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Chatterton, P., Büchs, M., Rawsthorne, C. et al. (2026) Doughnut economics, degrowth and decoloniality. New directions for the Doughnut Portrait method. *Local Environment*. ISSN: 1354-9839

<https://doi.org/10.1080/13549839.2026.2613377>

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Chatterton, P., Büchs, M., Rawsthorne, C., Millward-Hopkins, J., Solanki, A. (2026).
Doughnut economics, degrowth and decoloniality. New directions for the Doughnut
Portrait method. *Local Environment*: 1-21,
<https://doi.org/10.1080/13549839.2026.2613377>

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Acknowledgements

The authors would like to acknowledge financial support from the University of Leeds' Policy Exchange Fund and the UK's National Lottery Climate Action Fund for producing the underpinning research, and the Leeds Doughnut Coalition in the preparation of the Leeds Doughnut place portrait on which this article draws. All work in this journal article is the sole responsibility of the listed authors.

Doughnut Economics, degrowth and decoloniality. New directions for the Doughnut Portrait method

Abstract

Transformative action is required to respond to the polycrisis of our age, across climate/ecological breakdown and mounting social inequalities. Doughnut economics and its 'Portrait of Place' method has established itself as a tool for exploring local change through new possibilities that can help in this response. This position paper, based on a selective review of existing doughnut place portraits, examines how degrowth and decolonial approaches are intuitively part of the Doughnut model conceptually and practically and how they open up further opportunities to highlight what transformation looks like in the face of the global polycrisis. Exploring each of the four lenses of the Doughnut portrait method in turn (global-ecological, local-ecological, global-social, local-social), we critically explore and detail what these opportunities could be. While we found limited actual application of these ideas within existing Doughnut portraits, we recommend areas for further enquiry to enhance Doughnut portraits through degrowth and decolonial approaches. Specifically, these include paying more attention to assessing a wellbeing economy and provisioning systems, multi-species relations and the democratic rights and legal personhood of nature, the global impacts of supply chain activity from local consumption, and excess and uneven consumption and resource use and their impacts on critical planetary boundaries. We conclude by highlighting what could be the most lasting contribution of degrowth and decolonial approaches for the Doughnut model – to clarify, extend and embed debates and action in terms of what the economy could be beyond the dominant growth and colonial mindset.

Introduction - the Doughnut as a tool for local action

Doughnut Economics, popularised by Raworth (2017), is one of the most publicly visible interventions in economics in the last ten years. It advocates a heterodox approach through a broad set of concerns about how people can live well in the face of various converging and accelerating crises, or what is increasingly framed as a polycrisis (Rammelt et al., 2022; Kareiva and Carranza, 2018). The Doughnut model has emerged from this intervention as an intuitive and graphical framework that shifts away from the dominant paradigm of growth using a regenerative and redistributive design approach to move humanity into a just and safe operating space. Specific places have applied the Doughnut model to explore local transformations through what is called the 'Data Portrait of Place' method (Turner and Wills, 2022; Wahlund and Hansen, 2022; Acosta, 2022, Turner et al., 2020).

In its simplest form, the Doughnut model provides a visual metaphor, with the inner area of the Doughnut representing a "safe and just space for humanity" (Raworth 2017: 44). This space is bounded by an outer edge (called an "ecological ceiling" in Doughnut terms) and an inner edge (called a "social foundation" in Doughnut terms). Advocates and users of the Doughnut model make a case that for safe and just conditions to prevail for humanity, the outer ecological boundary must not be exceeded or over-shot, and the inner social foundation must not be under-shot. Two major frameworks are used to assess the performance of a range of preselected dimensions against these boundaries – the planetary boundaries study by Johan Rockström for the ecological ceiling (Rockström, 2009, Steffen 2015), and various internationally agreed targets and standards enshrined in the United Nations Sustainable Development Goals (SDGs) for the social foundation. For the subnational 'Data Portrait of Place' method, whilst dimensions are largely derived from SDGs targets, more locally relevant indicators are chosen to reflect the particularities of each context.

This Doughnut model was the catalyst for the creation of the Doughnut Economics Action Lab (DEAL) in 2020 to support coalitions of actors to downscale and set a course for a safe and just operating space. DEAL (2020) published a manual for 'Creating City Portraits' which outlined how to downscale the Doughnut model to localities using four lenses to interrogate and stimulate action: global-ecological, local-ecological, global-social, and local-ecological.

An overarching narrative was introduced to connect these lenses in terms of meeting local aspirations while responding to global responsibilities. In 2022, the portrait approach was further refined through ‘the Doughnut unrolled’ guide, unrolling it into a linear terrain on which to map transformative action (DEAL, 2022). The Doughnut framework has been used in different localities in various ways, of which creating a portrait is only one option. The DEAL guide “Cities & Regions: Let's Get Started” (2023) categorises nine approaches for engagement. There are now over 100 local Doughnut groups around the world, and to date dozens of localities have used the portrait methodology to create portraits including Amsterdam, Barcelona, Berlin, Brussels, Glasgow, Melbourne, Portland, Philadelphia and Sydney, as well as our own work on the Leeds Doughnut (2022). Based on evidence from over 50 localities, work by Grcheva and Vianello (2025) highlighted the doughnut as a tool by local governments for integrated decision-making and systems thinking. This level of replication and implementation of an analytical idea into place-based action is a significant achievement.

