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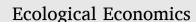
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What does degrowth do in/to empirical research? Methodological deliberations on placing degrowth 'in the world'

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ABSTRACT

This paper investigates how the notion of degrowth directs our focus as researchers, which leads us to deliberate on the consequences of empirically placing degrowth 'in the world.' We propose to rethink methodological questions about how phenomena are put into relation with notions of degrowth (or not) – and our own role as researchers in this process. Mobilizing the concept of diffraction, we argue that careful attention must be paid to what notions of 'degrowth' *do* in/to our research practices, including their role in researchers' selecting, thinking and talking about social phenomena – as well as the material and discursive practices encountered in fieldwork. This is illustrated through engagement with two studies, which undertook research on a housing community in Manchester (United Kingdom) and eco-social entrepreneurs in Stuttgart (Germany). Analyzing these cases with a diffractive lens, we show how an attunement to difference allows for attention to be paid to the 'translation' and 'operationalization' of degrowth in (research) practice. This orientation, we suggest, can help scholars with the inevitable negotiations intrinsic to the choice of how and whether to engage with and understand degrowth in empirical research.

1. Introduction

An increasing number of studies are empirically researching and identifying social phenomena through the lens of degrowth (Pansera and Owen, 2018; Burkhart et al., 2020). The translation of degrowth - a concept that is foremost used by academics to discuss systemic processes - into empirical research, however, is not straightforward. There is no definite relation between specific practices or organizations and the 'critique of the dogma of more' (Kallis, 2018, p. vii) - in particular economic growth - that is encapsulated by the term degrowth. And yet, degrowth is much more than a macro-level concept. For many, it is a lens to look through when studying practices and organizations in the world, particularly when investigating their alignment with the ideas and principles around which notions of degrowth¹ have formed, such as global socioecological justice, a good life for all within planetary boundaries, and a radical restructuring to create economic, political, and social institutions and infrastructures that do not depend on economic growth (Schmelzer et al., 2022).

These ideas and principles are as broad and pluralistic as notions of

degrowth themselves, which form a multiple, non-totalizing project that encompasses diverse worldviews, practices, and strategies that work towards 'fostering social-ecological transformation and are meaningful only as part of larger joint efforts with allied movements' (Kothari et al., 2019). Indeed, any specific coordinates for 'locating' degrowth remain abstract and difficult to relate to specific empirical phenomena. In this context, degrowth scholars take a two-pronged approach: on the one hand, some discuss transforming social relations on a systemic level while also pointing to a rich variety of organizations, projects, and initiatives that potentially put these into practice in the here and now (Burkhart et al., 2020). On the other hand, degrowth has also been integrated with 'allied concepts,' such as the notions of commons, care, and simplicity (D'Alisa et al., 2015), to help make connections to realworld practices. In both cases, a balancing act must be achieved between an abstract and pluralistic orientation and the already-existing world, leading some scholars to rely on descriptors like 'degrowth-oriented' (Vetter, 2018) or 'degrowth-minded' (Lloveras et al., 2018; 2021).

Despite the increasing prevalence of efforts to link empirical

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¹ In the following, we use the singular when we refer to the (heterogeneous) field of research and practice that has formed around degrowth, while speaking of 'notions of degrowth' in the plural helps us to foreground the variety of approaches and perspectives that coalesce around the term.

phenomena with degrowth, to date little consideration has been given to the process of utilizing 'degrowth' in research practices. How do notions of degrowth direct our attention as researchers? When types of social phenomena are identified as degrowth-related, how is this accomplished? Who can make claims about what constitutes degrowth 'in the world' and what are the consequences thereof? To respond to these questions, this paper critically reexamines the mobilization of degrowth in two empirical projects – a study of a housing community in Manchester (United Kingdom) and a study of eco-social entrepreneurs in Stuttgart (Germany) – that we conducted, where methodological deliberations were not at the center.

