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"Nobody" matters in circular landscapes

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ABSTRACT
This paper aims to apply an intersectional environmentalist lens to the circular economy (CE) transition in Flanders. CE discourse often takes a deterritorialised approach, that is, a focus on innovation and growth. This approach tends to neglect local knowledge and background skills that can inhabit and work with landscapes in balanced ways to enable a fully circular society. This knowledge is partly embodied by "nobodied" actors. After introducing relevant terminology, this article draws upon a collaborative autoethnography which integrates autobiographies of authors' experiences of circularity in projects with "nobodied" CE actors, and ethnographic notes on the Flemish context in which the CE discourse developed. The reflections unearth how a lack of an intersectional environmentalist lens in the CE rhetoric "nobodies" informal CE actors and practices. We show how they do not matter in a circular economy in a deterritorialised approach, but how they matter in a circular landscape view.

1. Introduction

In response to ecological and economic challenges, the concept of circular economy (CE) has recently been spearheaded by industries, political institutions, and other stakeholders. CE has many definitions and interpretations, but we see it as an abstract conceptual vision of a society where materials are maintained, their value is preserved, and where regenerative design is prioritised for as long as possible (Kirchherr, Reike, and Hekkert 2017; Bauwens, Hekkert, and Kirchherr 2020). CE literature focuses mostly on technical and economic aspects, and research on the social dimension of CE is rather underexamined (Hobson 2016; Kirchherr, Reike, and Hekkert 2017; Murray, Skene, and Haynes 2017; Friant, Vermeulen, and Salomone 2020; Schöggl, Stumpf, and Baumgartner 2020; Vanhuyse et al. 2021). There is a large body of environmental justice research, including feminist critiques of both the CE and industrial ecology approaches, but they are overlooked as they focus on certain practices that are not defined as circular. Noteworthy, there is a body of research on the social impact on communities active in the informal CE; mostly informal waste recyclers in the Global South (e.g. *carteros* in Buenos Aires (Gutberlet et al. 2017) or Brazil (de Oliveira 2021)). These studies highlight the "nobodisation" of these roles. For example, CE marketing strategies mostly emphasise industrial and official CE practices and processes, rendering informal practices and processes invisible (Kębłowski, Lambert, and Bassens 2020). In Brussels, for instance, CE communication and policy focus mostly on the practices of white, highly educated entrepreneurs,

while informal CE activities, such as the second-hand car market managed by a predominantly African migration community, are often "forgotten" (Kębłowski, Lambert, and Bassens 2020). Additionally, citizens who do not have the favoured lifestyles (e.g. spending money on eco-efficient technologies) are downgraded in transition politics to "consumers" (Kębłowski, Lambert, and Bassens 2020; Kenis, Bono, and Mathijs 2016). While less explicit in the mention of CE, there is abundant research on informal recycling economies in countries like Mexico, Chile, and India (e.g. Demaria and Schindler 2016; Guibrunet, Sanzana Calvet, and Castán Broto 2017; Guibrunet 2019) that could be labelled as studies which are positioned within the local environment of CE research. While CE involves more than waste management, many local and national governments use this approach (e.g. Dagilienė, Varaniūtė, and Bruneckienė 2021). There exists another problem with the (lack of) user perspective in circular solutions: they are often made for a certain niche market of citizens who have a certain financial security (Camacho-Otero, Boks, and Pettersen 2018). Notwithstanding, a whole body of research (political ecology, environmental justice) asserts that rather than individual choices and consumption, the socio-spatial contexts in which they take place and the histories, materialities, and skills which make a practice or idea circular, are more important (Hobson 2020).

In this study, we seek to address this by taking an intersectional environmentalist (IE) lens. As part of a holistic approach, our interest lies firstly in the recognition of the roles of non-apparent but important actors in CE and why they are (not) recognised in the circularity transitions in different places, and then in the social impact for various categories proposed by Vanhuyse et al. (2021). We are interested in accounting for the currently "nobodied" or "unrecognised" yet crucial actors in CE and arguing why a territorial approach can contribute to recognising them. We use an auto-ethnographic approach for this study that combines an autobiography, drawing from our experiences in place-based design research, and an ethnography of the context in which these lived experiences and observations take place (Ellis, Adams, and Bochner 2011). It is also collaborative in that it is the cooperation between two researchers and implies an even deeper reflection because of the dialogues (Sellberg et al. 2021). This paper illustrates the barriers, dilemmas, and difficulties that we encountered in conceptualising social CE in various projects and events in Flanders.

This paper investigates environmental justice literature through the entry point of "recognition". Many actors are, in fact, performing important CE roles. However, they are either unacknowledged for these roles or are unaware of the role(s) they play, resulting in a lack of social impact studies in circular city and regions design: this "nobodied" group largely misses out on financing and economic opportunities tied to CE transition. To recognise them in the specific context of Flanders, we apply the social impact framework of Vanhuyse et al. (2021) to code different observations according to social impact. This manuscript does not aim to provide solutions or frameworks to address this but rather contributes with a demonstration of an intersectional environmentalist lens solely toward CE research (e.g. Berry et al. 2021) that can inform a more just design of circular cities and regions.

2. Considerations

2.1. From being "nobodied" to recognition in CE transitions

This paper borrows the term "nobodies" from James Rebanks' biographical work, which depicts the silencing of people who are part of and essential to a place/landscape. In his observation of old, almost forgotten sustainable practices, Rebanks challenges the *dead, rich, white man*'s view of landscapes in his cultural historical study of the mountainous landscape of the Lake District, United Kingdom, where he has been living and working (Rebanks 2015). He describes how the preservation of cultural and natural heritage can provide essential goods, such as food, within the limits of a place and can support the role of the people who facilitate the provision of resources and goods and

safeguard the knowledge about this place. He calls for a small-scale/local economy in the name of sustainability and the preservation or reintegration of traditional, nonindustrial, and other local knowledge, where there is time to foster a sense of belonging in a place and within a group of people.