This current paper is part of an emerging academic debate on Doughnut economics and the application of this Doughnut model (see Crisp et al. 2023; Crowley et al. 2021; Domazet et al. 2023; Dragicevic 2024; Hartman & Heslinga 2021; Rogers et al. 2024; Waddock 2020; Wahlund & Hansen 2022; Acosta 2022; Fanning et al. 2021; Luukkanen et al. 2021; O’Neill et al. 2018; Saunders & Luukkanen 2022; Turner and Willis 2022; Warnecke 2023; Trebeck and Sayers, 2015; Khmara & Kronenberg 2023; Savini 2024; Fanning and Raworth, 2025). What motivates this paper specifically is a gap that requires addressing if the Doughnut Data Portrait method is to fulfil its potential as a means for radical place transformation. On the one hand, academic and practitioner debates highlight a mounting and converging polycrisis across climate, ecological, political and social issues, which will require new forms of transformative action and policy making (Jørgensen et al, 2024; Zakia et al., 2024). Approaches embedded in degrowth and decolonial ideas offer new insights into what transformation under conditions of polycrisis might look like: a redirection of state power and market mechanisms as a route to maximising human wellbeing, radically democratising the nation-state, curtailing corporate monopolies, redistributive policies, decentralised and popular power, privileging subaltern actors and horizontal forms of organising as agents of transformative change, a novel scalar politics that can challenge and restructure power

relations in complex ways, and promoting a broader project of municipal politics as well as more-than-human relations (Kallis, 2020; Hickel, 2021; Lawrence, 2024; Hudson et al., 2025; Bouzarovski and Haarstad, 2018; Russell 2019).

On the other hand, these kinds of transformative actions are already intuitively part of the Doughnut model reflected in its key principles of regenerative and redistributive design which foreground a new purpose for business, circularity, horizontal organising, challenging power and ownership, local collaboration and nurturing/mimicking natural systems. The Doughnut model, then, is a useful entry point for all those interested in exploring transformative local action in a context of polycrisis, and it is our contention that degrowth and decolonial approaches are ideally placed to add further clarity of the utility of the Doughnut in radical place transformation.

Specifically, in this position paper, we first present the main arguments of degrowth and decolonial approaches, and second situate Doughnut economics within current academic and practitioner debates on degrowth and decoloniality. Third, we then explore how the Doughnut data portrait approach can be critiqued and enhanced through degrowth and decolonial approaches, offering insights into what they mean for each of the four lenses. In this section we draw on a selective review of city-wide doughnut data portraits that are currently accessible and fully completed.ⁱ This also includes our own Data Portrait in the city of Leeds, UK (Leeds Doughnut, 2022). Ultimately, what we found, including in our own work, was that issues of decoloniality and degrowth were not fully integrated into doughnut data portraits, due to a desire to create a palatable starting point for a multistakeholder group of supporters, many of whom were unfamiliar with using the doughnut framework for place-based strategizing. By way of conclusion, we present a series of recommendations and specific areas for future interrogation for using degrowth and decolonial perspectives to strengthen the 'Data Portrait of Place' methodology. Overall, we hope degrowth and decolonial approaches can highlight the further usefulness of the Doughnut model as a tool for radical place transformation in an age of polycrisis.

Degrowth and decoloniality – an agenda for the polycrisis

Our position in this paper is that, in the context of current policy frustrations in terms of decisively responding to the converging and accelerating polycrisis (Gupta et al., 2024), degrowth and decolonial approaches can open up possibilities for transformative change. We must stress however, the complex and contested definitions of both degrowth and decoloniality. Variations of these terms are used, often interchangeably. In terms of degrowth this is variously seen as a political philosophy, social movement, and a preparatory stage before a more steady-state economy. Usefully, Savini (2024) offers the clarification that while post-growth is an approach and the doughnut is a tool, degrowth is an agenda. In terms of decolonial approaches, they are equally situated within a broader field of post-colonial studies, and can be understood differentially as: a hoped for state of 'decoloniality'; an active and ongoing process of 'decolonisation'; and, as a wider belief or set of values known as 'decolonialism' (Gallien, 2020). In this paper, we acknowledge, rather than try to resolve, this complexity. The rest of this section presents these terms to establish a baseline for exploring their utility within the Doughnut model.

Degrowth is a broad academic and social movement that promotes radical transformation – economic, political, social, and technological – and confronts the hegemony of economic growth and its role as a measure of welfare and performance in contemporary society (Kallis 2020, Hickel 2021b). Degrowth has a distinct meaning within a range of related post-growth approaches (Schneider et al. 2010, Kallis 2020, Hickel 2021), alongside steady-state economics (Daly 1992), a-growth (van den Bergh and Kallis 2012), Doughnut, circular (Raworth 2017), and wellbeing economies (Trebeck and Williams 2019, Waddock 2021). Specifically, degrowth advocates for a democratically planned, radical transformation of the economy to one that reduces resource and material use and socioeconomic inequalities, while prioritising and hence improving wellbeing. Relative to other similar approaches, Degrowth emphasises that the kinds of reductions required to secure wellbeing for all within planetary boundaries are less likely under a capitalist economy given that they are structurally oriented towards growth (e.g. Kallis et al., 2025, Hickel 2021).

Degrowth approaches agree that for growth to continue it would need to be decoupled from environmental impacts globally, in absolute terms to ensure that planetary boundaries (Steffen et al. 2015) are not transgressed. Degrowth approaches are sceptical that such absolute decoupling can occur at the scale and speed required (Kallis et al., 2025; Hickel and

Kallis, 2020) and hence argue that economies would need to be fundamentally reorganised so that social and ecological objectives can be prioritised beyond growth to ensure people live healthy, flourishing lives (Kallis 2020, Hickel 2021a). Critics often argue that growth is required to improve living standards and wellbeing. In response, Degrowth proponents acknowledge that economic growth can deliver increases in wellbeing and happiness up to a certain point, and that while growth may still be required in many Majority World settings to improve living standards, increased national income in many contexts is no longer associated with gains in wellbeing (Kallis 2020). Moreover, continued growth and trickle-down economics has done virtually nothing to change racialised power inequalities, at a global and local level.

