FILLING THE SOCIAL GAP IN THE CIRCULAR ECONOMY: HOW CAN THE SOLIDARITY ECONOMY CONTRIBUTE TO URBAN CIRCULARITY?

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ABSTRACT

In this chapter, we investigate how the ideas of the social and solidarity economy (SSE) can strengthen the social and cultural aspects of the circular economy (CE) in an urban context. Cities are essential to the CE transition as over 50% of the world population lives in urban areas, and 60–80% of natural resources are consumed in cities. We analyze the various notions of SSE and their potential links with CE via a theoretical literature review and conduct a comparative case analysis focused on CE- and SSE-driven urban development projects in Finland, Uruguay, and Spain. As a provisional result, we specify SSE ideas that contribute to the vision for urban circularity and can enrich the social and cultural sustainability of CE. We conclude that careful work is needed to put these two distinct approaches into a dialogue in relevant ways.

KEYWORDS

Circular economy; solidarity economy; social sustainability; urban sustainability; urban development; urban governance

1. INTRODUCTION

The circular economy (CE) has recently become one of the leading environmental policy concepts (Kirchherr et al. 2017; Lazarevic and Valve 2017; McDowall et al. 2017; Ghisellini et al. 2016), but researchers have questioned its ability to generate change toward sustainability (e.g., Fitch-Roy et al. 2020; Hobson 2020; Korhonen et al. 2018). Various researchers have pointed out that ignorance of the social and cultural aspects of sustainability is a major flaw in the current CE framework (e.g., Corvellec et al. 2020; Schöggl et al. 2020; Korhonen et al. 2018; Geissdoerfer et al. 2017; Moreau et al. 2017; Murray et al. 2017). This lack of social and cultural aspects is particularly pressing in cities, where the legitimacy of CE development needs to be recognized by residents and other stakeholder groups to become a real game changer for urban sustainability (Nylén et al. 2021; Kębłowski et al. 2020; Williams 2019; Prendeville et al. 2018).

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Over 50% of the global population currently lives in urban areas, and the global urban population is expected to increase by 1.5 times by 2045 (World Bank 2020). Besides being the home of the majority of the global population, cities are also centers of major social and environmental problems experienced around the globe (Bartone 1991; Rees 2007; Angotti 1996; Romano and Zullo 2014; Nilsson 2006; Fistola 2011).

The purpose of this chapter is to examine whether a solidarity approach could fulfill the "social gap" in CE. The solidarity approach is represented by the concept of social and solidarity economy (SSE). Moreau et al. (2017) establish s a possible parallel between CE and solidarity economy, but a connection between solidarity and circular approaches in urban development is rarely investigated. Gutberlet et al. (2017) discusses joining SSE with CE, but they focus on the role of waste pickers in the Global South and not on urban issues specifically.

The main question we address is: **How can the ideas of SSE enrich social sustainability in urban CE?** SSE and CE are divergent approaches that come from different traditions of research and practice. However, they both argue that the current economic system should be made more sustainable. They discuss the problems and approach solutions to sustainability in differing ways. CE has so far been mostly concerned with material throughput, stocks, flows of goods, and resources and waste in the economy (Savini 2019; Geissdoerfer et al. 2017; Haas et al. 2015). In contrast, SSE encompasses a series of practices and movements that offer alternatives to the current capitalist system, and it focuses on the principles of cooperation, solidarity, and democracy (Singer 2000).

Our study is based on a literature review of the ideas of CE and SSE followed by one in-depth and two complementary cases of CE and SSE in urban policies in Latin America and Europe. The cases were selected because they illustrate how both concepts can be practiced in policymaking and urban development. The overall aim is to reflect and learn from these case examples how to better integrate social and cultural dimensions into CE in the urban context. Europe and Latin America were chosen to utilize the maximum variation of potential case examples. SSE is more established in Latin America (North and Scott Cato 2017; Saguier and Brent 2017), whereas CE is more established in Europe (Fitch-Roy et al. 2020; McDowall et al. 2017).

