).

Consistent with an overarching critical realist approach to the research (Sayer 1992), such triangulation of research methods enabled the researcher to identify causal mechanisms and contingent conditions surrounding the local development of the CE



Figure 2. Value Mapping Tool (VMT) in practice. Photograph taken by the lead author (2019).

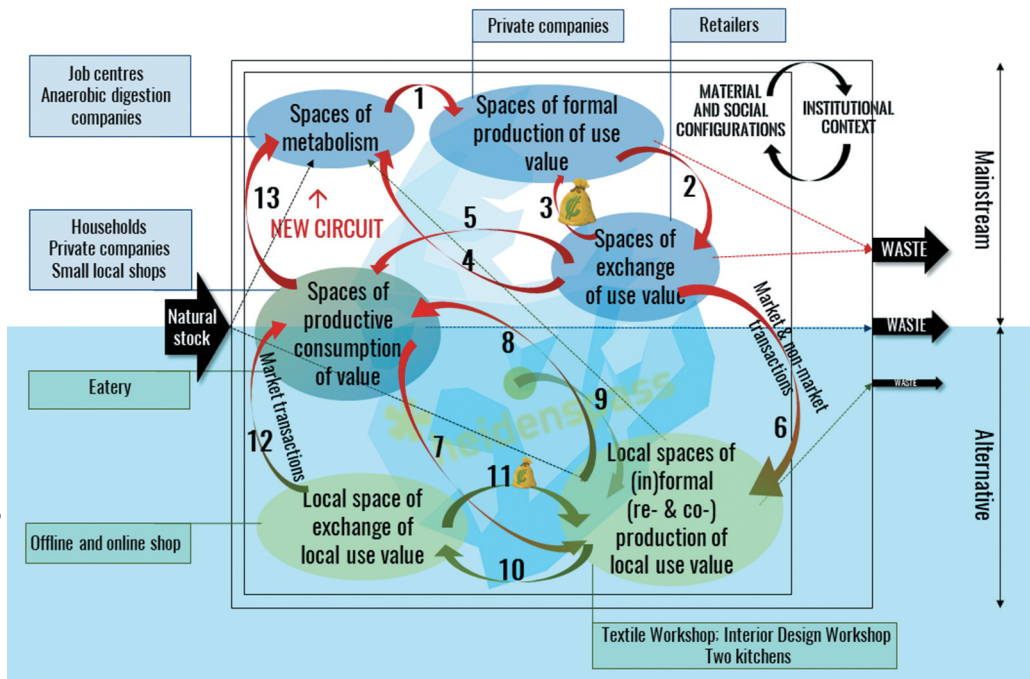
in a particular spatial setting. The requisite institutional ethics approvals for the adopted research methods were obtained prior to undertaking the research.

Results and Discussion

Drawing upon the results of the case study of *heidensplass* in Graz, Austria, this section interrogates and further develops the proposed heuristic framework for analyzing the sociomaterial configurations of value underlying local CE development (Figure 3). The framework represents flows of value as ingrained not only into the broader economic system (Granovetter 1985) but also into broader ecological and institutional contexts, which have implications for how CE practices blur the boundaries between the mainstream and alternative economic realms. By untangling and interrogating feedback loops inherent in circuits of value, this section reveals how mainstream and alternative economic spheres in fact coexist and coproduce values with one another. The results are organized around the following two themes: (1) the interplay of upper and lower circuits of value and (2) interrogating institutional norms.

Circuits of Value: Untangling Feedback Loops in the CE

In its everyday transactions, *heidensplass* exemplifies the potential of SEs to represent a new arena of alternative local development praxis within the social and circular economy. This is because SEs adopt novel yet ordinary ways of producing, exchanging, and consuming (raw) materials, goods, and services whereby circuits of value are coproduced alongside the mainstream economic paradigm. Positioned in the lower part of the economic iceberg model (see green arrows in Figure 3), this particular circular SE project forms *lower circuits of value* that interact with, and are shaped by, the *upper circuits of capital* (Santos 1977). Once the means of social production, namely, extracted raw materials, labor power, and time, are appropriated and exchanged for monetary value (see circuit 1 in Figure 3), stocks of natural capital are then transformed through the use of stocks of human capital (i.e., labor power) into raw material



268

Figure 3. Framework for mapping circuits of value in the SE-led local development of the circular economy: The case of Verein Fensterplatz-Projekt *heidenspass*. Note: Lead author’s design after Lee (2013) and Community Economies Collective (2021).

commodities (outputs) in *spaces of formal production of use value*. Any unsold commodities in extralocal *spaces of exchange of use value*, where private companies and individual customers execute monetary and digitally mediated transactions with large retailers (circuits 2), may be then transferred to SEs such as *heidenspass* (circuit 6).

For example, *heidenspass* collects unsold food surplus from a large food retailer, which is then transformed into meals in *local spaces of (re and co)production of use value* for consumption by *heidenspass* staff and customers at *heidenspass* eatery (see *space of productive consumption of value* and circuit 8). The enterprise also receives secondary resources that have already undergone several production and consumption cycles (circuit 7). They may concern second-hand truck canvas from transportation companies, punctured tires from bicycle retailers, second-hand furniture from individual donors and charity shops (circuit 9), or worn-out jackets from private companies, all of which are being (re and co)produced into aesthetic goods by *heidenspass* employees. While some of these items may be transferred to *heidenspass* via nonmonetary transactions (donations) to serve as production inputs, several large private companies send to *heidenspass* unwanted goods based on the premise that the provided materials will be converted on a business-to-business (B2B) basis into corporate gifts (circuit 8). For example, one well-known corporation sent *heidenspass* worn-out jackets and money in exchange for bags for its staff. In this way, *heidenspass*’s work activities revalorize *waste* and prevent it from being landfilled, incinerated, recycled via global production networks (GPNs), or in cases of food waste—from being subject to anaerobic digestion, which also generates troublesome waste (circuit 13). Such

feedback loops across mainstream and alternative realms raise, however, a range of environmental, social, and ethical value considerations, which we now examine.

Environmental Considerations

To begin with, many of the materials used by *heidenspass* have already circulated through GPNs. GPNs occupy transnational space and constitute “the nexus of interconnected functions, operations and transactions through which a specific product or service is produced, distributed and consumed” (Coe, Dicken, and Hess 2008, 272). *Heidenspass*’s inputs thus incorporate already-embedded complex social and material values and social relations that went into their production and distribution network, many of which are difficult to trace. For instance, observations conducted in the textile workshop revealed that some of the textiles received from private companies (circuit 6), or charity shops and individual donors (circuit 9), were manufactured in China. Many of the second-hand materials used in *heidenspass* already carry a negative carbon footprint as a result of circulating across extralocal spaces of production, exchange, and consumption. Some may include raw materials that were extracted without regard for the natural environment, thus contributing to its irreversible modification and revealing how capital may subsume nature (circuit 1) (Hudson 2005).