While degrowth receives critical attention as an 'impossible utopia' (e.g. McAfee, 2020), a growing number of contributions make proposals for ways in which it could be promoted through state and civil society-led approaches. Proposals include progressive taxation to promote greater equality and collective sufficiency, divestment from rent and fossil-based practices, debt write offs, rent controls, and a re-evaluation of work practices (Kallis 2020, Hickel 2021b; Savini 2020, Büchs 2021; Koch 2022), complemented by bottom-up experimentations such as urban agriculture, civic energy, and community-led housing that can prefigure non-market, self-organised economies (Barlow et al. 2022; Nelson, 2020; Kallis 2020).

Second, decolonial approaches and movements position themselves against and beyond colonial and settler colonial practices and legacies as forces shaping the past, present and future of places (Gonzalez, 2021). Colonialisation is an historical process of domination, enslavement and conquest that has shaped the world, materially and in terms of power and politics since the age of empires. As a counterpart historical process, decolonialisation is rooted in revolts of indigenous peoples against their oppressors from the 1492 invasion of the Americas onwards (Mignolo, 2011). As an intellectual tradition, decolonialisation represents a fundamental rejection by colonised and indigenous peoples of the European and Western development model. It is grounded in indigenous ways of knowing and understanding, engages Marxist, Fanonian and existentialist forms of analysis, and critiques modernity as synonymous with coloniality (Mignolo, 2011; Quijano, 2000; Walsh and Mignolo, 2018).

Decolonial praxis decentres the Western academy's values around knowledge production in favour of the perspectives of the racially oppressed (Denzin et al., 2008). Central here is not just colonialism as an historical period, but an ongoing and unequal power relation. Quijano (2000) conceptualised the colonality of power to include: a hierarchical scale of racial superiority/inferiority designed by European colonisers; race as a "naturalisation of colonial relations between Europeans and non-Europeans" which therefore prioritises European knowledges (Quijano, 2000, p.535); and the hegemony of Minority World cultural and economic systems, especially market-based capitalist economics.

Key to these debates are the inter-connected relations between colonialism, climate change, nature loss and resource extraction and in what ways policy and practice can be reshaped to address these. Most climate responses suffer from a reductionism focusing on scientific and technical processes of tackling extreme weather events without any tracing to colonialism (Sealey-Huggins, 2017). Bringing colonialism back into the climate debate shifts our attention to two key processes - racial capitalism and racialised climate vulnerability. Vergès (2017) advocates for a rearticulation of the Anthropocene as the Racial Capitalocene, defined not as a blanket referral to all of humanity, but only "to a small subset of humans" (Baldwin and Erickson, 2020: 4). Gonzalez (2021: 115) maintains that racism is not simply 'discrimination' based on race, but a core component of a global system that "subjects growing segments of the world's population to precarity" from climate change wherever they are. Further, while everyone is vulnerable to climate change, those who suffer under racialisation are "particularly susceptible to harm" (Gonzalez, 2021: 118). Racism is carved into the "sacrifice zones of both the fossil fuel economy and emerging green energy economy" (Gonzalez, 2021: 117) especially the violence inflicted on racialised communities by the fossil fuel industry.

Degrowth and decoloniality are deeply interconnected areas of enquiry and point to an interlinked set of historical events as well as present conjectures. Colonialism was one of the key strategies underpinning the economic growth of minority, powerful nations, and economic growth is a deeply uneven phenomenon which established, and perpetuates, the unequal and violent global geopolitical order. Decoloniality as a contemporary process can help us move away from the social imaginary of a growth-focused economy (Varvarousis, 2019). But it is much more than this. Colonialism was a driving force of the imperialist

capitalist economy's growth logic, which persists to this day. A racialised logic has developed to maintain the deeply unequal structural mechanisms of the contemporary global growth economy (Hickel, 2021), not least based on immense resource extraction from the global South to the North. A decolonial perspective reminds us of the immense structural divisions that characterise our world and continually subjects people to lives of misery and oppression on the one hand, and luxury and wealth on the other. This is not just at a global level through unequal trade between nations, but also locally through racialised and precarious labour markets, modern slavery, and the treatment of those seeking asylum.

Degrowth, decoloniality and the doughnut model

How do these approaches relate to the Doughnut model? First, in terms of degrowth, most academic work on Doughnut economics understands it, if not quite as a degrowth, at least as a post-growth oriented concept, which advocates for an economic system that questions the hegemony of economic growth and prioritises social and ecological outcomes (see Crisp et al. 2023; Crowley et al. 2021; Khmara and Kronenberg, 2023; Savini, 2024). However, there are subtleties. Some commentators interpret the Doughnut model as a position of neutrality within green growth debates (e.g. Buser 2024; Drees et al. 2021), while work by Luukkanen et al. (2021) and Saunders & Luukkanen (2022), which apply the Doughnut to countries in the Majority World – Thailand and Cuba – interpret the boundaries of the Doughnut as minimum and maximum levels of economic growth. Raworth has frequently described Doughnut economics as 'agnostic' about growth. Raworth (2017: 245) discusses how the growth agnosticism position may appear like a cop out and explains that it does "not mean simply not caring whether GDP growth is coming or not" (ibid.). Instead, Raworth defines growth agnostic economies as those that are regenerative and redistributive by design. Growth agnosticism therefore refers here to growth independence, which can be interpreted at least as a post-growth position.