2. THE IDEAS OF ECONOMIES

Modern economies are complex systems that in many cases exceed fulfilling basic human needs. Simultaneously, they produce environmental and social problems, which have resulted in large numbers of people living in poverty (Hahnel 2014; Brown 2004). Currently, capitalism is the prevailing organizational theory for economies and has expanded to almost the entire planet. It has achieved impressive results in terms of productivity, efficiency, technological development, and creation of useful goods, but it has failed to decrease gender, class, and country disparities (Cárdenas et al. 2016; Foster 1992). Due to the various environmental and social problems associated with capitalism, different ideas and policy concepts have been generated for how to organize economies (e.g., Raworth 2017; Loiseau et al. 2016).

Sustainable development is the most widespread policy concept for fixing problems of modern economies (Langhelle 2017). It has enormous political clout: in 2015, the United Nations announced a new agenda for sustainable development with 17 goals (SDGs) to be met by 2030 (United Nations 2015). However, according to a report by independent scientists, no country is on track to meet all of the SDGs by 2030 (United Nations 2019; Sachs et al. 2020). Moyer and Hedden (2020) conclude that the world is not close to achieving many of these SDGs, and some countries are even at risk of achieving none of them.

In general, policy concepts are tools for change as they can address problems and suggest ways to solve them. Different concepts can have kinship if they aim to tackle similar types of problems. However, these concepts differ in how they specify and scale the problems and solutions as well as the words used to describe them. The differing articulations of problems and solutions mean that policy concepts are often contested (Béland 2019; Meadowcroft and Fiorino 2017; Kenis and Lievens 2014; Pollitt and Hupe 2011; Gallie 1956). For example, the concept of sharing economy (Weili and Khan 2020) refers to having or using common underutilized assets through non-monetary or monetary exchange. This implies decreasing the production of new assets and thus reducing the environmental impacts; however, there is evidence that the opposite can occur (Hobson 2020).

Meadowcroft and Fiorino (2017) view policy concepts as innovations that diffuse among the prominent actors and to relevant policy documents. It is more likely that conceptual innovation will achieve success in policymaking if the policy concept is not "too alien to existing discursive patterns and dominant understanding of the way 'the world works'" (Meadowcroft and Fiorino 2017, 11). A prime example is the concept of green capitalism. It states that the technologies that are harmful to the environment can be replaced, capitalist growth can continue within the planet's boundaries, and the greening of the economy will result in access to new markets and profits (Harris 2013). Green capitalism has emerged as

a proposal amidst the paradigm of green modernization (Tienhaara 2014). Drawing from the critical political economy, Brand and Wissen (2015) argue that green capitalism is the culmination of the green economy strategies.

Sullivan (2009) finds that the vocabulary of green capitalism assigns to nature the role of a service provider. Tienhaara (2014) concludes that green capitalism is not a single project but comprises multiple varieties, the common aspect of which is a belief that investing in green sectors can boost employment. Yet, there are different views regarding the acceptable level of regulation and intervention by the state (Tienhaara 2014). Thiele (2019) sees decoupling as a macro strategy of green capitalism as it focuses on technological fixes that can increase eco-efficiency and detach environmental burden from economic growth.
Next, we review two major concepts that are topical in political discussion and policymaking: CE and SSE. Before we move to empirical analysis, we will summarize key elements of green capitalism, the CE and the SSE, and analyse the differences between them.

a. CIRCULAR ECONOMY

Various actors such as non-governmental organizations (NGOs), civil servants, politicians, researchers, and think tanks have generated policy concepts, but the success of these concepts depends on their diffusion. In that sense, the Ellen MacArthur Foundation has been extremely successful with its CE concept. The idea of CE as a policy objective has spread efficiently into influential organizations, such as the European Union (Fitch-Roy et al. 2020; McDowall et al. 2017). The CE narrative revolves around the idea that environmental problems can be tackled with CE solutions and, simultaneously, that these solutions are profitable for business (Nylén 2019; Lazarevic & Valve 2017).