With regard to the environmental benefits of spatial proximity, *heidenspass*’s spaces of production (kitchen and textile workshop), exchange, and consumption (shop with adjacent eatery) are colocated in the same rented premise. The interior design workshop is located within a relatively short journey by public city transport from the retail shop. The notion of spatial proximity does not, however, capture online sales of *heidenspass* goods to individual customers or private (B2B) clients outside Graz and Austria, who are an important source of income for the enterprise. In a similar fashion, B2B partners and donors of second-hand materials are not always located in Graz. All these aspects not only have implications for the environmental footprint of the final product but also for the development of a sustainable CE, which, according to Stahel (2013) occurs when all production inputs are sourced, produced, and consumed locally.

Circuits of Value Surrounding Labor

The question of labor needs to be at the forefront of discussions of circuits of value in a diverse economy (Gibson-Graham 2006; Jonas 2010). This is because it is important to recognize the full diversity of labor relations and conditions, including notions of gender and identity, which underpin ethical negotiations of economic development trajectories (McKinnon 2020). For example, the materials that *heidenspass* employees work with may already embody low labor costs, which neither compensate for potentially precarious working conditions nor unfair remuneration—issues that are often signaled in the context of low-income countries of the Global South (Wright 2006). As Campana, Chatzidakis, and Laamanen (2017) mention, “the mainstream economy is typically conceived to extract value from local communities, (...) and lead[s] to crises and social stratification.” It is therefore necessary to explore the conditions of labor and associated circuits of value “through which material economic life is performed and reproduced” (Jonas 2010, 15), and that go beyond ascribing value to a commodity based on the time and amount of work spent on producing it (Lee 1993).

Crucially, low labor costs may translate into decreased exchange value (i.e., price) of produced goods (circuit 2). This has implications for the development of such B2B CE initiatives and hence (local) value creation. An interview with the CEO of *heidenspass*

demonstrated that some of the private companies (clients) are unwilling to purchase *heidenspass* bags as they are deemed too expensive when compared to similar products tailored in lower-income countries. Besides, junior *heidenspass* employees usually work at low wages on a part-time basis, yet the prices of the final, high-quality goods they produce are high. This may deter Western consumers with a lower income elasticity, notwithstanding their growing social and environmental awareness. A question then follows as to whether the labor of employees in such SEs is subject to some kind of exploitation, especially given that the utilization of mainstream waste and second-hand items effectively lowers production costs. The findings nonetheless reveal that financial gains, which are relatively small, are not the primary reason employees join the project. Many of them simply seek to improve their resumés and language skills, and become better integrated into the host society. Crucially, the enterprise ethically reinvests any profits from sales into its social and environmental mission, keeping them within localized circuits of value (circuit 11). Albeit, there remain *leakages* into the *mainstream* in the form of taxes or occasional purchases of new inputs (e.g., zippers for bags).

270 Interviews with *heidenspass* employees reveal that their work environment encourages them to express their creativity and gain transferable skills, which may be applied in the mainstream labor market and hence wider circuits of value. This is because junior employees display high degrees of trust in managers who codesign circuits of knowledge exchange in a flexible, relaxing, experiential, ethical, and collective work environment where there is a *family-like* feeling. As one of the staff managers stated, “We learn through experience. We make things happen even if it seems challenging. If something is not working, we readjust it” (Interview, November 2019).

Contrary to Holmes (2018) and Schor et al.’s (2016) work on *circular* alternative economic spaces, our empirical findings do not reveal any gender inequality or imbalance with the exception of the wood workshop where women constituted a minority. There are, however, other aspects of work activities at *heidenspass* that may represent uneven dynamics at the micro level. For example, some junior employees may be, under exceptional circumstances, employed for longer periods of time than six months, and do longer and more frequent shifts, thus preventing others from entering the scheme. This further indicates that *heidenspass* employees may have strong attachments to the workplace and/or struggle to attend full-time education or access other work placements.

Concerning labor’s social reproduction (Jonas 2010), to some, the use of unsold food surplus as cooking ingredients for meals for *heidenspass* employees may constitute “bad food for poor people” (Holmes 2018, 145). Such a notion is, nonetheless, challenged by the fact that those meals are also sold at a regular price in *heidenspass* eatery. The findings reveal that the customers who are aware of the fact that the served food comprises unsold surplus ingredients from retailers do not question the quality of the food; instead, the idea of using food surplus appeals to their environmental conscience. Following Warde’s (1992) notion of *identity value*, which is associated with spaces of consumption and is not adequately captured in orthodox economics, it could be that *heidenspass* customers find new ways of enhancing their identity (e.g., environmental identity) by consuming *heidenspass*’s meals or items such as unique accessories. This is especially the case given that *heidenspass* accessories can be tailored according to individual desires. Identity value can be also manifested in spaces of production. By cooking national dishes, for example, Afghan cuisine, employees can express/enhance their national identity.

Moreover, the example of cooking and food-sharing sessions with employees, local authorities, and clients (B2B) in the open kitchen, wherein food acts as a social glue,

illustrates how the formation of strong and trust-based horizontal working relations spans upper and lower circuits of value. *Heidenspass's* spaces of production and consumption are hence characterized by strong intra- and interorganizational “relational assets, which embody social capital” (Kim and Lim 2017, 1427). They are sites for “practicing new social relations and new political, environmental and economic subjectivities” (Davies and Evans 2019, 157). Food sharing and collective cooking also challenge the traditional Marxist notion of producing solely for the sake of consumption or reproduction of labor power (Warde 1992). While the workers producing purely capitalist goods in the mainstream spaces of production may also have good relations with colleagues, *heidenspass's* primary mission is to help disadvantaged young individuals benefit from the social integration and work scheme.

Overall, *heidenspass* has had to make a trade-off between remaining faithful to its core mission of socially and personally (rather than strictly financially) empowering many young individuals, and growing in size to increase volume of B2B transactions, accumulate more capital, and increase wages while possibly producing cheaper goods of lower quality, for profit, and on a mass scale (circuit 3 and 4). The latter case suggests that the enterprise would additionally have to cease to rely on the state support, which currently constitutes the major part of its available capital, thus providing a *life sustaining value* (Lee 2006).