Raworth (2017: 29) has also clearly positioned herself beyond growth in relation to the green growth debate, where she states that there is no Environmental Kuznet's Curve according to which growth will eventually lead to more environmentally friendly societies. Raworth (2016) also expresses her scepticism about the feasibility of decoupling GDP growth from resource impacts. Moreover, Raworth (2017: 45) has also stated that

“‘Doughnut economics’ means that the shape of progress is not ever-rising growth, it is actually in balance. It is meeting the needs of all people within the means of a living planet”. She also explains that growth independence is required because high growth rates of the mid-20th century have been fuelled by access to cheap fossil fuels, an option that is no longer feasible. Nevertheless, Raworth (2017) does acknowledge, as do many degrowth proponents, that growth may still be required in some of the Majority World to achieve needs satisfaction.

The choice to use the term ‘growth agnosticism’ rather than degrowth therefore largely seems to be pragmatic, designed to make the Doughnut model appealing to a broad audience. For instance, the ‘agnostic’ position enables Raworth to state that “it is not possible to predict definitively one way or the other whether GDP will go up or down in high-income countries as they create regenerative and distributive economies” (2017: 267), which may make more mainstream policymakers and practitioners more open to Doughnut economics. In one of her blogs, Raworth (2015) has explained which downsides she sees with using the term degrowth: the impreciseness of the term; and, more importantly, the problem that the term degrowth still reminds people of growth. Based on Lakoff (2004), Raworth argues that debates that still use terms associated with what we seek to move away from are less likely to bring about a change in thinking and action. Usefully, Thompson et al. (2024) outline that uses of the Doughnut in Amsterdam’s circular strategy represent a crossroads between more post-capitalist experimentation and further embedding capital accumulation. The point remains that no matter what its formal relation to degrowth, the Doughnut model is a rich area of activity that opens an exploration of what could come after growth. Indeed, Schmid’s (2025) work points to the potential for the Doughnut model to be used to hold up to scrutiny what local growth means in practice.

Decoloniality has a much less clear relationship to Doughnut economics. It is important to note that while well intentioned and incredibly useful, the Doughnut model originates from a Western intellectual and NGO paradigm. The Doughnut itself is a visual metaphor grounded in norms that originate from and resonate in a particular part of the world. The doughnut with a hole, for example, is more iconic of North America and Europe than doughnuts in other parts of the world. This is not to undermine its strength, but to point to the potential to enrich the Doughnut model through understandings, meanings and

language from outside the visual vocabulary and intellectual canon of the Minority World. This work has already started. Doughnut practitioners in China, for example, highlight that a more accurate representation is the peace button which represents a symbol of harmony between humans and nature (Wildound, 2024), and indigenous Māori reimaginings of the doughnut draw as a spiral metaphor (Shareef and Boasa-Dean, 2020). Moreover, one core reference point for the doughnut's social dimensions – the SDGs – has come under criticism for representing a universalist agenda that upholds Western and neoliberal ideologies and inadvertently reinforce unequal power dynamics and perpetuate neo-colonial structures in the present (Arora-Jonson, 2023; Ziai, 2016). This is not to undermine the utility of the SDGs, but to encourage criticality as to what further ideas and insights would help to decolonise the Doughnut's foundational concepts.

Raworth's 'Doughnut Economics' book does not directly mention decolonisation or colonialism, but it emphasises that we need to "consider ourselves as part of a global community too, connected in a multi-layered but interdependent economy" (2017: 198). The 'Doughnut unrolled' handbook (2022) more explicitly adopts a decolonisation lens. It states (p10) that "the unequal power relations between countries deserve explicit attention, having been built upon the legacies of colonialism". The guidance on the global-social lens recommends that users formulate targets for global-social outcomes based on the social SDGs, and to measure the impacts of actions in one place on people globally through suitable indicators. A first step to do so is to identify the routes through which these impacts play out, and the guidance mentions as examples global supply chains, migration policies, international trade regulations, lifestyle patterns, cultural connections, as well as policy regimes, including their "colonial legacies" (ibid: 34-35).

To date, there is no in-depth academic work that discusses the relationship between the Doughnut model and de/colonisation. However, there is critical commentary linking decolonial approaches to the various dimensions that the Doughnut model draws upon. For example, Krauss et al. (2022) explore how a decolonial lens shows how various SDGs are falling short of transforming our world, while in relation to planetary boundaries Sultana (2023) makes the crucial point of 'who gets to set the boundaries, whose interests they serve, why the breaches occur, and how the burdens of staying within these boundaries are shared'. Work by Lotfi et al. (2021) is the only one we identified that applies the Doughnut

model to examine how supply chains affect workers' rights but without directly referring to global justice or decolonisation frameworks. References to decoloniality remain relatively broad, for instance, Rogers et al. (2024: 137) highlight that the 'global' dimension of the Doughnut portrait method "might resonate particularly in European cities as some begin to face up to the histories of colonialism and extractivism that have fuelled their growth"; and Turner & Willis (2022) also argue that the Doughnut method can help to generate ideas rooted in ideas of global justice and priorities from the Majority World (see also Wahlund and Hansen, 2022). Overall, then, the Doughnut model does align with much decolonial thinking, but additional work is necessary to strengthen these links.

Enhancing Doughnut data portraits through degrowth and decolonial approaches

In this section we ask: given the portrait is now established as a useful approach for transformative local action, and (de)growth and (de)coloniality are accepted concepts in that portrait method, how can it be further strengthened by more directly taking into account perspectives and lessons from the traditions of degrowth and decolonisation? Moreover, what work has stated this journey, and what does this practically mean for local actors? Below, based on a review of a selection of Doughnut data portraits completed to date and associated critical literature, we explore what degrowth and decoloniality means for each of the four lenses.