By its very nature, CE is an abstract concept. Multiple different CE definitions exist (Kirchherr et al. 2017), but a general objective can be recognized: it is a closed-loop economy. The CE objective starts by labelling the prevailing model as a linear economy, which functions on the basis of linear throughput: natural virgin resources are extracted, produced as goods, and discarded after consumption as waste. CE promotes various solutions for closing the loop and decreasing the amount of natural virgin resources extracted and wastes generated (Nylén et al. 2021; Geissdoerfer et al. 2017; Ghisellini et al. 2016). As such, CE is a meta concept (Meadowcroft and Fiorino 2017) that gathers these solutions together under its general objective and thus generates momentum toward change.

As CE has become topical in policymaking, it has generated a great deal of research interest as well as criticism. Among the key endorsements for CE are the new business opportunities it is believed to create. However, CE business models are not as easily profitable as the rhetoric might lead one to believe (Nylén 2019; Gregson et al 2015). Moreover, several researchers have raised the question whether various CE practices, such as “take back and

recycle" schemes, actually increase the amount of material consumed (e.g., Hobson 2020; Valenzuela and Böhm 2017; Hobson and Lynch 2016). According to Korhonen et al. (2018), if the CE discourse does not begin to emphasize the need to decrease the amount of consumption, then it is in danger of becoming more of a technological fix than an actual idea for remodeling the economy. Various scholars have also pointed out the lack of social dimension in CE thinking and policies (e.g., Corvellec ym. 2020; Fratini et al. 2019; Geissdoerfer et al. 2017; Moreau et al. 2017).

Despite these criticisms, proponents still believe that CE can transform economies. However, the changes it proposes are still very much in development, and criticism can affect the pathways that CE policymaking takes. The urban context is an important example. Research on circular cities shows that CE can be fitted to city-level policies, but technological and economical aspects dominate its implementation. This a serious drawback as a multitude of lifestyles, livelihoods, and social practices exist in cities (Nylén et al. 2021; Kębłowski et al. 2020; Williams 2019; Prendeville ym. 2018). Likewise, Fratini et al. (2019) highlight that attention is rarely given to the role of citizens, authorities, and institutions or to social identities in CE studies. Further, they note that few studies have addressed the relationships between CE and the institutional arrangements underpinning urban transformations. Finally, Moreau et al. (2017) argue that noncompetitive and non-for-profit initiatives and enterprises have not been fully explored in the CE literature.

b. SOCIAL SOLIDARITY ECONOMY

The SSE concept was originally not introduced by a single influential NGO or think tank. It derives from civic movements and networks; volunteer action; and ideas of solidarity, cooperativism, and democracy in order to fight poverty, inequality, and unsustainable forms of production and consumption, among other socioeconomic issues (Moreau et al. 2017; Singer 2000; Cruz 2007). As such, SSE has diverse roots in the concepts of social economy and solidarity economy. The latter began in France and South America in the early 1980s, while the concept of the social economy dates back to discussions of cooperatives or mutual associations from the mid-nineteenth century onwards. The combination of social economy and solidarity economy into SSE took place at the turn of the millennium, as did the founding of the Intercontinental Network for the Promotion of the Social Solidarity Economy (Poirier 2014). As such, Moreau et al. (2017) view SSE as both a practice and a social movement.

As a policy concept, SSE is diverse and somewhat ambivalent. In its perhaps most revolutionary form originating from the solidarity economy, SSE would not aim to achieve cooperativism under the capitalist system but rather to offer a set of economic initiatives of associative character based on an ethics of egalitarianism and diversity. It would be based not only in different structures and institutions but also different ethics, morality, and values

(Dacheux and Goujon 2011; Calvo and Morales 2017). In a similar vein, Singer (2000) argues that the solidarity economy should be conceptualized as a mode of production based on the principles of collective or associated ownership of capital and the right to individual freedom. These principles would be applied by a single class of workers who share capital in cooperatives or economic societies, which would result in solidarity and equality. For Singer (2000), reproduction in SSE would be carried out by state mechanisms for income redistribution.