The same is valid for CE: there are "nobodies" that play an invisible role within the core of CE (reuse, landscape restoration, etc.) because the nature of their work is small-scale and they operate in a landscape (city, region) where more technocentric discourse dominates the funding and marketing of CE transitions. In her ecofeminist critiques of environmental ethics, Plumwood (2002) explained this through the concepts of mastering and backgrounding. In certain contexts, some skills and practices are seen as more valorised than others, even in sustainability debates, which have societal consequences. We argue that this lack of recognition of the backgrounded work makes many actors "nobodised" in environmental and circularity transitions.

Examples of such small-scale initiatives in Flanders are as follows. Categories of such people are: artists or other eco-communicators who offer a critical voice and alternative stories, not only by storytelling but also by engaging; organisations that protect regional landscapes, offer education, and preserve ideas around food forestry (Blog September 2020); plumbers, infrastructure maintenance workers, cleaners, etc., who are responsible for the maintenance of materials, which is important for slowing technological material flows (Blog September 2019); organised initiatives that connect people with needs with those possessing the skills, such as repair hubs (e.g. Maakbar Leuven); and healers, who take care of the restorative and regenerative tasks; and the teams of the Flemish waste agency which are responsible for the cleaning of the brownfields, etc. In addition to their role as public actors, these people often have roles outside "office hours", performing more for the CE transition than monetarily valued. Additionally, there are more groups and roles to be mentioned (Reike, Vermeulen, and Witjes 2018), such as those that contribute to CE by refusing, reducing, and reselling/reusing. Although there is no added value for the economy, the invisible faces behind these practices should not be considered "nobodies" in the CE.

In contrast to Rebanks' use of "nobodies" as a noun, this paper adopts the term "nobodied" as an adjective, specifying a specific group of CE actors that is being "nobodied" or unaccounted for.

This classification is *forced* upon certain people because dominating CE framing focuses on technology and innovation. They are mostly not strategy thinkers or policymakers whose names are recorded in grant applications, reports, academic publications, policy briefs, scenarios, and plans. They mostly operate "hidden" in the shadow of these people. However, as Klein (2020) described, we are all part of a web of people (and other living beings and energy forms), and a just CE would incorporate this web view. This does not mean that all actors play the same role. For example, public actors could direct and regulate (Uusikartano, Väyrynen, and Aarikka-Stenroos 2020), while farmers, shepherds, and cleaners, care for environments as first-hand field experts and even possess knowledge of how environmental crises may be avoided. However, these different roles raise questions on how inclusive the financial and other policy instruments created by policymakers really are. Environmental justice research already provided evidence for the risk of information gaps between policy and local individuals (e.g. Blake 1999). To venture a step further, if the aim is to work towards a more "just CE", would that not entail also breaking free of the types of categorisations that allude to "farmers, shepherds and cleaners taking the role of caring" or break these dualisms criticised by scholars like Plumwood? Would it not also mean that they are somehow involved in the regulatory process and that we should not forget that public actors also have other roles?

In addition, being "nobodied" (as a verb expressing an action) draws attention to policy and other conscious and unconscious mechanisms excluding certain CE actors. Being "nobodied" is not limited to missing out on participation and a sense of belonging. "Nobodied" CE actors are also often more exposed to the same risks that CE claims to reduce because of resource extraction. Accounts in the environmental justice literature describe how poorer and ethnic minority communities face higher

environmental burdens as they lack the political power to resist such burdens (e.g. Mohai, Pellow, and Roberts 2009).

As Julia Watson writes "While 'modern' societies were trying to conquer Nature in the name of progress, these indigenous cultures were working with it" (Watson 2019). Watson focuses on indigenous perspectives, but this idea also recalls Escobar's notion of "pluriverse" as interlinked worlds operating under unequal power conditions (Escobar 2020). Friant, Vermeulen, and Salomone (2020) positioned not only indigenous ideas, but also farmers, shepherds, local communities, and neo-indigenous communities, which also underwent, and some still undergo, colonial processes. As global South countries still operate on a global scale under the rules of external debt, most of these nations are being pushed out from their CE practices and forced into the more "industrial" version of CE (which is only reasonable from a dominant, colonial perspective).

2.2. Intersectionality recognising the "nobodied"

The lens that we take envelops a large body of research on environmental justice from a feminist perspective and includes intersectional perspectives in urban planning and coproduction, ecofeminist critiques, and (feminist) political ecology. Therefore, we start from the recent international movement that educated us in 2020 and even challenged us to revisit our own ideas about design for circularity in Flanders, to ground different ideas of justice and different "classic works" that paved the road for this consciousness and need for an IE lens in practice and design. We knew about some of these classic works before we encountered the movement, but we use the term as a hook for recognising what has been done before. The risk of this more narrative approach to the literature is that we reinforce the invisible work by non-white (women) scholars of the past decades on environmental justice and the role of community and interdependence (e.g. hooks 2000). On the other hand, through this approach, we hope to amplify current activist work.

The term intersectional environmentalist was coined by Leah Thomas in May 2020, inspired by Crenshaw's pioneering work on intersectionality (1989), ecofeminist studies and actions, and ecowomanist and environmental justice efforts, following "social and green movements – namely, Black Lives Matter and the youth climate strikes in 2019 and 2020" (Thomas 2020b).

One critical characteristic of "nobodied" CE actors is their intersectionality of one or more identities that are systematically muted, suppressed, or eliminated in mainstream CE policy and practice. These identities can refer to gender, race, historical connection to the land (indigenous or not), migration status, and disabilities, among others. Therefore, the IE lens could make their roles in CE more visible.

IE is also interlinked with environmental justice, meaning that all people are entitled to equal protection by environmental laws and regulation, housing laws, land use, employment, and health (Bullard and Johnson 2000). In the USA, evidence shows that people of colour and low-income communities are more likely to live closer to hazardous waste sites and polluting industrial sites (Hamilton and Bullard 1991). The focus was on the lack of environmental measures and the people who were exposed to the risks.