B2B Transactions: Genuine Impact or Window Dressing?

The interaction of upper circuits of value with lower circuits of value in the case of *heidenspass* also raises important ethical questions with regard to the performance of the CE as *window dressing* by private companies involved in B2B transactions or when donating food surplus. Window dressing refers to a strategy, often near the quarter end, whereby company managers use mutual funds to boost their corporate social responsibility (CSR) and the firm's reputation in the face of many reputational pressures to green its corporate image (O'Neal 2001; Lin 2010). For instance, by transforming waste from private companies, or in other words, by-products of the main production cycle, into upcycled goods, the SE project enables private companies to capitalize their CSR, aligning it with *heidenspass's* social and environmental mission while lowering their waste management fees. In a similar fashion, Holmes (2018, 145) notes that alternative circular economic spaces accepting mainstream waste can be perceived as “a free solution to the waste problems of the capitalist [food] industry.”

While it may seem like a win-win transaction whereby each transacting party obtains a value specific to its motives, it is, however, important to acknowledge that B2B and similar exchange agreements may, in reality, indirectly perpetuate deeper structural problems underlying contemporary economic systems. First, following the European waste hierarchy pyramid, it is important that companies prioritize waste prevention above reuse, recycling, recovery, and ultimately landfill in order to significantly minimize their negative environmental externalities (Hultman and Corvellec 2012). While *heidenspass's* B2B partners may be already adopting some internal waste prevention strategies at the company level, by sending no longer in use materials to *heidenspass*, they do not prevent waste generation and overexploitation of natural resources. Besides, upcycled products, such as bags, are likely to be landfilled or incinerated at some point during their lifetime, since they are made out of nonbiodegradable materials (unlike compostable wood or food waste). This further suggests that upcycling is not inherently circular unless it involves biodegradable inputs (e.g., newspapers for collages).

Second, by simply acknowledging social and environmental benefits of B2B partnerships, private companies are not likely to be profoundly challenged and rethink their ties to global commodity/value chains and exploitative labor relations (Phillips and Sakamoto 2012). Even though SEs help to create demand for alternative markets offering circular products, these markets currently do not seem to be sufficiently developed to significantly impact the way large capitalist companies act. On top of that, corporations intend to appeal to more investors by boosting their image through B2B partnerships. By enabling SEs to repurpose their waste, they hence (in)directly make profits, which may prompt them to exchange even more waste into corporate gifts or procure new goods from the upper circuits. It is hence important to question as to what extent material circuits in such circular economies are moral (Gregson et al. 2015).








Interrogating Institutional Arrangements Underpinning Circuits of Value in the CE
























Table 1 brings together some of the key results of our analysis of circuits of value associated with *heidenspass*, and represents (use) value captured, lost, or potentially

272

Table 1














Diverse Multistakeholder Value Outcomes across Spaces of Value Creation, Capture, and Loss Associated with Verein Fensterplatz-Projekt heidenspass

Economic Unit	Use Value Captured	Use Value Lost	Use Value Opportunity
<p>Spaces of formal production</p>	<p><u>ECONOMIC</u></p> <p> Financial capital accumulation</p>	<p><u>SOC-EC</u></p> <p> Reinvestment of surplus capital to support social mission is not always prioritized</p> <p><u>SOC-ENV</u></p> <p> Goods may be produced under challenging work conditions</p>	<p><u>LINKING-REPUTATIONAL-ECONOMIC</u></p> <p> Partnerships with SEs to reinvest surplus capital and improve corporate image via social procurement & B2B</p>
<p>Mainstream spaces of exchange</p>	<p><u>REPUTATIONAL-SOC-ENV-EC</u></p> <p> Improved socioenvironmental image of mainstream companies by donating surplus materials and/or exchanging them (B2B); lower waste management fees</p>	<p><u>SOC-ENV-EC</u></p> <p> Not all clients are located in close proximity to <i>heidenspass</i> premises</p>	<p><u>LINKING-SOC-ENV-EC</u></p> <p> Partnerships with SEs to donate/exchange (B2B) obsolete materials for revalorization</p>

<p> Alternative spaces of (in)formal (re & co)production</p>	<p><u>SOCIAL</u></p> <ul style="list-style-type: none">  Social welfare support services by providing low-threshold employment to disadvantaged youth   Improved well-being  Reduced urban crime rates <p><u>ECONOMIC</u></p> <ul style="list-style-type: none">  Reduced rates of production of landfilled food, wood & textile products <p><u>PERSONAL</u></p> <ul style="list-style-type: none">  New social, language, motor, creative, tailoring, joinery & cooking skills   Flexible work schedules 	<p><u>ECONOMIC</u></p> <ul style="list-style-type: none">  Short-term contracts (up to 6 months) that offer up to 4h & 3 days of work per week  1-year funding contracts subject to renewals & negotiations  Competition for material resources with other similar enterprises <p><u>SOC-EC</u></p> <ul style="list-style-type: none">  Strong attachment to workplace may not motivate young employees to seek other jobs  Certain cuisines dominate <p><u>SOCIAL</u></p> <ul style="list-style-type: none">  Inability to hire refugees <p><u>SOC-EC</u></p> <ul style="list-style-type: none">  Limited marketing  	<p><u>LINKING</u></p> <ul style="list-style-type: none">  Lack of formal contracts with mainstream companies (more flexibility) <p><u>SOC-PER-EC-ENV</u></p> <ul style="list-style-type: none">  Training and counselling in climate change, drug prevention, sports <p><u>PER-EC</u></p> <ul style="list-style-type: none">  Partnerships with mainstream companies to progress young employees' careers  Growing competition induces necessity to differentiate products <p><u>SOCIAL</u></p> <ul style="list-style-type: none">  A high employee turnover rate  <p><i>heidenspass</i> appreciates customer feedback</p>
--	--	---	--