In the literature, SSE authors generally manifest an anti-capitalistic line of thought in different ways. Razeto (1999) understands the solidarity economy as a transforming force inside the mainstream system. For Laville (2009), it comprises a hybrid of volunteer action, market activities by professionals, and activities financed by state subsidies. In that, the diversity of SSE goes beyond orienting its position to capitalism and the transformation of the capitalist economic system. According to Saguier and Brent (2017), SSE in Latin America is a paradigm that values work more than capital. Morandeira-Arca et al. (2021) point out that the vocabulary of SSE also includes the appreciation of a plural economy, including the principles of exchange, redistribution, and non-monetary reciprocity. Furthermore, for Miller (2010), the solidarity economy is an open movement that is always subject to innovation and constant development.

All in all, SSE is a broad and diverse concept that entails a plethora of ideas, aims, and practices that have emerged from the grassroot level of action. As the concept of SSE has become more popular, it has gained attention at the policy level. However, this has not occurred without complications. For example, Saguier and Brent (2017) analyze how the SSE agenda has been transmitted to the Union of South American Nations and Southern Common Market. The adoption of SSE concepts by regional policy has led to a narrow conception of SSE focused primarily on employment. SSE's critiques of economic growth, consumerism, materialism, and extractivism, however, have been neglected. SSE has also been pointed in the literature for its promising potential in solving issues of poverty and social exclusion (Lee 2019).

Even though SSE seems like a project of civilization or a human-first approach to a just and socially sustainable economy, its environmental aspects have gained attention in both SSE social movements and policymaking. According to Miller (2010), in a solidarity economy, there is a moral responsibility regarding basic raw materials and the natural processes that sustain life on the planet. One example of the environmental dimension in SSE comes from waste pickers in Brazil, who organize their activities through solidarity and cooperativism. Sabedot and Neto (2016), for example, found that waste pickers recycled 2.3 to 5.7 times more than the formal waste collection of the municipality of Esteio.

KEY ELEMENTS OF GREEN CAPITALISM, CE, AND SSE

Table 1 condenses and summarizes the key elements of the different ideas of CE, green capitalism, and SSE.

Table 1. Key elements of green capitalism, CE, and SSE

Aspects	Green Capitalism	Circular Economy	Social Solidarity Economy
Worldview	Free market (neoliberal economy), decoupling	Green growth, dematerialization	Degrowth, solidarity and reciprocity
Role of citizens	Consumers	Consumers, producers, service providers, owners	Citizen-led worker movements
Problems to be solved	Loss-making policies, market failures, environmentally damaging technologies, growth that does not respect planet's boundaries (Harris 2013)	Linear material and energy flows; environmental pressures that should be decoupled from economic growth (Ghisellini et al. 2016)	Profit over people, loss of ecological diversity, climate change, unemployment (Singer 2000)
Locus for action and attitude toward globalization	Led by national and international institutions (World Bank, IMF, etc.), tendency toward technologically mediated globalization	Micro level: customers, eco-design, cleaner production; meso level: industry symbiosis; macro level: cities; national level: policy (Ghisellini et al. 2016)	Self-managed entrepreneurs and local governments, against globalized capitalism or transforming capitalism
Policy instruments	Market-based mechanisms (e.g., carbon tax), carbon trading	Promotion of eco-industrial symbiosis, taxation of polluting practices, fiscal incentives, public procurement rules, innovation vouchers	Distribution, social/community currency, shared decision making, collective ownership of land, community-based consumption, micro-crediting, public banks, decentralization of the governance of

			environmental goods

The table adapted from Quiroz-Niño and Murga-Menoyo (2017) and Mochizuki and Yarime (2016).

3. EMPIRICAL CASES

a. Research design

To analyze where CE could most productively benefit from the principles of SSE in urban development settings, we applied a case study strategy (Eisenhardt 1989). Taking inspiration from the concept of windows of opportunity (Kingdon 1995), we predicted that collaborative actors working on establishing SSE or CE can utilize multiple opportunity streams for social sustainability depending on strategic vision (problem stream), implementation practices (solution stream), and the arrangements of urban governance (political stream). We thus selected three cases to explore general conditions for social sustainability (Table 2).