In the past decade, local and national governments have developed and implemented "greening" strategies for industries, cities, and other places. Brownfields were cleaned and replaced by trendy real estate projects with parks and playgrounds (Anguelovski 2016). However, these land-use changes have led to new justice challenges, such as the displacement of residents (e.g. Curran and Hamilton 2012; Wolch, Byrne, and Newell 2014). On a global level, environmental injustice in the Global South is largely caused by consumption in Europe, with industries relocating polluting economic activities to areas in the Global South and offsetting CO2 emissions. The same reasoning applies to waste disposal, such as boat dismantling in Asia, e-waste processing in Africa, plastic recycling in Turkey and Malaysia, and for those areas with less stringent environmental legislation and thus more exposure of local people to environmental risks. Another field that addresses injustice in natural resources is political ecology (PE), which critically studies the reasons (and especially

power structures driving) consumption patterns of materials and other resources. Further, one sub-school is a feminist political ecology that unravels why women, or women with specific colour, class … , are still at the centre of struggles around resources (Rocheleau, Thomas-Slayter, and Wangari 2013), and some PE scholars use ecofeminist lenses and conduct intersectional analyses of colonial relationships and gender (e.g. Méndez 2018).

Other streams that are less mentioned include ecopsychology and deep ecology, which refer to humans as part of nature and call to unmute the stories of non-human beings. In their definition of IE, Thomas and others not only advocate for justice to all people, but also the protection of the planet, referring to the more-than-human-world.

The aforementioned schools, with ecopsychology and deep ecology on the border, are rooted in Western thinking; however, they also exist as traditional ecological knowledge (TEK), which can be defined as "a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment" (Berkes, Colding, and Folke 2000).

IE addresses exclusion, and even erasure of indigenous land caretaking practices which are "forgotten" by "centuries of settler-colonialism and the absence of Native peoples in discussions about wildfires, caretaking, and climate change" (Hueston 2020). Previous research by ecofeminists or feminist political ecologists has often explored activism around indigenous knowledge and how their perspectives and values challenge dominating worldviews (e.g. Méndez 2018); evidently, there are multiple roots originating in different yet overlapping knowledge streams leading to present IE thinking. Undoubtedly, the previous section does not cover all important academic literature/activist movements that steer contemporary IE thinking. On the other hand, scholars have used intersectional lenses in environmentalist matters (e.g. Agyeman, Bullard, and Evans 2002; Kaijser and Kronsell 2014), but they might not have launched it at the right juncture to create a movement. Recently, industrial ecology scholars, one of the traditional CE schools (Ghisellini, Cialani, and Ulgiati 2016), started to acknowledge the need to integrate intersectionality to better understand and assess the environmental impacts of industrial processes on diverse families (Khalikova, Jin, and Chopra 2021).

While studying all these ideas, we acknowledge the need for a holistic framework to understand the social impact for various users of a place, such as a city, neighbourhood, or territory. Recently, Vanhuyse et al. (2021) conducted a review on social impacts in circular cities and identified only 14 papers; they used 8 arenas which are used in international social impact assessments, partly to identify where more evidence is needed (namely culture, health, and fears and aspirations). These arenas are (1) way of living, (2) culture, (3) community, (4) political systems, (5) environment, (6) health and wellbeing, (7) personal and property rights, and (8) fears and aspirations. We will use these categories to present observations in the lived experiences of circularity by ourselves and others we worked with in the Flemish CE context.

2.3. Circular landscapes

One dimension disadvantaging "the nobodied" in CE transition is the dominating deterritorialised CE approach. CE discourse often takes a deterritorialised approach, which tends to neglect traditional/local knowledge on how people can inhabit and work with landscapes in balanced ways.

This knowledge is partly embodied by "nobodied" actors caring for these landscapes, and their materialities and temporalities. To understand the requirements of a strategic sustainable management of circular landscapes, studies must understand the role of these "nobodied" actors in the restoration, regeneration, and maintenance of these landscapes. As aforementioned, different stakeholders, including local governments, take a waste management perspective (Dagilienė, Varaniūtė, and Bruneckienė 2021) or a sector-based approach on CE, without considering the specific

context. A territorial approach means often reterritorialising spaces, after a phase of deterritorialisation.

Urban planner Magnaghi finds the cause for deterritorialisation in the aftermath of Fordism and mass-production when:

> the territory, gradually "liberated" also through technological developments, was represented and used as a purely technical support for economic activities and functions, which were localised according to an entirely economic and technological rationale, increasingly independent of relations with place and environmental, cultural and identifying features. (Magnaghi 2005)

In such de-territorialised approaches, local knowledge has little value, therefore "nobodying" various locals. Sassen explains the environmental and social destruction by her idea of expulsions: the growing number of dislocated and unrooted people are the symptom of unjust processes in the global economy (Sassen 2014). These expulsions or other injustices will not be solved by the CE; but CE might replicate the same power structures that we observe in the linear economy if it takes a deterritorialised approach.