274

	<p><u>ENV-SOC-PER-LINKING-EC</u></p> <ul style="list-style-type: none"> Environmental awareness-raising work activities, DIY workshops & cooking sessions <p><u>ENV-SOC</u></p> <ul style="list-style-type: none"> Proximity of spaces of production to spaces of consumption <p><u>ENVIRONMENTAL</u></p> <ul style="list-style-type: none"> Only vegetarian and vegan meals are offered Rented premises 	<p><u>ENVIRONMENTAL</u></p> <ul style="list-style-type: none"> Some collages incorporate plastic <p><u>SOC-EC</u></p> <ul style="list-style-type: none"> Production inputs may embed negative social & environmental footprint 	<p><u>LINKING</u></p> <ul style="list-style-type: none"> Growing trends among companies to improve their corporate image by partnering with SEs Ability to negotiate distribution of funds with local authorities <p><u>ENVIRONMENTAL</u></p> <ul style="list-style-type: none"> Changing directives on plastic use
<p> heidenspass</p> <p>Alternative spaces of exchange</p>	<p><u>SOC-ENV</u></p> <ul style="list-style-type: none"> Revenue from sales is reinvested into socio-environmental mission Rented premises <p><u>SOCIAL</u></p> <ul style="list-style-type: none"> Community events <p><u>AESTHETIC/IDENTITY</u></p> <ul style="list-style-type: none"> Aesthetic goods 	<p><u>ENVIRONMENTAL</u></p> <ul style="list-style-type: none"> International sales; not all clients are in close spatial proximity to <i>heidenspass</i> <p><u>ECONOMIC</u></p> <ul style="list-style-type: none"> Expensive products 	<p><u>SOC-EC</u></p> <ul style="list-style-type: none"> <i>heidenspass</i> encourages customer feedback

 Alternative spaces of productive consumption	<p><u>EC-LINKING</u></p> <p> Lunches are provided for customers</p> <p></p> <p><u>ECONOMIC</u></p> <p> Eatery and shop are merged</p>	<p><u>SOC-ENV</u></p> <p> The project is not sufficient to significantly challenge throw-away culture (possibility of rebound effect)</p> <p></p> <p><u>ECONOMIC</u></p> <p> Only lunches are provided</p> <p></p>	<p><u>ECONOMIC</u></p> <p> Crowdfunding campaigns to support socioenvironmental mission</p> <p><u>LINKING</u></p> <p> <i>heidenspass</i> membership to join various community activities</p>
Spaces of metabolism	<p><u>ENVIRONMENTAL</u></p> <p> Transformation of organic waste into energy</p>	<p><u>EC-ENV</u></p> <p> Transportation of waste does not solve deeper waste problems</p> <p> Anaerobic digestion fees</p>	

Legend representing key actors who are directly impacted by respective value outcomes:

-  *heidenspass* employees
-  *heidenspass* customers
-  Private company (B2B)
-  Society
-  Environment
-  Local authorities

Abbreviations stand for the following meanings: SOC—social, EC—economic, ENV—environmental, PER—personal. See Appendix A in the online materials to view photographs depicting *heidenspass*'s respective economic spaces.

captured in relation to respective economic units. This table forms a basis for interrogating the role of underlying institutional norms (public, private, and social) in directing (re)circulation of value in the local development of the CE.

As evidence of the potential of SEs to foster the local CE development, *heidenspass* contributes to *local* economic value creation through strategic and mutually beneficial partnerships with public, private, and social sector organizations. These organizations exhibit varying degrees of power to manipulate transactions and operational processes

across respective economic units through diverse institutional norms, regulations, and governance mechanisms. Respective institutional logics may in turn facilitate or constrain the expansion of circuits of value in the CE and its supporting institutional norms (e.g., those conjoining economic, reputational, and/or environmental value). Understanding the broader institutional context in which SEs operate, and which shapes sociopolitical relations, is hence important when exploring transition pathways toward a more localized and socially inclusive CE.

276 Following Fuller and Jonas (2003), the case study can be classified as an *alternative-additional* enterprise, one that is complementary to, and reliant upon, flows and outputs in the mainstream economy. The social work aspect of *heidenspass*'s mission and the organization's high dependence on public funds, which amount to almost 70 percent of the enterprise's total financial resources, means that it does, to some extent, complement (if not substitute) mainstream social welfare delivery structures, especially those the public sector fails to provide. Such high reliance of *heidenspass* on external agents for funds, however, may constrain its institutional autonomy, and hence capacity to determine its own strategic direction and structure circuits of value accordingly. For instance, the interviews revealed that public funds have been invested in a top-down pilot sports project that deviates from *heidenspass*'s upcycling mission. In line with Cleaver (2016, 17) who noted that, "[w]e seem unlikely to transcend politics—understood as the confrontation and negotiation of differences" when investigating the diversity of economic forms, annual negotiations with public authorities determine *heidenspass*'s availability of funds and hence its activities. As *heidenspass*'s project manager mentioned, "Governmental players are changing so fast and the public funding is always very tricky because it depends on the current political situation. The Austrian political situation is not too good for innovative social projects like *heidenspass*. Our field of work is going in a different direction. It is hard to be true to our concept with which we have a very good experience and we know it works" (Interview, November 2019). Moreover, the project currently receives many employees via a youth coaching organization, which depends on public funds. This has implications for mixed levels of personal work motivation: "In former times it was 80 percent of youngsters showing up and 20 percent were coming through Jugendcoaching" (Interview with *Heidenspass* Manager, November 2019). Such public-social dynamics reflect the dependence of SEs more generally upon the state and thus confirms a tendency in the literature to depict the social economy as a form of social-welfare capitalism (Amin, Cameron, and Hudson 2003). However, such a portrayal that focuses primarily on the social mission can conceal environmental, aesthetic, and creative value associated with CE practices. As the CEO of the SE in this study mentioned, "it is very important for the young people to see that it is not just the money from the government but it is also the money that they help to make because the product is very cool and interesting. Our clients don't buy things because we are a social project but because they are very nice and have environmental value" (Interview, November 2019). Crucially, the fact that such sales are underpinned by digital transactions only further denotes interactions of local circuits of value with mainstream, global financial institutions via upper circuits of capital and hence *heidenspass*'s subordination to the *laws of the market*.

The transactional context shaping relations between *heidenspass* and private sector organizations is likewise noteworthy. B2B transactions are subject to negotiations and are underpinned by verbal agreements rather than formal written contracts. The semiformal character of B2B transactions allows the SE to circumvent formal bureaucratic contracting processes (hence adding economic value), yet it involves dependence

upon relatively high degrees of trust between transacting parties (cf. Granovetter 1985). When asked whether contracts with private companies would be useful, the social project manager at *heidenspass* admitted that “Sometimes contracts make things more complicated” (Interview, November 2019). The CEO of *heidenspass* also mentioned that “It is very important to have personal contact with firms. People who know me trust me as I have a good reputation” (Interview, November 2019). Despite high social legitimacy, SEs do not significantly challenge the value proposition of large international corporations and, instead, enable them to add community and public benefits into their existing business models. By spending their accumulated surplus capital on *ethical goods*, private clients often provide only a temporal *spatial fix* of their capital (Aoyama, Murphy, and Hanson 2011). It can be therefore argued that the localized nature of B2B transactions tends to perpetuate patterns of uneven development resulting from sedimented economic practices in place, which often fail to establish a bridge between the local development of the CE and its capacity to establish connections between production, circulation, and environmental value at larger spatial scales. As Bornstein (2007, 14) noted, “Relatively few social entrepreneurs have achieved the levels of scale needed to excite state- and nation-level policy makers.” Nonetheless, SEs collectively have a significant potential to contribute to national and international policy and practice evolving around the CE.