Our main research case is Hiedanranta, which is a district-scale urban living lab and urban development project of the Finnish city of Tampere. Hiedanranta is a unique case of circular city development. During the first years of the process, the strong citizen activity in bottom-up demonstrations and experiments (Turku et al. 2021) resulted in spontaneous manifestations of social sustainability similar to SSE. To gain a more comprehensive view of potentially productive links between CE and SSE in urban development, we explored suitable SSE cases in Portuguese- and Spanish-speaking regions where SSE principles are adopted (perhaps most widely in the world) and selected two to complement our research setting. The Strategy for Resilience of Montevideo in Uruguay is exemplary of a resilience-centered strategy anchored in both solidarity and circularity aspects and offering a concrete example of how considering both economic ideas could look in policymaking. The Strategy for Social and Solidarity Economy of Madrid in Spain was chosen due to the centrality of solidarity concepts in steering the municipality's economic development. The strong reliance on social discourses, such as those surrounding inequality and employment, illustrates how CE could be implemented as a social process.

For the data, we examined the following policy documents using content analysis (Cresswell 2013): *Hiedanranta Structure Plan 2017*, *The City of Madrid's SSE Strategy 2018–2025*, *Strategy for Resilience in Montevideo 2018*, and *Two Years of Strategy of Resilience in Montevideo*, with occasional analysis of supporting documents. To analyze actions in the Hiedanranta urban living lab, we utilized results from previous case studies based on

participatory action research (e.g., Alatalo et al. 2017, Leino & Puumala 2020, Särkilahti et al. 2021, Turku et al. 2021) and several reports published by the city of Tampere.

Table 2. Case description

Aspects	**Tampere strategy for CE**	**Montevideo strategy for resilience**	**Madrid strategy for SSE**
Scale	City district	City	City
Vision	Building a new city district based on CE principles	Using resilience framework for promoting SSE and CE	Making SSE comprehensive and growing
Implementation	Urban living lab for multi-actor co-production of CE solutions	Focus on territorial ordering and territory regulation as well as inclusive SSE principles	Economic development, jobs, CE, cooperatives; participation and open forums
Mode of urban governance	Platform governance	Top-down governance	Hybrid or bottom-linked governance
Data	Strategy document, case studies	Strategy document	Strategy document

b. Case analysis

Hiedanranta Urban Living Lab in Tampere

Tampere in Finland has 235,000 inhabitants and is the fastest growing city in the country. It hosts one of the biggest urban experiments, the Hiedanranta project, which uses CE and smart city development as a guiding principle for urban regeneration. Hiedanranta is a former industrial area that the city is developing into a new urban district that will have 25,000 residents and 10,000 workplaces.

The city began the project by opening the area to city dwellers, civic groups, businesses, and university researchers for CE experimentation. In three years (2016–19), Hiedanranta developed into an indicative example of platform governance with an active urban living lab hosting approximately 40 experiments and research and development projects. During this period, the city primarily wanted people to create, experiment, and pilot new CE-related ideas for the new urban district and only loosely steered the activities in Hiedanranta at this stage. Rather, the city was an enabler and partner in co-production (Särkilahti et al. 2021).

Consequently, innovative citizen activities (including hundreds of people in total) took place during that period and resulted in spontaneous development of activities focused on CE in addition to features of social sustainability identified in the SSE literature and movements. This can be seen, for instance, in the entrepreneurial spirit that dominates among cultural actors, which represent the largest citizen group operating out of the old factory buildings in Hiedanranta. Artisans, artists, and entrepreneurs have created a community of more than twenty people, and also some other cultural actors have intentionally found jobs via a hobby started in Hiedanranta. The cultural actors have steered their livelihoods in ways that align with the social economy literature. They (1) seek alternatives to prevalent working life, production, and consumption; (2) emphasize community welfare, cultural values, low-threshold participatory possibilities, community, and collaboration; (3) combine business and social goals in their activities to support the values of a community economy; (4) have a shared feeling of cooperation and personal connections fostered through employment; and (5) draw inspiration from CE by using waste material in their products or providing reparation services (Turku et al. 2021). We read these findings as hidden features of SSE, suggesting that in some circumstances, the ideas of CE and SSE can co-develop and cross-fertilize each other in urban development in ways that support social sustainability.