Local social thriving

First, the local-social lens explores whether people in that portrait location lead thriving lives. Using this lens to bring degrowth and decoloniality into the conversation about local thriving is complex, but necessary for those seeking lasting gains through the Doughnut model. This is particularly important given that while local growth coalitions do focus on sustainability and liveability, they still operate in a business-aligned paradigm, where surplus value is extracted through globalised corporate-led supply chains, which also generate social and spatial disparities (Jessop, 2002; Brenner and Theodore 2002; Xue and Wojciech, 2022; Kirkpatrick and Smith (2011). In this regard, place based growth strategies benefit from, and perpetuate, (neo)colonial division and expansion, resource extraction, dispossession and the enclosure of land and communities across the Majority World (Linebaugh, 2014).

In terms of implementation, dimensions for analysis are plentiful and drawn from various United Nations SDGs covering a range of key issues such as housing, health, income, participation, equality and education. Unsurprisingly, portraits which benchmark these dimensions against local indicators find a range of deficits and reveal areas where improvements are urgently required. While the local-social lens is a necessary starting point for increasing the potential for local thriving, degrowth and decolonial perspectives highlight opportunities to take debate and action further. Promisingly, those creating portraits have flexibility over the range of dimensions that can be selected from the SDGs to gauge people's ability to thrive. The opportunity for those creating Doughnut portraits is to generate discussion on the complex relations between growth and wellbeing, especially in lower income contexts in the Minority and Majority World. For example, while a focus on economic growth might be attractive as it can appear to create improvements in wellbeing in the short term, this does not necessarily prove a causal relationship between growth and wellbeing (Llena-Nozal et al., 2019). Ultimately, longer lasting and widespread wellbeing gains emerge from creating fairer societies that distribute resources (Wilkinson and Pickett, 2009).

Degrowth, therefore, changes the nature of the debate on what constitutes broad and longer-term local thriving, and in turn the range of dimensions that are selected to gauge this. These would go beyond basic measures of, for example, increases in wages or employment levels, and begin to pull out the specific characteristics of the money economy and employment conditions and how they impact wellbeing. Moreover, local social analysis needs to identify and critique green, or inclusive growth, which contain contradictions and limitations, not least through an overconfidence by the local state to actually shape or direct the benefits of growth (Lee, 2019). Through green growth approaches, local social thriving is framed within attempts to both find an advantageous place within a globalised, consumerist expansionist and extractivist economy, while at the same time capturing and sharing social benefit from this.

A degrowth approach would offer insights into local social indicators in ways that lean towards maximising wellbeing; for example, work, income, housing and energy indicators can be used to gauge sufficient and affordable minimums and quality of experience rather than simply access or supply. Fundamentally, from a degrowth perspective avoiding

undershoot in all areas of social life – be it access to energy and housing, or political representation, freedom from violence and oppression – becomes a key objective rather than a focus on growth. Doughnut portraits can be strengthened by emphasising the level of decoupling of growth from ecological harm in the local economy, not just in absolute terms but in terms of ‘sufficient decoupling’ in line with Paris climate targets (Warlenius, 2023). Here, the policy focus shifts to building a social or foundational economy (Barnthaler et al., 2021; Froud et al., 2018), and associated provisioning systems (e.g. Fanning et al. 2020) through a range of measures: universal basic services, community wealth building approaches, community and co-operative businesses, local currencies, universal basic income, four-day week trials, local regulations to distribute and dezone land and assets, and placing social, racial and climate justice, and the lived experience of actively marginalised groups at the heart of local strategies (Coote and Percy, 2020; Foundational Economy Collective, 2018; Büchs, 2021; Savini, 2024; Lorenzen and Drew, 2023).

Further, Doughnut portraits could sensibly take stock and assess the intensity of corporate activity, including public sector disposals and private sector acquisition of land and assets, which would both reflect degrowth and decolonial concerns around ownership by global corporations. If we regard degrowth as a phase of planned reduction of energy and material throughput to bring consumption within ecological limits, incorporating measures of local over-consumption and commodification will be central especially in terms of restraining excess or luxury consumption that is driving social division, resource use and carbon emissions (Hickel, 2021a). The further challenge is to identify the ways that (neo)colonial practices and experiences operate at the local level. A climate and racial justice lens is central here in terms of, for example, accounting for racialised violence, stop and search figures, levels of hate crime, migration and asylum support, neighbourhood integration between different ethnic groups, or racialised inequalities in the labour market. It would also involve identifying local trauma from extended family members facing climate impacts abroad. Localising the global story of colonisation is a crucial, but potentially overwhelming, task. The local social lens has the power to tell that story, especially through the experiences of those who face power asymmetries and racialised harm, and the local impacts of global supply chains which maintain unequal terms of global trade, social inequalities and ecological harms. Decolonial approaches at the local level also helps us uncover how

colonial practices operate – through displacement from gentrification, urban growth and the extractivist industries. As Wolf (1982) commented there are ‘people without history’ everywhere.

To date, work on the local social lens in the portraits we looked at has largely followed the DEAL methodology and has not directly drawn on a vocabulary of degrowth or decoloniality. This is driven by both pragmatism and a desire to avoid division and misunderstanding in the early phase of the use of the Doughnut model as a tool for place transformation. As Goodwin (2021, p37) pointed out: ‘Tribalism and fragmentation across suburbs, communities, regions and interest groups was spurred on by ‘militant’ viewpoints such as degrowth is the only answer’. In all the portraits we reviewed, including our work in Leeds (2022), SDG goals were used as the dimensions for local social thriving due to a desire to create an acceptable starting point for a broad group of stakeholders. However, an exciting and expanded range of indicators reflecting the discussion above could start to be used to critique, and propose alternatives to, local growth strategies and colonial structures of power.