Conclusions

By mapping circuits of value (Lee et al. 2004) and outlining a heuristic framework that positions SEs as agents of local development, this article makes a novel contribution to the existing economic development discourses and practices surrounding CEs. By way of conclusion, we highlight five findings and identify some questions for further research.

First, through the lens of circuits of value we have offered a novel heuristic tool for investigating how SEs involved in the CE, such as *heidenspass*, operate at the nexus of the upper and lower circuits of value, where extralocal and local social relations and transactions conducive to CE intersect. In doing so, the article has added to the literature on how collective actions enacted by SEs help to diversify local economic development trajectories (Montgomery, Dacin, and Dacin 2012). Crucially, it has interrogated the role of the SE in constructing alternative circular narratives, tacit knowledge, and other values in its systemic pursuit of *beyond capitalist* value cocreation with the mainstream. Through its multilevel, cross-sectoral and extralocal relations, *heidenspass* demonstrates the resources, capabilities and low-tech tools necessary for extracting value from secondary resources while fostering community spirit and creating new, inclusive, and diverse (circular) economic opportunities for the disadvantaged.

Second, and most importantly, the adoption of circuits of value enabled us to excavate some key tensions and contradictions in relation to (re)production, (re)circulation, exchange, and consumption of products and services in the CE. By uncovering feedback loops inherent in circuits of value in the context of the particular SE, it cross-examined the implications of the movement and transformation of diverse notions and conceptions of value in terms of its extraction, expansion, and (re)circulation via (non)market mechanisms operating across coexisting alternative and mainstream spaces of exchange, production, and consumption. The proposed framework has thus covered a gap in the CE literature by revealing mechanisms and processes linked to outcomes of value cocreation

within multistakeholder systems, and the impacts of institutional structures on organizations engaged in the circulation and cocreation of value (Kohtamäki and Rajala 2016).

While *heidenspass*'s sociomaterial configurations and activities result in many socioenvironmental benefits, especially with regard to its systemic support for young people through the work integration scheme (Table 1), the SE's broader contribution to the development of a local and socially inclusive CE remains questionable. This is because many of its production inputs embody complex and often exploitative (of labor and nature) social and material conditions of global production. By internalizing wider societal tensions in capitalism, such SEs may, in fact, indirectly and unwittingly help to perpetuate a range of inequalities and environmental problems while at the same time attempting to become more circular and financially independent (e.g., from state support). Not only are *heidenspass*'s commodities expensive, and hence affordable only to certain groups of customers, but they also depend upon global market transactions and are consumed both locally and globally. Such spatially differentiated economic activities have implications for the development of a *genuine* CE, which occurs when all production inputs are sourced and produced
278 locally and ethically, and commodities are exchanged and consumed locally (Stahel 2013). Metaphorically framed as minicogs of circuits of value, SEs in fact operate within the larger cogs of expansionary circuits of capital. In line with Lee's (2011) analysis of circuits of value, our contribution suggests that SE-driven local economic development is little more than the joining of some parts of circuits of value in such a fashion that they enhance local *circular* economic activity rather than stimulate local economic development in a broad sense. There is, therefore, a need to formulate policies for local CE development that are sensitive to the wider territorial contexts and institutional constraints within which SEs operate.

Third, as global corporations seek to boost their image and attract more investors through B2B partnerships with SEs and/or social procurement, it is debatable to what extent, if at all, such practices prompt them to rethink their linear production logics and adopt CE practices. It remains dubious whether the socioenvironmental benefits offered by SEs, such as *heidenspass*, outweigh the negative social and environmental externalities embodied in *heidenspass*'s inputs of nonlocal, capitalist origin. The formation of cross-realm circuits of value neither significantly challenges the status quo nor addresses deeper issues that underlie mainstream economic logic, including the problem of overconsumption and demand for cheap products. Such alternative material circuits of value tend to, instead, rather only superficially consolidate what the mainstream circuits tend to disintegrate (i.e., humans and environments made disposable) and what, in fact, underpins their sole existence. In this respect, the debate about the social and environmental benefits of the CE can learn much from examining the contribution of SEs from the perspective of a diverse economy.

Fourth, the study invites further research on SEs operating in different spatial contexts for local CE development. For example, SEs operating in the CE in other contexts being investigated in this research (e.g., UK and Chile) may generate income solely from selling donated items such as food or textile products (Holmes 2018; Lekan et al. 2020). In these contexts, profits may be reinvested into social missions not only locally but also nationally and globally through expansionary circuits of capital especially in cases where SEs belong to social franchise networks. What these circular SEs have in common though is utilization of waste as a means of providing (use-value) for those in need, be it directly (i.e., in the form of *socially necessary resources* such as food or clothes), or indirectly (i.e., by using it as an input for the production of luxury goods while creating socially necessary employment opportunities). As the CE concept

continues to attract political attention, SEs are very likely to be increasingly leveraged as a tool and an “object of policy and politics” (Gibson-Graham 2008, 620) to deliver public services while navigating us toward a bottom-up CE transition (European Commission 2016). This article has hence identified several salient points that different stakeholders, including policy makers, investors, (social) entrepreneurs, economic geographers, and urban planners, need to be aware of when seeking to diversify local economic development trajectories and unleash the full potential for circularity in SEs.

Finally, future research on the CE could benefit from a more participatory approach that could involve multistakeholder perceptions and negotiations of value among actors such as local authorities and private companies, who have different value priorities, yet hold the power to shape flows of value across spaces of production, exchange, and consumption (cf. Mendoza and Prahbu 2009; Farrelly, Kildunne, and Deutz 2020). This would ideally call for more transformational societal and institutional changes to ensure that biophysical resources and human labor are not just (re)circulated but also valued. In this way, SEs could also receive greater and well-deserved attention.

279

Supplemental data

Supplemental data for this article can be accessed [here](#).