We observed in our own practice and research for design that many projects in Flanders were "all over the place", partly as many landscapes got altered in the past decades and even centuries because of global value chains and other despatialising trends (e.g. Marin and De Meulder 2018a). Recently, there is an emergence of the territorial approach in circularity studies (Chembessi, Beaurain, and Cloutier 2021; Tapia et al. 2021; Veyssière, Laperche, and Blanquart 2021). This includes understanding territories' palimpsest (Corboz 1983), the different historical layers that together form contemporary landscapes, lending insights on the changing metabolic relationships of a specific place. As such, each place/landscape is a series of invisible and visible histories. People in charge decide which stories are visible, who is – consciously or unconsciously "nobodied" and which people, processes, and matters are considered relevant. Notably, although there is an increase in the body of research exploring traditional ecological knowledge (TEK) that can be embedded in solutions, often, white people propose Indigenous methodologies and preventive measures as solutions for ecological crises and not many indigenous people are involved in the processes (Hueston 2020). Further, sometimes indigenous knowledge is used for culture-washing sustainability projects that benefit mostly white high-income people (Holzinger and Wuyts 2022). Including certain historical/cultural practices can lead to feelings of exclusion by other people with roots/connections to that place/landscape. Commodification of traditional heritage has also been observed in non-indigenous contexts. Researchers such as Sharon Zukin have demonstrated through cases, the streets in Amsterdam for instance, how some histories became commodified in urban development programmes to attract capital rich newcomers and tourists (Zukin 1987, 2011). Hence, it is important to not romanticise one "history". Japan in the Edo-area has another culture, and other practices and values which could be called "more circular" and local-oriented than the present Japan (Brown 2013). However, Japan nowadays also has the knowledge, tools, and skills that are useful in the design of better futures (Wuyts and Marjanović 2022). All people, histories, and traditional and current knowledge could contribute and should be included in the transition, which avoids reinventing everything from a "tabula rasa" (which is a colonial strategy), but starts from local conditions, working with the existing as the basis for a contextualised resource sensitive CE (post-colonial strategy).

3. Methodology

3.1. Approach and materials

This paper is the result of a form of collective or collaborative autoethnography (Ellis, Adams, and Bochner 2011; Sellberg et al. 2021). As two young early career researchers who have been involved in engaged place-based research and practice, the authors of this work were drawn together in 2020 by a shared interest for territorial approaches in circularity and especially the call to reterritorialise landscapes to enable more circularity. The autoethnography encompasses our lived experiences

of circularity, but also the observations of lived experiences of others we worked with in various workshops and other design and co-creation events, as well as inputs of interviews with other people that seek circular solutions in a Flemish context, whether at the neighbourhood, city, or sub-national level.

The first author was also involved in another small-scale implementation project in Antwerp on which she also published several blogs online (see Appendix) and often interviewed actors in circular city implementation for a blog on sustainability for the website of a Belgian critical journalist magazine (see Appendix). These blogs (and the unpublished diary notes) are a data source. She especially documented in detailed observations and reflections on one implementation project in 2019, in the two Flemish cities Leuven and Mechelen, herein called C-Power, which involved young people from diverse backgrounds. The first author conducted semi-structured interviews with them and had access to outcomes of pedagogical and engagement methods. For example, one of the methods that is also deployed in the C-Power program is photovoice (Strack, Magill, and McDonagh 2004), to engage them in visualising what circular versus linear economy mean in their life and own observations in the cities. The instruction was to photograph things they link to problems or circular solutions, which could be of moments/situations of their daily life, from contexts such as their hobby/work/home/street. These photographs, quotes from interviews about their learning experience, reflections on their own lived experiences of CE and linear economy, and the related tensions were documented in various research diaries, which were shared with and complemented by the project leader, who followed them on a daily base for 6 months.

The second author has participated in different implementation and design projects in cities such as Leuven and territories such as the Campine (Kempen), and can draw from her experiences; some of these reflections have been published to contribute to the literature. We have combined this with an iterative process of sharing and reviewing literature (academic literature, local popular news, social media accounts like LinkedIn from various actors in Flanders) about social justice in CE, territorial approaches, and environmental justice in general. Previous drafts were read and commented on by Flemish and international CE and/or social justice experts a priori initial submission and during review. The empirical data, in other words, are published blogs and unpublished quotes and notes that we collected during our engagement in circularity implementation projects during the period 2017–2021 and in various Flemish contexts.

Lastly, as researchers in place-based transdisciplinary research, we see walking also as a method (Pierce and Lawhon 2015); we walked in various places in Flanders, perceiving them not only through cognitive concepts and structures but also through our different senses. Sometimes we walked as part of circular design workshops and had clear rules and prompts that turned our body into a data library, but also did so often unconsciously; these landscape immersion experiences were reflected upon.

3.2. Introduction to the Flemish society and CE

Flanders is a highly multicultural region in Belgium. At the beginning of 2018, there were approximately 5,120,000 people of Belgian origin living in the Flemish Region and just over 1,430,000 persons of foreign origin (21.9%) (Vlaanderen 2021a). In 2020, 20% of the population was 65+, while 19% were younger than 18, and there were 102 women for 100 men (Vlaanderen 2021b). In 2019, 18.4% of Flemish people aged 25–64 were not-to-low-educated, 40.6% were middle-educated, and 41.0% were highly educated (Vlaanderen 2021c). About 10% of Flemish families earn an income lesser than the poverty threshold, with the highest risk of poverty for single-parent families, not-to-low-educated families, and people of non-European origin (Vlaanderen 2021d). This section focuses on CE in Flanders as a case study and, more specifically, the CE initiatives launched or supported by the Flemish Waste Agency. In the years before 2017, the Flemish Waste Agency shifted from waste management to sustainable materials management, which resulted in new policy and subsidy programmes. In 2017, a subagency Circular Flanders (Vlaanderen Circulair, hereinafter VC) was created

under the wings of this agency, and several subsidy programmes for CE initiatives, experiments, and innovations have been launched under the VC umbrella.

4. An IE lens on C-Power and other initiatives

The holistic framework by Vanhuyse et al. (2021) serves as our IE lens. We read the interpretations of tensions encountered in interviews, conversations, and other observations through these eight arenas, and zoom in on three arenas: (1) way of living, (2) political systems, and (3) environment.

4.1. Way of living: employment and skill valuation

In September 2017, VC organised the first bootcamp, which was followed by an edition in 2018 and 2019, with the aim "to inspire enterprising young people at the start of their careers to incorporate the circular economy into their approach" (VC 2020). One of the authors was the participant in the first bootcamp and was invited as the workshop leader on the second. Both bootcamps captured almost fully white middle-class highly educated experiences. This motivated her to volunteer for co-writing a fund for a project where resources are used to inspire people who did not have this intersectionality of whiteness, high education, and middle class – and to help the project leader in continuous evaluation and the design of pedagogical materials on circularity.