Local-ecological thriving

The second local-ecological lens focuses on the quality and functionality of local ecosystems and how they may be managed to best support thriving lives. The Doughnut portrait method focuses on four key ecosystems as outlined in the Ecosystems Services Millennium Assessment (Alcamo et al., 2003): water (providing access to clean water and managing flood water), land (its role in carbon sequestration, supporting biodiversity and harvesting energy), air (purifying air and regulating temperature) and matter (recycling waste). Dimensions assess how each ecosystem provides services in terms of, for example, capacity for renewables, food or tree planting, but also their ability to provide local resilience and safety through flood management, air quality and carbon sequestration. Compared to the local-social lens, there is typically less data available to support analysis for this lens, which reflects less detailed ecological policy making at the local level.

Incorporating assessments of local ecological systems into debates on decoloniality and degrowth is again a complex, unfamiliar but essential task if rapid headway is to be made on

reversing habitat and species collapse. Usefully, there is longstanding work that critiques the impact of place-based growth on nature loss and depletion (Lent, 2023). Despite a green turn in local policy and practice, place-based development continues to have negative impacts in terms of encroachment of human landscapes into wild places, as well as a deterioration of local air, soil and water ecosystems (Garretsen et al., 2025). Doughnut portraits already grasp this critique, and have documented rather sobering levels of local ecological overshoot. Degrowth work would take this in new directions through exploring, for example, how greater municipal, community and local ownership can in turn create nature positive solutions. The crucial aspect is that while natural assets remain externally controlled, they will be seen as commodities to be exploited. But more fundamentally, the push towards the degradation of local ecological systems is part of a much longer, broader colonial and growth mindset, in which biological and non-human species are exteriorised and inferiorised as something to be contained, controlled and placed at the service of human development (Plumwood, 1993).

Faced with the rapid degradation of local ecosystems a more radical shift in emphasis is required based on repositioning natural species and habitats as a central feature of local wellbeing. Doughnut portraits are well positioned to do this through promoting elements such as circular, nature-based solutions, rewilding, biomimicry and biophilia (Seddon, 2022). Local policy and practice needs to reflect the deep inter-connections and co-dependencies between humans and non-humans (Eisenstein 2018), learning from indigenous knowledge and practice on local conservation, and the deep social inequalities in terms of access to nature. These insights would foreground indicators around habitat and species loss, policies that promote the legal personhood of nature (Cavaliere 2001), and uneven ecological harms and access to ecosystems. Many inspiring examples already exist where corporations have given a democratic voice to nature, and this can be replicated in local decision making (ICAEW, 2024). Place redesign can focus on rewilding as if they are home to an interconnected web of species, while rezoning can prioritise the idea of Half-Earth (Wilson 2016) and the Montreal Biodiversity Protocol priority of 30 x 30. But more fundamentally, it would require reskilling and support for place makers to foreground nature, not just for its utility value but from a deeper connection to the intrinsic value of nature.

The portraits we reviewed largely reflected the dimensions presented in the DEAL Doughnut method around the health and functioning of local ecological systems. This is a useful starting point, as even this perspective opens up critical debates about, for example, the level of biodiversity, renewable energy generation or the health of soil, air and water systems. Nevertheless, the opportunity is significant, and increasingly urgent, to incorporate a broader set of dimensions around, for example the uneven access to nature, multi-species ethics and rights, the legal personhood of nature, rewilding and biophilic initiatives. The Sydney doughnut for example stated that ‘a truly regenerative Sydney centres First Nations wisdom and an understanding of Natural Law’ (Regen Sydney, 2022: 9).

Global-social responsibilities

Third, the global-social lens focuses on the impacts a locality has on the wellbeing of people worldwide. It brings in a broader geography of responsibility for those not physically present, but impacted by, local activity (Massey, 2004). Typically, this lens focuses on the flow of goods and services in global supply chains to assess the various extra-local social harms that result from local patterns of consumption and lifestyle. This supply chain analysis follows the standard method for quantifying the impacts through a ‘footprint’ based upon a locality’s consumption (Wiedmann and Lenzen, 2018) which trace and aggregate the impacts of international trade flows occurring throughout supply chains (mine, factory, farm, transport, machinery, chemicals, etc.). Using the ‘social footprint’ literature (Wiedmann and Lenzen, 2018) the global impacts of consumption, especially through labour rights and resource extraction (Hickel et al., 2024), occurring in a particular place can be assessed by downscaling existing data, matched to SDGs on issues such as labour rights, land acquisitions, pollution, forced labour or workplace deaths.

The global-social lens does intuitively address decolonial and degrowth issues, and hence the opportunity is ripe for analytical and practical deepening. Fundamentally, uncovering and ultimately reversing the harm done through global supply chains is a central part of an economy that aims towards sufficiency and wellbeing rather than growth. Moreover, decolonisation encourages us to frame these supply chains not as reflections of an efficient modern global economy, but as a continuation of longer historical trends of an extractivist and (neo)colonial economy. Ultimately, there are complexities here as limiting global supply

chains can reduce opportunities for economic activity in the Majority World. The short-term reductions in wellbeing that this might create need to be explored in Doughnut approaches, advocating for compensatory mechanism such as global solidarity trade networks and macro-economic incentives such as financial transfers, debt write-downs, fairer global terms of trade and climate reparation payments.

Deepening our understanding of global social thriving is made more difficult by the absence of internationally agreed safe boundaries. However, given the deeply unequal nature of the global economy, we can be confident that most activities in medium and high-income contexts linked to global consumer supply chains would be inconsistent with supporting people worldwide to lead thriving lives. This highlights the significant global responsibilities that local leaders and policy makers need to acknowledge and act upon to orient their local development models within the Doughnut. What is clear is that places with significant levels of consumerism derived from global supply chains are not only driving ecosystem degradation at local and global levels, but are connected to human rights issues related to poor labour conditions, damage to health, land displacement and undermining community development elsewhere on the globe (Simas et al., 2014).