References

- Allen, S. 2015. Reflexivity for sustainability: Appreciating entanglement and becoming relationally reflexive. *International Journal of Work Innovation* 1 (2): 240–50. doi:10.1504/IJVI.2015.071191.
- Amin, A., Cameron, A., and Hudson, R. 2003. The alterity of the social economy. In *Alternative economic spaces*, ed. A. Leyshon, R. Lee, and C. C. Williams, 27–54. London: SAGE Publications.
- Anastasiadis, M., Gspurning, W., and Lang, R. 2018. *Social enterprises and their ecosystems in Europe. Country report*. Luxembourg: Publications Office of the European Union.
- Aoyama, Y., Murphy, J. T., and Hanson, S. 2011. Circuits of capital. In *Key concepts in economic geography*, ed. Y. Aoyama, J. T. Murphy, and S. Hanson, 129–36. London: SAGE Publications.
- Arnould, E. J. 2014. Rudiments of a value praxeology. *Marketing Theory* 14 (1): 129–33. doi:10.1177/1470593113500384.
- Benyus, J. M. 1997. *Biomimicry: Innovation inspired by nature*. New York: Morrow.
- Bolger, K., and Doyon, A. 2019. Circular cities: Exploring local government strategies to facilitate a circular economy. *European Planning Studies* 27 (11): 2184–205. doi:10.1080/09654313.2019.1642854.
- Bolton, M., Kingston, J., and Ludlow, J. 2007. *The Venturesome model: Reflecting on our approach and learning 2001–6*. London: Charities Aid Foundation.
- Bornstein, D. 2007. *How to change the world: Social entrepreneurs and the power of new ideas*. Oxford: Oxford University Press.
- Boulding, K. 1966. The economics of the coming spaceship earth. In *Environmental quality in a growing economy*, ed. H. Jarrett, 3–14. Baltimore: Johns Hopkins University Press.

- Campana, M., Chatzidakis, A., and Laamanen, M. 2017. Introduction to the special issue: A macromarketing perspective on alternative economies. *Journal of Macromarketing* 37 (2): 125–30. doi:10.1177/0276146717700228.
- Cannas, R. 2018. Diverse economies of collective value co-creation: The Open Monuments Event. *Tourism Planning & Development* 15 (5): 535–50. doi:10.1080/21568316.2018.1505651.
- Certo, S. T., and Miller, T. 2008. Social entrepreneurship: Key issues and concepts. *Business Horizons* 51 (4): 267–71. doi:10.1016/j.bushor.2008.02.009.
- Cleaver, H. 2016. Circuits of struggle? *Political Economy of Communication* 4 (1): 3–34.
- Coe, N. M., Dicken, P., and Hess, M. 2008. Global production networks: Realizing the potential. *Journal of Economic Geography* 8 (3): 271–95. doi:10.1093/jeg/lbn002.
- Community Economies Collective. 2021. Diverse economies iceberg. [Diverse Economies Iceberg by Community Economies Collective is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License]. <https://www.communityeconomies.org/resources/diverse-economies-iceberg>.
- Cresting ITN. 2020. Verein Fensterplatz-Projekt heidenspass in the city of Graz, Austria. YouTube video, 10: 19. <https://youtu.be/eClOwb8Ev9U>.
- . 2021. Diverse circular economies iceberg. YouTube video, 2: 25. <https://youtu.be/4fzFh20wOoA>.
- 280 Davies, A., and Evans, D. 2019. Urban food sharing: Emerging geographies of production, consumption and exchange. *Geoforum* 99 (February): 154–59. doi:10.1016/j.geoforum.2018.11.015.
- Deutz, P., and Lyons, D. I. 2015. Introducing an international perspective on industrial ecology. In *International Perspectives on Industrial Ecology*, ed. P. Deutz, D. Lyons, and J. Bi, 1–11. Cheltenham, UK: Edward Elgar.
- Deutz, P., and Ioppolo, G. 2015. From theory to practice: Enhancing the potential policy impact of industrial ecology. *Sustainability* 7 (2): 2259–73. doi:10.3390/su7022259.
- Domosh, M. 1998. Geography and gender: Home, again? *Progress in Human Geography* 22 (2): 276–82. doi:10.1191/030913298676121192.
- Ellen Macarthur Foundation. 2013. The circular model—Brief history and school of thought. <http://www.ellenmacarthurfoundation.org/circular-economy/circular-economy/the-circular-model-brief-history-and-schools-of-thought>.
- European Commission. 2016. Social enterprises and the social economy going forward: A call for action from the Commission Expert Group on Social Entrepreneurship (GECES), European Union. https://ec.europa.eu/growth/content/social-enterprises-and-social-economy-going-forward_en.
- . 2019. Implementation of the circular economy action plan. http://ec.europa.eu/employment/circular-economy/index_en.html.
- Eurostat. 2018. Municipal waste statistics. https://ec.europa.eu/eurostat/statistics-explained/index.php/Municipal_waste_statistics.
- Farrelly, M., Kildunne, A., and Deutz, P. 2020. “There is no problem with plastics”: Understanding consumer and industrial perceptions of the plastics problem. In *Creative circular economy approaches to eliminating plastic waste*, ed. R. Rothman and A. Ryan, 96–106. London: UK Circular Plastics Network: KTN, EPSRC.
- Fox, J., and Marx, K. 1985. *Understanding capital, volume II: A reader’s guide*. Toronto, Canada: Progress Books.
- Fuller, D., and Jonas, A. E. G. 2003. Alternative financial spaces. In *Alternative economic spaces*, ed. A. Leyshon, L. Roger, and C. C. Williams, 55–73. London: SAGE Publications.
- Fuller, D., Jonas, A. E. G., and Lee, R. 2010. *Interrogating alterity: Alternative economic and political spaces*. Farnham, UK: Ashgate Publishing.
- Geissdoerfer, M., Savaget, P., Bocken, N. M., and Hultink, E. J. 2017. The circular economy—A new sustainability paradigm? *Journal of Cleaner Production* 143 (1): 757–68. doi:10.1016/j.jclepro.2016.12.048.
- Gibson-Graham, J. K.. 2006. *A postcapitalist politics*. Minneapolis: University of Minnesota Press.