One of the original aims of the C-Power program was to generate ideas or even prototypes for social circular solutions. During both 6-month trajectories, different stakeholders were invited to conduct workshops, hackathon-style, and help facilitate the process from problem to prototype. The kick-off workshops were open for the youth that were recruited for a programme of citizen service, but also to other interested young people in the city in which it took place. The hope was to have a mix of uneducated to lowly as well as highly educated people. Four highly educated people joined in the first event, especially interested to learn about just design, but did not engage further in the process, because they reported the learning was too slow. The outcomes of the trajectories were mostly the proposal of low-tech solutions and incremental challenges, which were appreciated by the jury and different inspirators along the journey. However, there were tensions and the more technocratic-oriented actors were told that they had to adapt their expectations during the process. In Flanders, as in the rest of Europe, the underlying dominating circularity discourse in policy and industry appears to be technocentric. One of the imagination tools that VC deployed during the first bootcamp was a program called Reburg (Pantopicon 2016) that would help participants to envision more clearly the circular activities, spaces, and other resources that are needed for a full circular economy. As Marin and De Meulder (2018b) highlighted, this future design echoes a technocratic worldview, because the focus is on digital technology and innovation, and there is not much sovereignty to explore, for example, the role of low-tech solutions. This discourse could be described as "segmented", focusing on "sustainable human progress without negative environmental externalities, … through economic innovations, new business models and unprecedented breakthroughs in CE technologies for the closing of resource loops with optimum economic value creation" (Friant, Vermeulen, and Salomone 2020). This focus on innovation and technology clearly disregards ordinary CE contributions of "nobodied" repairers, maintainers, or caretakers. Sharon Zukin explains in The Innovation Complex (Zukin 2020) how cities attract creative digital capital through investment in infrastructure and education oriented toward (digital) innovation. However, it can experience decay of liveability for other people outside the creative class (Florida 2005). In hackathons, meetups, and other innovation-oriented events/spaces, the so-called highly skilled people with similar worldviews and competences assemble with stakeholders with financial capital, to let them generate innovations and discover a market for the same. These "places" do not foster a mix of different worldviews, jobs, needs, and competences, therefore automatically "nobodying" those simultaneously suffering the consequences of increased housing prices. Government instances or other stakeholders who want to develop and diffuse CE practices can focus

on sectors and stimulate innovations there, however, they can also consider strategies implementing circularity in specific places within the boundaries of a city, a municipality, or other administrative units of governance. However, place-based circularity strategies can also lead to injustice, for example through a strategy of spatial fixes (including Zukin's examples), neglecting the processes of most citizens within these boundaries (Kębłowski, Lambert, and Bassens 2020).

There were not only differences between the bootcamps and C-Power that highlighted mastering and backgrounding dualisms in the Flemish circular context. During C-Power, there were various disappointments felt by the first author and the project leader. For example, the drop-out of a few married women with conservative religious ties, due to the new role of motherhood, felt like a failure to engage them in CE. Before they left the programme, they were not perceived as being 100% involved in the programme, partly because they were limited to ascribed gender roles and family responsibilities. The process facilitator remarked they had to sometimes call their husbands to ask permission. In technocentric views, these mothers would not be acknowledged as CE actors. However, their role of caretaker must be seen as essential for CE. Without healthy humans, there is simply no (linear or circular) economy, or as Federici (2004) remarked in the previous century: male "economic" production was impossible without women's uncompensated "non-economic" labour. Often, techno-centric circularity advocates oversee the social reproduction and care aspects which are the base of our survival and society because they prefer efficiency (and convenience) above sufficiency. This dominating view resulted in data about household economics that is not counted for in many national statistical accounts (Waring and Steinem 1988). The work of the caretaker in domestic spheres stays invisible. According to critical feminist thinkers (e.g. Plumwood 2002; Federici 2004; Ruder and Sanniti 2019), certain skills that are essential in CE strategies, such as sanitation, maintenance, and repair services, are undervalued and invisible. One reason could be possibly because they are feminised and/or racialised (Ruder and Sanniti 2019). These so-called essential workers only become visible in times of crises, like the first lockdown of COVID-19 in Flanders, because of their essential roles, but also because of the risks they face (Wuyts et al. 2020). After the C-Power project ended, they did not end up in circular positions, while the participants of the bootcamps are reported to be forming the circularity scene in Flanders (VC 2020).

4.2. Political systems: observations of colonisation of CE principles and practices

In the summer of 2017, VC, who facilitated and connected CE stakeholders, launched the first call for circular entrepreneurship and circular cities. The first author was approached by the fundraiser coordinator of a platform in Brussels to co-write a grant application. The platform aims to (re)activate young people, aged 18–25, over a 6-month trajectory involving innovation-focused workshops, individual and group voluntary work, and guidance. CE would be the major theme of two trajectories in two different cities to be eligible for this brand new fund. In February 2018, C-Power was greenlit. In the aftermath of this project, we realised that the roles of the cities and the young participants within the project were already predefined without involving them in the initial process. During both cities' project trajectories, however, the participants' evaluations and reflections changed the programme, aligning it more with their needs and competences. This "opportunity" arose precisely because the process facilitator and first author, who managed the project together, encountered many tensions and uncomfortable situations (Blog January 2020). In the process of linking findings with conclusions for the report for the beneficiary (VC), the first author interacted with others and read social media material, opinion pieces, and literature for ideas to ground the uncomfortable experiences. The participants recruited by this platform did not primarily participate in this project to learn about CE; rather, most participants' intrinsic motivation was to have the time and space to (re)orient their lives. During the 6-month trajectory, the project manager and the first author reflected and learned about which educational methods worked and which required change. They were mostly confronted with the participants' reactions regarding their definitions of CE and their related cognitive bias. The expected outcomes were not achieved: none of the 18–25 aged youth groups engaged

in participation, introduced "circular businesses", or set up their own initiative. Only one participant brought small changes to an organisation where he occasionally worked. For this reason, the first author started reflecting on what was missing in the project approach and why expected outcomes were not achieved.