Many localities have started to think through these issues, for example, by using the SDGs to guide local policy. However, much more radical thinking and action is required to unpick the harms driven by global supply chains. Key issues include how to use the planning system to constrain nodes of global consumerism, such as retail outlets and distribution hubs in a way that does not undermine local social thriving in the short term. More fundamentally, decoloniality points to ethical practices that can be adopted to both disrupt and decentre local power and renews a sense of global responsibility. Reparations charters, loss and damage funds, and promoting under-represented groups into decision making roles through citizen assemblies can apply these approaches in real terms.

In the portraits we reviewed, this lens was the least developed and most speculative, but usefully this opens up scope to explore degrowth and decolonial approaches. Many portraits including Amsterdam, Portland, Glasgow and Philadelphia have focused on outlining in general terms the harms associated with global trade and supply chains, highlighting a myriad of shortfalls including exploitative worker conditions through forced

labour, child labour, dangerous working conditions, malnutrition among factory workers, and exposure to violence. Focusing on these supply chain issues highlights critical issues. For example, in the Leeds Doughnut (2022), we chose six dimensions based on SDGs to downscale and attribute global supply chain impacts from consumption in that locality. For one dimension, downscaling data from Simas et al. (2014), we estimated there were over 21,000 child labourers involved in global supply chains supporting Leeds' consumption in 2018. The Barcelona portrait undertook innovative work to push analysis in this lens forward, exploring life conditions in countries where materials used in Spain could be traced to. Moreover, Lemos (2022) applied decolonial theory for the global social lens of the Barcelona Doughnut foregrounding the historical legacy of North-South colonial relations and how they continue to shape power imbalances in the city.

Global ecological boundaries

The final lens considers global ecological impacts and responsibilities and the extent to which a place exceeds safe global planetary boundaries as identified by Rockström et al., (2009). O'Neill et al. (2018) streamlined this work to create a set of seven global-ecological indicators – climate change, ocean acidification, land use, fertilizer use (phosphorous and nitrogen), freshwater withdrawals, waste generation and biodiversity loss (with air pollution and ozone-depletion not yet quantified). Each boundary can be downscaled and expressed as a maximum impact per person per year, assuming an equal, global, per-capita allocation. No local place actively sets targets for these dimensions or creates policy to avoid overshoot. The task is both too complex to assess and respond to, and makes more sense at the national scale. But it is fair to assume most higher income localities in the Minority World overshoots a safe ecological ceiling in all these. Importantly, overshoot refers to the average impact of a typical resident, but these impacts vary considerably with affluence (Chancel 2022), creating a deeply uneven geography of responsibility and impact within not just between nations states.

A decolonial and degrowth approach offers future directions for the global ecological lens. For example, there is a consensus in Doughnut thinking on the need to bring places back within safe planetary boundaries, especially in terms of per capita carbon emissions resulting from luxury emissions. It is now clear that planetary boundaries are not just being

exceeded, they are being extensively overshoot, and that this can be attributed to high consumption lifestyles, and associated high levels of material and energy use, amongst higher income residents in medium and high-income contexts (Hickel and Sullivan, 2024). Therefore, there needs to be more scrutiny of the role of a planned degrowth phase to achieve this recalibration of life within these safe boundaries.

The key task for moving towards the safe and just space of the Doughnut is what local policy and planning needs to look like if it respects the real limits of the Earth's systems. This takes us into the territory of degrowth and decolonial approaches in terms of a more localised and circular economy within biophysical limits. However, while 2018 onwards saw a wave of climate emergency declarations at the local state level, hard work remains to accelerate change (Rudde et al., 2021), especially reflecting the radical agenda put out by the UN's IPCC. In particular, the oft-cited emergency mode of local authorities needs connecting with tangible international action, for example through action on climate migrants, amplifying the voices of marginalised voices and nations, and taking an active part in international networks of solidarity and cooperation with places at the forefront of extreme weather-related emergencies.

The city portraits we reviewed have done detailed work on this global-ecological lens using the planetary boundaries framework, mainly because of the availability of existing data sets. Most localities follow the dominant national and global 'overshoot' picture with their share of total carbon emissions, land impacts and fertiliser use exceeding safe boundaries. Taking this further through decolonial and degrowth perspectives, one of the key messages of this lens is to embed climate justice, especially in terms of distributional impacts which are not generated or shared equally. While inequality is a feature across all the four lenses, it is particularly pronounced in the global-ecological lens. Because of greater consumption, production and travel, higher income people and places drive higher levels of ecological and climate harm. This is especially the case when we consider carbon emissions. For example, what we found in the Leeds Doughnut (2022) was that while the average income group exceeded safe levels of carbon emissions by a factor of five, the highest 20 percent of earners exceed it by eleven times. If the average carbon footprint of the global population were the same as the richest 20 percent of Leeds residents, a safe carbon budget would be exceeded in three years. However, we also found that even the lowest 20 percent of

earners in Leeds exceeded safe levels of carbon use by three times. There are very few aspects of life in high income countries that are within the safe carbon space of the Doughnut. So, while redistribution and addressing social and spatial inequalities has to be part of place policy, this also means lower levels of consumption overall.

Discussion and Conclusion

The severity of the polycrisis we are facing is difficult to comprehend and assess, but it is our contention that degrowth and decolonial approaches can offer further insights for this task. Given the Doughnut portrait method is already productive terrain for critiquing the impacts of colonialism and growth, there is further potential for exploring what degrowth and decolonial ideas mean as part of local strategies for change. In Table 1, we summarise some of the key insights and possible interventions/associated indicators across the four lenses.