Considering the evolution of the Hiedanranta urban living lab, cultural actors and other civic groups have not created an isolated niche in the area. Instead, functional links supporting social sustainability have developed between several multi-actor groups. For instance, citizens, companies, and university researchers have participated in many co-creation and co-production projects carried out by the city. This interaction partly contradicts the

common understanding that social innovations and technical innovations are distinct activities in urban development. However, although many citizens, cultural actors, and other civic groups have participated in shared projects, they have been uncertain about the collective goals needed to ensure community development during the district's development. They have criticized big development projects that emphasized technology and business. Indeed, the current citizen activities are at risk of ending when construction begins in the area to turn it into a new residential district.

Strategy for Resilience in Montevideo

Montevideo is a port city and the capital of Uruguay. Its estimated population of 1.4 million people corresponds to half of the country's total population. The *Strategy for Resilience*, published in 2018, aims to respond to the growing urbanization of the city, which continues despite the fact that population growth has stabilized. The strategy is mobilized and financed by the Rockefeller Foundation as part of the 100 Resilient Cities network and led by the Department of Urban Planning, with other municipal bodies also involved.

The strategy deals with the following topics: expansion of the urban area and territorial development model; social, economic, and territorial inequality; mobility; transportation; environmental sustainability; waste management; and climate change and climate risk management for coastal territories. When it comes to the economic pillars of the strategy, the goal is to transition Uruguay's economy toward a circular, social, and solidarity economy.

With respect to the economic goals, Montevideo's strategy for resilience does not point to mechanisms commonly associated with SSE (e.g., forms of solidarity exchange and ownership, progressive/distributive taxations, shared ownership, and grassroots' accountability). Thus, the strategies and actions employed by Montevideo's plan only provide a limited picture of SSE objectives for advancing equality and promoting decent employment. Examples of goals related to solidarity include inclusion and equality through the cultural sector as well as reversing spatial segregation in Montevideo. In this sense, the strategy's focus on resilience might be one of the explanatory reasons behind the dissolution of SSE. The strategy views SSE and CE as better equipped to deal with the global challenges that will generate uncertainty in the future. Furthermore, the strategy aims at solving inequality to enable citizens to become key actors in the identification of risks and, therefore, enablers of resilience.

The concept of resilience contains inherent plasticity, which allows multiple interpretations of resilience-building to be adopted, though these do not necessarily follow the radicalism of SSE. Urban resilience, for example, has been characterized as intangible and fragmented (Wardekker et al. 2020). Environmental anthropologists also argue that a focus on resilience

avoids an examination of the socio-economic structures behind inequality (Brightman and Lewis 2017). Similarly, Wardekker et al. (2020) argues that practitioners may connect different stakeholders and projects under the umbrella of resilience without necessarily offering interventions that would improve the resilience of the city.

As for the city's specific policy on CE, it appears to be following an approach based on regulation and prohibition. When it comes to the relation of private companies and the public sector, for example, the strategy transfers the cost of waste to construction companies in order to force them to consider creative approaches to dealing with waste. However, Montevideo's strategy fails to provide a policy framework by which solidarity and circularity are considered in a complementary manner. The strategy for circularity, for example, addresses the financing and encouragement of new businesses without citing or taking into consideration solidarity tools and cooperative-based enterprises. Policy instruments of Montevideo's strategy include, among others, taxation of polluting practices, recovery of abandoned areas, public mobility, and construction of new paths for transportation.

SSE in Madrid

Madrid, the capital of Spain, has established the *Municipal Strategy for Social and Solidarity Economy of the City of Madrid* covering the period of 2018–2025. The locus of the strategy is local districts and neighborhoods, and the strategy is led by the Office for Economic Development. The strategy pursues four objectives: (1) to establish lines of action to achieve SSE centrality in the economic planning of the city, 2) to approximate the SSE economic reality to Madrid's citizens, 3) to territorialize SSE, and 4) to diversify and strengthen the productive fabric of SSE in the city.