A significant proportion of Flemish residents, especially in cities, comes from countries where circular practices are part of daily life without being labelled "circular". Participant A, a female with Rwandan roots, quickly questioned: "Is this progressive? Reusable diapers are 'everyday items' in Rwanda. And not only among the middle class" (Participant A, 2019). In her family, reusable nappies have been used for generations. An Afghan participant also thought it was "normal" to use clothes as long as possible, and even adapt them if the body changes. He explained that reusing and recycling were always part of Afghan culture. "People in the past were not very dependent on goods from other countries, and basic needs could be met within Afghanistan" (Participant B, 2019). Some participants indicated that the CE brings out new jargon for them, but the practices are familiar to them. The process facilitators had uncomfortable feelings about the fact that white people teaching CE present it as an innovative thing as if the Global North is the CE expert.

4.3. People's environment

Social injustices related to environmental degradation play out in different ways. In environmental justice literature, evidence shows that people who find themselves in a certain intersectionality are more exposed to the consequences of biodiversity loss or other environmental concerns. One remarkable example is the neighbourhood around the Umicore plant near Antwerp, where high concentrations of lead were measured in children's blood on multiple occasions (VRT 2020). Umicore is internationally known as a pioneer CE in urban mining – for example recovering gold from old cell smartphones. When we walked in this neighbourhood in the summer of 2020, we noticed that it was full of minorities. Many examples of environmental justice have highlighted the correlation between polluted neighbourhoods and the social identity of the people that are affected the most. It is ironical that Umicore is seen as a champion in recycling and circularity.

In addition, as Flanders is one of the most densely populated areas in Europe, the Flemish waste agency has made tremendous efforts in brownfield redevelopment. These redevelopments are mostly partnerships with project developers, creating new urban neighbourhoods on previously polluted lands (Blog May 2021). Nevertheless, these developments pose the risk of gentrification, pushing out "nobodied" inhabitants from the few urban areas that are still affordable, which is also documented in environmental gentrification research (e.g. Curran and Hamilton 2012; Anguelovski 2016). In 2020, there was a call for "projects that provide a sustainable circular economic interpretation of urban sites under consideration for redevelopment" (vlaio 2021), which are granted to four sites in four different cities. As the projects are scheduled to start in 2022, it is too early to assess social impact. However, there is a positive social impact story, where a polluted brownfield was converted into a place for a social and circular economy (Blog May 2021). Since 2020, VC is taking steps towards more inclusion by redesigning their project call to nudge local governments to search for economic opportunities or local needs and testing solutions within the region, and the involvement of social economy actors is a precondition to participate (esf Vlaanderen 2020). Secondly, in contrast to other government instances, VC calls (already in 2017) allow non-profit organisations (NPOs) and other stakeholders to apply (Blog May 2021). Another supporting tool that VC adopts is leasing buildings to social economy actors, and not (only) to projects which will create the most revenue. In Flanders, project O.666 (Oostende) and the Potterij (Mechelen) are two of few examples of practices combining circular area development with social economy. Interviews with the project managers of O.666 highlighted the place-based care approach where they value "small everyday stories, small steps and small cycles" and on purpose do not consider innovative changes which require engagement globally and virtually (Blog May 2021). However, they noted that the contract to rent this place under an affordable price is temporary and that they are

dependent on authorities for protecting this space. This emphasises again how space is a resource in enabling circular (and social) economy (Williams 2021), and the role that authorities can play in protecting this required space and social circularity.

A last note is reserved for multispecies justice in circular and other sustainability designs. The fundamental issue is the dominating anthropocentric view in CE thinking, ignoring the more-than-human-world. Animals, plants, and other energy forms are also largely "nobodied" in circularity discourse. However, there are examples of contexts in Flanders where unused infrastructure and spaces (for example, abandoned mining infrastructure in Limburg) are passively restored and support territories of more than the human world.

5. Discussion and conclusion: the "nobodied" matter in a just circular landscape

Applying an IE lens uncovered a diverse group of "nobodied" CE actors that should be acknowledged in the conception, realisation, and benefits following circularity transition. We argue that the "nobodies" do not matter in a circular economy in a deterritorialised approach, but they do in a circular landscape view. The following subsections discuss the observations and connect them with territorial thinking to propose future research and action agendas.

5.1. Revisiting how CE discourses work in different contexts

CE is not new at all, and Western CE discourse is paternalistic, perhaps grounded in Western colonial thinking. As Friant et al. noted, several non-Western circularity discourses about sustaining and restoring natural cycles exist under other, often indigenous "labels" (Friant, Vermeulen, and Salomone 2020). However, Western thinking tends to disregard the "primitive" technology of indigenous cultures (Watson 2019). It is noteworthy that these reflections on CE, bringing a discourse with jargon to practices that already exist in other contexts or previous times in the same place, must be read with caution. First, we should not compare practices in Belgium with those in Rwanda or Afghanistan because the circularity discourse is not universal; the CE discourse in Flanders is not the same as a CE discourse in other countries. Second, it is not only the non-Western background that explains circularity. Third, these arguments can lead to the defence of practices of harvesting metals in, for example, African landfills, which may score highly in respecting the way of living of those directly engaged in this work, but perhaps not highly in the domains of their occupational health. We are aware that the CE discourse works differently in different contexts. The context of Flanders is already different from that of the Netherlands for instance, because of history and regulations. Moreover, within the context of Flanders as in other (sub)national contexts, there is a pluriverse of diverse microspaces, contexts, and heterogeneous groups of people that live, work, and visit in each different space. Circularity rather works as an umbrella concept covering many different interpretations of the future (Bauwens, Hekkert, and Kirchherr 2020).