- . 2008. Diverse economies: Performative practices for 'other worlds'. *Progress in Human Geography* 32 (5): 613–32. doi:10.1177/0309132508090821.
- Granovetter, M. 1985. Economic action and social structure: The problem of embeddedness. *American Journal of Sociology* 91 (3): 481–510. doi:10.1086/228311.
- Gregson, N., Crang, M., Fuller, S., and Holmes, H. 2015. Interrogating the circular economy: The moral economy of resource recovery in the EU. *Economy and Society* 44 (2): 218–43. doi:10.1080/03085147.2015.1013353.
- Gritzias, G., and Kavoulakos, K. I. 2016. Diverse economies and alternative spaces: An overview of approaches and practices. *European Urban and Regional Studies* 23 (4): 917–34. doi:10.1177/0969776415573778.
- Haas, W., Hertwich, E. G., Klaus, H., Korytarova, K., Ornetzeder, M., and Weisz, H. 2005. The Environmental Impacts of Consumption: Research Methods and Driving Forces. IIASA Interim Report (IR-05-027).
- Healy, S. 2009. Economies, alternative. In *International encyclopedia of human geography*, ed. R. Kitchin and N. Thrift, 338–44. Oxford: Elsevier Science.
- Heley, J., Gardner, G., and Watkin, S. 2012. Cultures of local economy in a Celtic fringe region. *European Urban and Regional Studies* 19 (4): 366–82. doi:10.1177/0969776411431102.
- Hobson, K. 2016. Closing the loop or squaring the circle? Locating generative spaces for the circular economy. *Progress in Human Geography* 40 (1): 88–104. doi:10.1177/0309132514566342.
- Hobson, K., and Lynch, N. 2016. Diversifying and de-growing the circular economy: Radical social transformation in a resource-scarce world. *Futures* 82 (September): 15–25. doi:10.1016/j.futures.2016.05.012.
- Holmes, H. 2018. New spaces, ordinary practices: Circulating and sharing within diverse economies of provisioning. *Geoforum* 88 (January): 138–47. doi:10.1016/j.geoforum.2017.11.022.
- Hudson, R. 2004. Conceptualizing economies and their geographies: Spaces, flows and circuits. *Progress in Human Geography* 28 (4): 447–71. doi:10.1191/0309132504ph497oa.
- Hudson, R. 2005. *Economic geographies: Circuits, flows and spaces*. London: SAGE.
- Hultman, J., and Corvellec, H. 2012. The European waste hierarchy: From the sociomateriality of waste to a politics of consumption. *Environment & Planning A* 44 (10): 2413–27. doi:10.1068/a444668.
- Jonas, A. E. G. 2010. 'Alternative' this, 'Alternative' that ... Interrogating alterity and diversity. In *Alternative economic and political spaces: Interrogating alterity*, ed. D. Fuller, A. E. G. Jonas, and R. Lee, 3–30. Farnham, UK: Ashgate Publishing.
- . 2013. Interrogating alternative local and regional economies: The British credit union movement and post-binary thinking. In *Alternative economies and spaces. New perspectives for a sustainable economy*, ed. H. M. Zademach and S. Hillebrand, 23–42. Bielefeld, Germany: Transcript.
- Kay, A., Roy, M. J., and Donaldson, C. 2016. Re-imagining social enterprise. *Social Enterprise Journal* 12 (2): 217–34. doi:10.1108/SEJ-05-2016-0018.
- Kim, D., and Lim, U. 2017. Social enterprise as a catalyst for sustainable local and regional development. *Sustainability* 9 (8): 1427. doi:10.3390/su9081427.
- Kohtamäki, M., and Rajala, R. 2016. Theory and practice of value co-creation in B2B systems. *Industrial Marketing Management* 56 (July): 4–13. doi:10.1016/j.indmarman.2016.05.027.
- Korhonen, J., Nuur, C., Feldmann, A., and Birkie, S. E. 2018. Circular economy as an essentially contested concept. *Journal of Cleaner Production* 175 (February): 544–52. doi:10.1016/j.jclepro.2017.12.111.
- Lacy, P., and Rutqvist, J. 2016. *Waste to wealth: The circular economy advantage*. London: Springer.
- Laurenti, R., Singh, J., Frostell, B., Sinha, R., and Binder, C. R. 2018. The socio-economic embeddedness of the circular economy: An integrative framework. *Sustainability* 10 (7): 2129. doi:10.3390/su10072129.
- Lee, C. O. 1993. Marx's labour theory of value revisited. *Cambridge Journal of Economics* 17 (4): 463–78. doi:10.1093/oxfordjournals.cje.a035249.

- Lee, R. 2006. The ordinary economy: Tangled up in values and geography. *Transactions of the Institute of British Geographers* 31 (4): 413–32. doi:10.1111/j.1475-5661.2006.00223.x.
- . 2011. Within and outwith/material and political? Local economic development and the spatialities of economic geographies. In *Handbook of local and regional development*, ed. A. Pike, A. Rodríguez-Posen, and J. Tomaney, 193–211. New York: Routledge.
- . 2013. The possibilities of economic difference? Social relations of value, space and economic geographies. In *Alternative economies and spaces. New perspectives for a sustainable economy*, ed. H. M. Zademach and S. Hillebrand, 69–84. Bielefeld, Germany: Transcript.
- Lee, R., Leyshon, A., Aldridge, T., Tooke, J., Williams, C., and Thrift, N. 2004. Making geographies and histories? Constructing local circuits of value. *Environment and Planning. D, Society & Space* 22 (4): 595–617. doi:10.1068/d50j.
- Lekan, M., Jonas, A. E. G., Deutz, P., and Baumgartner, R. 2020. Circular spaces of alterity: The interplay of mainstream and alternative economic spaces for inclusive circular economy development. The 26th Annual Conference of International Sustainable Development Research Society Conference, July 15–17, Budapest, Hungary.
- Lekan, M., and Rogers, H. A. 2020. Digitally-enabled diverse economies: Exploring socially inclusive access to the circular economy in the city. *Urban Geography—Debates and Interventions* 41 (6): 898–901. doi:10.1080/02723638.2020.1796097.
- 282 Lin, L.-W. 2010. Corporate social responsibility in China: Window dressing or structural change. *Berkeley Journal of International Law* 28 (1): 64–100.
- Longhurst, N., Avelino, F., Wittmayer, J., Weaver, P., Dumitru, A., Hielscher, S., Cipolla, C., Afonso, R., Kunze, I., and Elle, M. 2016. Experimenting with alternative economies: Four emergent counter-narratives of urban economic development. *Current Opinion in Environmental Sustainability* 22 (October): 69–74. doi:10.1016/j.cosust.2017.04.006.
- McDonough, W., and Braungart, M. 2010. *Cradle to cradle: Remaking the way we make things*. New York: North Point Press.
- McKinnon, K. 2020. Framing essay: The diversity of labour. In *The handbook of diverse economies*, ed. J. K. Gibson-Graham and K. Dombroski, 116–28. Cheltenham, UK: Edward Elgar.
- Meadows, D., Meadows, D., Randers, J., and Behrens, W. W., III. 1972. *The limits to growth: A report for the Club of Rome's project on the predicament of mankind*. New York: Universe Books.
- Mendoza, G. A., and Prahbu, R. 2009. Evaluating multi-stakeholder perceptions of project impacts: A participatory value-based multi-criteria approach. *International Journal of Sustainable Development and World Ecology* 16 (3): 177–90. doi:10.1080/13504500902919672.
- Menger, C. 1976. *Principles of economics*. Auburn, AL: Ludwig von Mises Institute.
- Mizik, N., and Jacobson, R. 2003. Trading off between value creation and value appropriation: The financial implications of shifts in strategic emphasis. *Journal of Marketing* 67 (1): 63–76. doi:10.1509/jmkg.67.1.63.18595.
- Montgomery, A. W., Dacin, P. A., and Dacin, M. T. 2012. Collective social entrepreneurship: Collaboratively shaping social good. *Journal of Business Ethics* 111 (3): 375–88. doi:10.1007/s10551-012-1501-5.
- Murray, A., Skene, K., and Haynes, K. 2017. The circular economy: An interdisciplinary exploration of the concept and application in a global context. *Journal of Business Ethics* 140 (3): 369–80. doi:10.1007/s10551-015-2693-2.
- O'Connor, J. R. 1998. *Natural causes: Essays in ecological Marxism*. New York: Guilford Press.
- O'Neal, E. S. 2001. Window dressing and equity mutual funds. Working Paper. Winston-Salem, NC: Wake Forest University, Babcock Graduate School of Management. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=275031.
- Pearce, D. W., and Turner, R. K. 1990. *Economics of natural resources and the environment*. Baltimore: Johns Hopkins University Press.
- Phillips, N., and Sakamoto, L. 2012. Global production networks, chronic poverty and 'slave labour' in Brazil. *Studies in Comparative International Development* 47 (3): 287–315. doi:10.1007/s12116-012-9101-z.