Table 1. Degrowth and decolonisation insights and interventions for the Doughnut portrait method

In summary: for the local social lens, degrowth could focus analysis on creating a wellbeing economy and associated provisioning systems that can support equitable needs satisfaction in a planned phase of degrowth, while decoloniality can highlight and assess how (neo)colonialism continues to shape places in the present, especially through racialised injustices and unequal corporate and state-based power. For the local-ecological lens, a degrowth and decolonial approach could foreground the intrinsic value of nature, multi-species relations, uneven access to nature, the legal personhood of nature and the use of biomimetic design solutions to think through how to reconceptualise and rebalance human-nature relations where nature is a partner not just a resource, ecological limits are respected, and sufficiency is promoted over excess. For the global social lens, a degrowth and decolonial perspective can highlight the role of supply chains that service life in particular localities but also create global social and ecological harms especially through an uneven and racialised extractive global economy that is driving excess rather than wellbeing. Finally, for the global-ecological lens our approaches can highlight that planetary boundaries are exceeded in a growing economy and importantly that exceeding boundaries has longer roots in a globally uneven colonial economy that continues to the present day.

We want to conclude by raising two opportunity areas. The first issue relates to scale and connections. The Doughnut four lenses approach emphasises the explanatory power of systems thinking about how decoloniality and degrowth exists in inter-connected ways across the four lenses. What we stress is to avoid seeing degrowth as merely an economic issue or decoloniality as a global issue. Both must permeate thinking and action across all four lenses. Moreover, the Doughnut perspective points to the need for multi-scalar policy interventions – where local aspirations are dependent on changes in national and global responsibilities. Without meaningful national and global action, all localities will in some way have a less safe and just future.

The second issue relates to strategies for change. Ultimately, the dilemma for Doughnut practitioners is the extent to which data portraits are seen as more centrist, and hence accepted, methods for change, or as politically radical and more fringe, activist tools. These dilemmas will play out differently in different places. For example, in some iterations those using it may aim for inclusion and diversity, but in others it may aim to create anti-racist, anti-oppressive or even anti-capitalist dynamics. Ultimately, these differences may represent a false binary; any use of the Doughnut will mobilise minimalist and maximalist versions depending on timing, context and audience. While growth and colonial agnosticism can be a useful entry point to bring people together, given the kinds of issues raised by Doughnut portrait work and the context of a growing polycrisis, there are huge opportunities to be more explicit about what degrowth and decolonial interventions are, how to assess them, and what benefits they can bring.

Not only do decolonial and degrowth approaches offer insights into ways the Doughnut model could advance place making debates and interventions, they also offer insights for how we undertake research – decentring research from solely relying on formal data and academic knowledge, to empowering a broader cross section of lived experiences. The broader potential of the Doughnut portrait, then, is not just to highlight this or that indicator, or suggest this or that project or policy suggestion. It can act as a valuable tool in a broader movement repertoire that, combined, extends local debate towards decolonialism and degrowth. Indeed, it is our hope that it can support new kinds of local practitioners, policy makers and researchers, that blend more formal institutional personas with more movement style insights. Ultimately, degrowth and decolonial approaches further decentres

the 'economic' as a key determinant of what constitutes local strategy. This could be their most lasting contribution – to nurture broader debates and action in terms of what the economy could be beyond the dominant growth and colonial mindset.

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Table 1. Degrowth and decolonisation insights and interventions for the Doughnut portrait method

Lens	Degrowth and decolonial insight	Potential interventions/indicators
Local-Social	Degrowth requires a wellbeing economy and associated provisioning systems at the heart of place policy and strategy	Incorporate assessment of provisioning/wellbeing economies such as essential services, co-operatives, community businesses, 4 day week and UBI trials, measures to limit excess consumption, use of development indices beyond GDP, decommodifying land through municipal and community ownership of assets and land through land trusts, relaxing zoning, restricting development sprawl; community led industrial strategies and employment hubs; restricting decentralised retail/industry zones; community housing/co-operatives; rent controls; restricting private transport
	Decolonisation requires acknowledging how (neo)colonialism continues to shape place strategy and policy and ability to thrive locally	Foreground and assess aspects of local climate and racial justice through migrants/asylum rights, targeting race crimes, solidarity and twinning activity, global solidarity trading, dispossession, evictions and displacement.
Local-Ecological	Degrowth promotes the intrinsic value of natural systems and sufficiency rather than excess	Support intrinsic value of nature within policy and planning and initiatives such as rewilding and biophilic places

	Decolonisation requires reconceptualising and rebalancing human-nature relations	Promoting multi-species ethics, nature for natures sake, legal personhood of nature
Global-Social	Degrowth highlights the role of supply chains in creating global harm	Assess impacts of global supply chains from local consumption across child and forced labour, workplace-related illness, injuries, and fatalities, hunger, air pollution; assess and profile global impacts of locally based firms
	Global harm is perpetuated by an uneven and racialised extractive global economy	Local activity in international solidarity, global twinning and allyship, reparation charters, documenting global harms. Challenging points of production and extractivism
Global-Ecological	Planetary boundaries will be exceeded in a growing economy, with GHGs resulting from excess/luxury of particular concern	Prioritise localised and circular economy initiatives and a planned reduction of excess consumption and material use, focus on reducing social/spatial inequalities, distribution policies
	Exceeding planetary boundaries has longer roots in a globally uneven colonial economy	International solidarity with those facing climate breakdown, debt, extractivist industries and power asymmetries, advocacy at international forums, support for climate refugees

ⁱ Available full data portraits that we reviewed included: Amsterdam, Brussels, Copenhagen, Barcelona, Leeds, Oxfordshire, Cornwall, Cambridge, Portland, Geneva, Glasgow, Sydney and Melbourne. See DEAL (2021).