The aim of the strategy is to implement SSE in all areas and policies of the municipality, with a special focus on economic development and employment initiatives. Nevertheless, the proposed solutions primarily address SSE as a separate initiative, for example, by determining the creation and curation of spaces dedicated exclusively to SSE. It is unclear, however, how these initiatives would contribute to SSE being integrated into existing businesses and public projects. The strategy has ambitious goals: to create resilience through co-creation, equality, solidarity, and CE while boosting innovation. The bottom-linked governance reflected in the strategy is probably suitable for the urban regime change occurring in Madrid (see Medina-García et al. 2021).

Madrid's strategy brings up a relevant concept concerning the idea of growth: the growth of SSE should not be confused with economic growth (Esber Elias 2019). Whereas in green capitalism growth is associated with the generation of wealth, Madrid's strategy refers to the growth of SSE as a transformative tool capable of reaching traditional businesses and increasing the number of solidarity initiatives in the city. In this, the growth of the solidarity

economy would be measured by the amount of solidarity enterprises and the increase in decent employment rather than by urban competitiveness or economic growth, which are commonly used as urban development performance indicators.

In Madrid, SSE is seen as a tool to promote inclusion and as a way to build an alternative model of the economy to the current system. In Madrid's SSE, a "human-first" type of economy, democratic and horizontal models for management, and social initiatives and cooperatives are preferred over the "businesses as usual." When it comes to the role of citizens, Madrid's strategy envisions an open forum for SSE deliberation and participation and views citizens as workers, by which a transformation in citizenship can happen through work. Policy instruments include financing SSE initiatives, dissemination through formal education, inclusion of vulnerable people who have difficulties entering the formal job market, research and development, clustering, and territorial centers for SSE innovation.

4. BROADENING THE OPPORTUNITIES FOR SOCIAL SUSTAINABILITY

Our theoretical and empirical findings show, first, that central principles of social sustainability are inherent in SSE, but the realization of these principles, for instance in Montevideo and Madrid, depends on several factors. Second, while previous research indicates a severe lack of social sustainability in CE, the Hiedanranta case provides some evidence to the contrary. The manifestations of social sustainability in Hiedanranta, bearing substantial similarities with those of SSE, required favorable circumstances to emerge.

Consequently, both in SSE and CE, a successful realization of the principles of social sustainability depends crucially on favorable circumstances resulting from convergence in opportunity streams (strategic vision, implementation practices, and urban governance) and skillful promoters who utilize these circumstances. This is how an opportunity window for social sustainability opens (see Kingdon 1995).

Table 3 summarizes the ideas of social sustainability that we found both in the SSE literature and the analyzed cases. The table also shows empirical examples of the SSE ideas (including the ones that have emerged in Hiedanranta) that could contribute to the implementation of CE in urban contexts and be used for advancing urban sustainability. We found that SSE can contribute to CE and urban sustainability in major aspects, such as stakeholder interaction, barriers to implementation, employment, democracy, business models, cultural heritage, education, and resilience.

Table 3. Ideas of SSE contributing to social sustainability in CE

SSE Ideas	Case	Contribution of SSE to CE and Urban Sustainability
Economy as a social process	Madrid and Montevideo: SSE encourages territorial equality, decent employment, gender equality, and inclusiveness. Hiedanranta: Cultural actors exercise practices of social economy and value jobs.	SSE ideas and practices can facilitate the overcoming of the social barriers of CE implementation, such as political disputes on distribution or unequal access to resources.
Role of citizenship & community participation	Madrid: An open forum for SSE is provided. Hiedanranta: The whole urban living lab was opened for civic experimentation and co-production between the city, citizens, businesses, and researchers.	SSE may offer ideas on how to increase stakeholder interaction to aid CE implementation (Winans and Deng 2017). SSE can bring a needed focus on communities (Lee 2019).
Instruments to promote inclusion	Madrid: SSE includes vulnerable populations who cannot access the formal job market. Hiedanranta: Single bottom-up initiatives are received from anyone.	SSE and CE can provide instruments for social inclusion and thereby promote social sustainability.
Social innovation	Madrid and Montevideo: Innovative bottom-up initiatives are considered in SSE. Hiedanranta: Cultural actors and other groups create a community supporting social innovations related to their entrepreneurial ideas, sometimes working with other actor groups operating in the area.	Social innovation and experiments are often key to successful CE implementation (Bulkeley et al. 2016). Art contributes to the imagination of sustainable futures.
Alternative business models	Madrid: SSE contributes to the realization of cooperative business models. Hiedanranta: Social entrepreneurship among cultural actors is developed.	SSE can inform and help designing much needed new business models which contribute to sustainability transitions (Geissdoerfer et al. 2018)
Role of cultural goods	Montevideo: Preservation of culturally relevant sites strengthens resilience. Hiedanranta: Activities of cultural actors parallel socio-technical urban development but are not necessarily balanced with it in the long term. Artisans want to design CE products.	SSE has promoted cultural meaningfulness of areas, buildings and practices. Integration of these aspects would enhance the sociocultural dimensions of the CE.
Education	Madrid: Elements of SSE are incorporated into the formal basic and secondary education in Madrid.	Education is needed to advance CE models (Andrews 2015; Kirchherr and Piscicelli 2019).
Resilience and preparedness for risks	Montevideo: Social resilience is promoted; citizens should be aware and perceptive of risks.	SSE can enrich CE to integrate resilience aspects to become 'future proof' (Aguiñaga et al. 2016).