- Rana, P., Evans, S., Bocken, N., and Short, S. 2013. A value mapping tool for sustainable business modelling. *Corporate Governance* 13 (5): 482–97. doi:10.1108/CG-06-2013-0078.
- Ranta, V., Aarikka-Stenroos, L., Ritala, P., and Mäkinen, S. J. 2018. Exploring institutional drivers and barriers of the circular economy: A cross-regional comparison of China, the US, and Europe. *Resources, Conservation and Recycling* 135 (August): 70–82. doi:10.1016/j.resconrec.2017.08.017.
- Raworth, K. 2017. *Doughnut economics: Seven ways to think like a 21st-century economist*. White River Junction, VT: Chelsea Green Publishing.
- Rockström, J., Steffen, W. L., Noone, K., Persson, Å., Chapin, F. S., III, Lambin, E., Lenton, T. M., Scheffer, M., Folke, C., Schellnhuber, H. J., et al. 2009. Planetary boundaries: Exploring the safe operating space for humanity. *Ecology and Society* 14 (2): art. 32. doi:10.5751/ES-03180-140232.
- Rosner, D. K. 2014. Making citizens, reassembling devices: On gender and the development of contemporary public sites of repair in Northern California. *Public Culture* 26 (1): 51–77. doi:10.1215/08992363-2346250.
- Samers, M., and Pollard, J. 2010. Alterity's geographies: Socio-territoriality and difference in Islamic banking and finance. In *Alternative economic and political spaces: Interrogating alterity*, ed. D. Fuller, A. E. G. Jonas, and R. Lee, 47–58. Farnham, UK: Ashgate Publishing.
- Santos, F. M. 2012. A positive theory of social entrepreneurship. *Journal of Business Ethics* 111 (3): 335–51. doi:10.1007/s10551-012-1413-4.
- Santos, M. 1977. Spatial dialectics: The two circuits of urban economy in underdeveloped countries. *Antipode* 9 (3): 49–60. doi:10.1111/j.1467-8330.1977.tb00092.x.
- Sayer, R. A. 1992. *Method in social science: A realist approach*. London: Routledge.
- Schor, J. B., Fitzmaurice, C., Carfagna, L. B., and Attwood-Charles, W. 2016. Paradoxes of openness and distinction in the sharing economy. *Poetics* 54 (February): 66–81. doi:10.1016/j.poetic.2015.11.001.
- Schor, J. B., Walker, E. T., Lee, C. W., Parigi, P., and Cook, K. S. 2015. On the sharing economy. *Contexts* 14 (1): 12–19.
- Schulz, C., Hjaltdottir, R. E., and Hild, P. 2019. Practising circles: Studying institutional change and circular economy practices. *Journal of Cleaner Production* 237:117749. <https://www.sciencedirect.com/science/article/pii/S0959652619326095>.
- Smith, T. S. J. 2020. 'Stand back and watch us': Post-capitalist practices in the maker movement. *Environment & Planning A* 52 (3): 593–610. doi:10.1177/0308518X19882731.
- Sposato, P., Preka, R., Cappellaro, F., and Cutaia, L. 2017. Sharing economy and circular economy: How technology and collaborative consumption innovations boost closing the loop strategies. *Environmental Engineering and Management Journal* 16 (8): 1797–806. doi:10.30638/eemj.2017.196.
- Stahel, W. R. 2010. *The performance economy*. London: Palgrave Macmillan UK.
- . 2013. Policy for material efficiency—Sustainable taxation as a departure from the throwaway society. *Philosophical Transactions of the Royal Society A* 371 (1986): 20110567. doi:10.1098/rsta.2011.0567.
- Teasdale, S. 2012. What's in a name? Making sense of social enterprise discourses. *Public Policy and Administration* 27 (2): 99–119. doi:10.1177/0952076711401466.
- Vickers, I. 2010. *Social enterprise and the environment: A review of the literature*. Working Paper 22. Birmingham, UK: Third Sector Research Centre.
- Warde, A. 1992. Notes on the relationship between production and consumption. In *Consumption and class*, ed. R. Burrows and C. Marsh, 15–31. New York: Springer.
- Winans, K., Kendall, A., and Deng, H. 2017. The history and current applications of the circular economy concept. *Renewable and Sustainable Energy Reviews* 68 (February): 825–33. doi:10.1016/j.rser.2016.09.123.
- Wright, M. W. 2006. *Disposable women and other myths of global capitalism*. New York: Routledge.