The aftermath of C-Power raised several questions: Why did we not start from familiar situations and participants' community needs? The photovoice method was not planned initially, but integrated later, as we needed to engage them with an abstract concept of circularity through their own lived experiences of linear and circular economy. The problem of circularity discourse is that it can be interpreted in different ways (Korhonen et al. 2018; Bauwens, Hekkert, and Kirchherr 2020), because it started as an abstract concept and many stakeholders got free play in envisioning it for a sector or a place. Documenting lived experiences for the different discourses and contexts might contribute to more insights about the uneven distribution of the social impacts of circular designs. Therefore, in-depth biographies are needed, especially of the "nobodied", to understand the plurality of different reasons as to why people engage in practices that are seen as circular in a Flemish or other context.

Noteworthy, "nobodisation" is a spectrum: depending on the place and sector, some roles are more "nobodied" than others. Especially in cities and regions with a history of a strong civil

society network (e.g. Leuven), "nobodying" people with certain skills, like repairing, is less than in more technocentric-oriented discourse and environments (interviews, blog November 2020). The different types of imagination in these strategies or political agendas are often steered by different worldviews (Marin and De Meulder 2018b). Therefore, collected biographies should be linked with the discourse and context.

5.2. Revisiting the involvement of the more than human world

Incorporating rooted and place-based human knowledge is the first step towards equally including non-human actors. For example, in line with the One Health vision, this means expanding focus on individual human health to entire landscapes as well as the interactions between different natural entities, such as trees and water. Escobar wrote how the concepts of individual and categorisation do not exist in societies with other worldviews because everything is so interrelated that the fragmentation of knowledge and beings is wrong (Escobar 2020). In addition, he observed that there is renewed interest among people with the same worldview in lifestyles that engage with a place and do not perform fragmentation (Escobar 2020). Stepping away from anthropocentric approaches calls for deep engagement with physical landscapes, for example, defined as watersheds, rather than administrative entities that "nobody" natural dynamics, such as where water flows or how a virus spreads. Many circular studies encompass industrial ecology studies where the unit of analysis is determined by administrative boundaries and other studies that look for the optimal scale. Therefore, our future interest lies in units of analysis or design that looks at natural resources, for instance, the valley section of Patrick Geddes in designing a circular landscape Engaging with TEK, and with people who embody it, is crucial to realise more just circular cultural landscapes.

One consequence of an ecocentric approach is to reconsider the CE time frames. CE policies target certain goals by 2030 or 2050, responding to the urgent threats of climate change and material supply insecurity. However, 10–30 years is still very short-term compared with lifecycles of other energy forms, such as trees or entire landscapes. Some technical cycles are short, such as the life cycles of many plastic products. However, biological cycles can take centuries or more. For the case of C-Power, more funds for more and longer trajectories might have resulted in another impact, partly because the process facilitators learned by doing and testing co-learning methods, and the CE in Flanders has been growing and changing rapidly in a short period. If there was a third trajectory, the idea was to implement methods such as walking and focusing more on specific sites and places.

The inclusion of a different (probably non-Western) temporality will benefit CE strategies. Future research and practitioners could reflect on how tools, such as financial help and indicators, might be designed to consider the pluriverse lengths of cycles, something that has been echoed in previous work on territorialism and regionalism by e.g. Magnaghi (2005).

5.3. Integrating the pluriverse in participation schemes

Some people are "nobodied" because they cannot participate due to lack of money, time, or other resources. In addition, we often see how white and/or higher-educated people with certain skills are well represented because they often have fewer constraints. Therefore, participation processes should be designed in a way that they enable diversity in terms of personalities, resources, and competencies for a local transition project or programme to appeal to everyone. Not everyone is able to participate in every project; one suggestion is to collect stories from "nobodied" CE actors (including non-humans and whole place-based ecosystems), expressing how their (potential) role(s) in CE and how linear economy affects them, as well as which values they attach to circularity. Consequently, designers of financial instruments, evaluation tools, and other policy supporting and regulating programmes should reserve time to read/listen to their stories and reflect on how they can benefit from the instruments. Questions that could be asked: What can we learn from the history of the metabolic

relationships of a place? Why and how did these landscapes evolve from circular to linear? What can we learn from this to reverse the process, considering that we do not reproduce injustices? Further, importantly, who do we have to recognise in these landscapes?

It is noteworthy that although we should value the role of caretakers and others, the IE lens invites us to not revive customs, values, traditions, without questioning the tensions between traditional structures and current sustainability goals. In many cultures, for example, women were ascribed to the role of taking care of the domestic sphere, had no choice, and were excluded from other roles. We should question the risks and conditions of these roles. Some more "risky" jobs are often done by nobodies. The IE reminds us of the need to improve (working) conditions and disposable income and remove structural barriers to access education, health, land use, etc., and how people in other roles (regulators, policy makers) should not be blind to it. After an economic structural analysis of selected CE activities in the European Union, researchers called for reframing the social value of these activities and improving working conditions. One example is the application of tax exemptions or reductions to such labour-intensive activities, so that they can improve their relative costs and competitiveness vis-à-vis traditional sectors' (Llorente-González and Vence 2020). In addition, to explore how we can improve the conditions around these roles to reduce the risks, we should question how to avoid these roles from becoming masculinised and/or whitewashed. Further research should be conducted on the role of these policy tools in circularity transitions to understand the exclusionary mechanisms embedded in them and test different designs from an IE perspective.

This paper concludes that an IE lens provides useful starting points for inclusive circular landscapes and can lead to more recognition. We call for more reterritorialised approaches to circularity in future research and action, integrating an IE lens, which would lead to a more socially just circular economy, or more accurately, a variety of local social circular economies adapted to the needs and resources of the territory.

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Appendix. List of selected published blogs about research and experiences for, on and with design in different circular economy projects in various Flemish contexts

Originally, they were written in Flemish, but we translated the titles here and provided some summaries and context. This appendix entails the blogs to which the manuscript refers, but also extra blogs that show the evolution of thinking in the learning process of especially the first author.

All the blogs can be found here: https://www.mo.be/auteur/wendy-wuyts.

We created a project on Researchgate where we also keep project logs about new blogs: https://www.researchgate.net/project/Blogs-for-a-broader-audience-in-Flanders-about-circular-economy.