Source: compiled by Authors.

In CE, the social dimension can be an important factor in determining sustainability in the long term (Moreau et al. 2017; Padilla-Rivera et al. 2020). Drawing from our findings, we propose that the ideas of SSE can enrich social sustainability in CE in cities in several ways. However, this can take place only in suitable circumstances defined by a strategic vision, implementation practices, and urban governance. Regarding this challenge, future research would benefit from new perspectives and experimental orientation to understand what these suitable circumstances entail. For instance, the relational approach to urban governance (e.g., Bartels 2020) provides possibilities to think differently and analyze whether SSE and CE create circumstances by themselves and thereby entail novel opportunity streams for social sustainability.

5. CONCLUSION

Whereas CE has strong appeal for the economic and waste management dimension of sustainability, the lack of consensus over the social dimension and its importance in CE constitutes a need to further untangle how and why sustainable cities should be both circular and solidary. This research identified a set of aspects based on the principles of SSE and studied three cases that can contribute to the social dimension of CE. Our exploratory study demonstrates that addressing the SSE principles in CE has the potential to enrich social sustainability in circular cities. In this way, SSE can contribute to addressing barriers to CE implementation, stakeholder interaction, social innovation, social inclusion, business models in sustainability transitions, cultural heritage, education, and resilience.

The results were promising. Firstly, the case of Hiedanranta showed that in suitable circumstances, spontaneous trajectories intrinsic to urban socio-cultural development can emerge and manifest "solidarity aspects" in conjunction with CE, even in an unplanned manner. At the same time, the case of Montevideo illustrated that integrating SSE into policymaking and associating it with other plastic concepts, such as resilience, can water down the strengths of SSE's social aspects. We also revealed that using SSE to enrich CE creates some practical and epistemological traps. The boundaries between SSE and CE are sensitive due to their ideological differences, and we are only beginning to understand the potential spaces where SSE and CE can interact and overlap in relevant ways for further research. The presented narratives regarding alternative economies come from different scholarly and practice traditions as well as diverse areas of the world. While SSE is associated with a critique of capitalism, CE seems to approximate green capitalism paradigms, which may present non-compatible worldviews.

In this regard, our exploratory findings are not of a universal nature. Rather, they refer to the contexts of these three cities, which bring interesting dimensions that can be further

explored by scholarly research in the future. For example, which aspects and features of these meta-concepts are emphasized in their implementation to urban policies? What type of targets have been placed on the SSE and the CE informed policies, and how are these policies assessed and measured? When SSE and CE are jointly implemented on regional and national levels, how is the diversity of ideas which these concepts entail being accommodated? And, in the same context, how do actors select which aspects of SSE will go through 'the final cut' of implementation, like in Saguier and Brent's (2017) case, where SSE was lessened as employment objectives?

Furthermore, for future research, more primary data should be collected from circular and solidarity cities in order to better inform the contradictions and complementarities of the two approaches. In conclusion, case studies that focus on specific cultural and social contexts are needed to achieve a general understanding of the synergy between circularity and solidarity.

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