September 2017	How do we make the circular economy more fun? https://www.mo.be/zeronaut/hoe-maken-we-circulaire-economie-plezanter-en-interessanter Focus: Antwerp south	Reflections about participation in the first bootcamp organised by Circular Flanders, in the city of Antwerp, with a focus on circularity transitions and the challenges to make it more known. In this bootcamp

		we got a challenge of the new smart circular neighbourhood in south Antwerp.
December 2017	Dear santa, I want more time, less stuff https://www.mo.be/zeronaut/liefste-kerstman-ik-wil-meer-tijd-niet-meer-spullen Focus: none	A reflection was written about experiences and research in Japan, and lessons for Belgium, mostly about some circular rebound effects, and about self-care.
September 2018	Coffee with some circularity please https://www.mo.be/zeronaut/koffie-met-een-wolkje-circulaire-economie-alsjeblieft Focus: none	Reflections about presenting at the second bootcamp of Circular Flanders, including the question of why the most participants at such events are white, about consumption and some social impacts.
September 2019	What if the postman disappears https://www.mo.be/zeronaut/wat-als-de-postbode-verdwijnt Focus: lived experiences of her family	A blog about how the job of post delivery changed in Flanders over the course of 30 years, witnessed from the first row, as her father is a postman. She talks about valorisation of skills in the context of economic growth and increased productivity, even in jobs where this is at the expense of the humans, and also the need for a social circular economy, including social skills.
October 2019	If furniture could talk https://www.mo.be/zeronaut/als-meubels-konden-spreken Focus: none	A blog about the role of storytelling in circular economy transitions.
January 2020	Circular economy in 10 uncomfortable steps https://www.mo.be/zeronaut/circulaire-economie-10-lastige-stappen Focus: a social CE project in Leuven and Mechelen	Wendy wrote this blog with a project coordinator of a "introduction to CE" project in 2019. This blog is also applauded by the main editor of the Belgian journal because it is about concerns that CE, although spearheaded, should be complemented by social programmes too. We are also two young white women with a heart for a better environment and social well-being. Both of us were connected in our own way to the C-Power project, which aimed to introduce a circular economy to two groups of young adults from diverse backgrounds. I was a co-founder of the project. In 2017, I wrote my master's thesis on education in circular economy and also wrote back then a blog for MO* on the need for a social dimension in the circular economy. I got contacted to write together a grant application for the first call of Flanders Circular. It took more than a year before the project got started. Lore joined in the meantime as an educational supervisor and project coordinator. The idea of also teaching single young mothers, wheelchair users, newcomers, underprivileged people and other young people who would otherwise not be involved in this generally white middle-class story, more about circular economy attracted us both strongly. However, it soon became clear that it was not they, but rather we, who would be going home with most of the lessons.
November 2020	Even on the last day of earth, I will plant a tree. https://www.mo.be/zeronaut/zo-ziet-geweldlozen-rebellie-eruit Focus: Campine region	This blog is about voluntary work especially in 2020, in small organisations working on nature connection, sustainability and nature based solutions, landscape revitalisation, natural and cultural heritage projects, in various macro spaces, which organisations and work Wendy got to know in the past year.
May 2021	What is a better world? What is a circular city? https://www.mo.be/zeronaut/navigeren-op-de-getijden-en-stromingen-van-de-circulaire-economie Focus: Oostende, coastal town in Flanders	This blog shares more learning experiences about local circularity thanks to an interesting case in Ostend, a coastal town in Flanders. This case, which is at the base of this online article, is a nice hope-giving learning story about cooperation between the Flemish government and local actors. We need more examples like this. Thanks to some experts from Circular Flanders and OVAM, I discovered this story of a socially and locally embedded circular economy and got in touch with some of the actors in this Belgian coastal town. It surfs on thoughts on spatial planning around

		circularity that I am now exploring with Marjan Marjanović for a next paper about circular cities. A quote that the editor selected explains the social aspect: "This is what I want for circularity too: a story for everyone, not a Noah's Ark where only a few privileged people can navigate their way through the crises". A quote selected by the editor about an environmental justice/ spatial aspect: How can you make the surface in your city or town serve the local circular economy while ensuring that not only an elite can enjoy it?
September 2021	A circular city should not forget its mountains, fields and rivers https://www.mo.be/zeronaut/een-circulaire-stad-mag-zijn-bergen-velden-en-rivieren-niet-vergeten Focus: Røros and Glomma valley in Norway, but with references to ports in the Low Countries	Wendy visited a traditional and former mining village in a more remote rural area and stayed there for three weeks in August. In one of the museums she found a visualisation of a material flow analysis of the copper for some centuries, saw historical photographs, maps about how the copper and other material travelled, including to the ports of Amsterdam and Antwerp, and also joined some tours. In this blog she reflects on what a rural or an integrated circular economy can mean. Now there is a focus on circular cities, but circular cities cannot thrive without its rural areas around (and actually, because of global value chains, also in rural areas far away). So we need to also look at circular solutions in rural areas, consider transportation and mobility systems. There are also some reflections about traditional knowledge and practices (which are not always sustainable according to norms today).
January 2022	A safety check on bringing back "waste" to the city https://www.jus.uio.no/english/research/areas/companies/blog/futuring-sustainable-nordic-business-models/safety-check-waste–wuyts.html Focus: Antwerp, lived experiences of safety of employees in recycling/collection parks	This blog is written as part of a seminar on Circular Economy and Corporate Sustainability, where I presented the results of a Master thesis research on safety challenges in recycling parks in Antwerp. This thesis collected the lived experiences of people working in recycling centres. I connected them also with the theoretical problem of despatialising, etc. One of the many big circular exercises we witness in Belgium is how to transform recycling or waste treatment centres in circular hubs, where components and materials get recollected after use, treated if needed, and then sold again – as component or material. This blog refers also to previous work by Julie Marin, on historical wastescapes in Antwerp (published in 2016).