We suggest that degrowth is a 'disturbing' element of methodologies: it interrupts or interferes with the research process. To conceptualize this, we use the notion of 'diffraction' to rethink what degrowth does to research and how degrowth participates in researching. It is important to distinguish diffraction from the more widely reproduced practice of reflection: drawing on Haraway (1992), Barad (2007:29) describes how, 'whereas reflection is about mirroring and sameness, diffraction attends to patterns of difference.' In this way, 'diffraction involves reading insights through one another in ways that help illuminate differences as they emerge: how different differences get made, what gets excluded, and how those exclusions matter' (ibid., p.30). We therefore discuss methodologies for researching (with) degrowth in two empirical cases through our differing interests and subjectivities, our distinct empirical research contexts and theoretical orientations, and the other variable material conditions which come together in qualitative social science. Key to this discussion are multiple practices: observing and participating in social contexts; listening and recording the sayings, doings, and relatings (e.g. Schatzki, 2012) of research participants; conceptualizing phenomena by analyzing and applying concepts; relying on participants' ideas; thinking and writing; and more besides. We scrutinize our own research in these terms, seeking to understand how degrowth directs our attention and becomes explicit (or not), as well as its effects on researchers, those researched, and the process of researching.

By unveiling our own research practices with regards to degrowth, we hope that this paper contributes to better preparing scholars for the inevitable negotiations intrinsic to the working with degrowth in the context of social science research. Section 2, next, provides the paper's contextual backdrop, tracing the use of degrowth in academic literature, common definitions, and phenomena identified as degrowth-oriented. Section 3, then, proposes diffraction as a means for answering the question: what becomes visible when empirical inquiry sharing an interest in degrowth is attuned to the differences in our methodological approaches, our selves, our findings, and the social phenomena we studied? Subsequently, Section 4 examines the methodological work of grappling with degrowth in two empirical cases, which each in their own way required navigating and negotiating empirical contexts in terms of degrowth. Section 5 returns to the notion of diffraction, showing how this compels a different vantage on our empirical research and discussing processes of translation and operationalization that become visible as a result. The paper closes with several implications of our research, which together serve as an invitation for scholars to critically examine the differences intrinsic to researching degrowth in empirical phenomena.

2. Degrowth this....Degrowth that...

Degrowth scholarship starts from a challenging point of departure: while ample signs are pointing towards the irreconcilability of a further increase in GDP with ecological integrity and social justice, economic growth remains the top politico-economic priority. As a consequence, the momentousness of the 'degrowth hypothesis' – that a radical political and economic restructuring to reduce resource and energy use is *necessary, desirable, and possible* (Kallis et al., 2018) – outstrips its actual empirical implementation many times over. Writings on degrowth, therefore, often engage in foundational research, developing empirical

and theoretical arguments on the limits to growth and questioning the usefulness of measuring social progress in terms of the aggregated value of produced goods and services (Victor, 2008; Jackson, 2017). This covers a large area of inquiry: while some early degrowth scholars emphasized the conditions for social change (e.g. Fournier, 2008), the close affiliation of degrowth with ecological economics led to a strong focus on lowering material throughput in an equitable way (Kallis et al., 2018).

At the same time, a growing body of empirical studies engage with actually existing phenomena and organizations that somehow reflect ideas and principles that resonate with degrowth – if often only in partial and contradictory ways (Schmid, 2021). Degrowth scholars, thus, study the multiplicity of existing initiatives, projects, and activities that resonate with the kind of economic relations and institutions discussed under the umbrella of degrowth. In doing so, they explore the diverse practices that occur alongside, within, against, and amongst the prevailing growth paradigm (Gibson-Graham, 2006). Often-cited examples are community-led initiatives such as community-supported agriculture schemes (Bloemmen et al., 2015), cohousing projects (Lietaert, 2010), or social and common-good oriented enterprises (Johanisova et al., 2013; Nesterova, 2021).

Empirical research with degrowth thus poses several challenges. For obvious reasons, degrowth scholars are often drawn to intentional and voluntaristic examples – projects and organizations that take a deliberate orientation counter to and beyond mainstream economic and political bearings. These undertakings, explicitly addressing and promoting social and ecological priorities, are seen to resonate with the orientations of degrowth. This inclination, however, potentially overlooks or even discounts less conspicuous and 'quiet' (Smith and Jehlička, 2013) forms of needs-focused arrangements and practices such as everyday solidarity, allotment gardening, and neighborhood mutual aid (which is not to say that these examples are entirely absent from the degrowth literature, see for instance Vandeventer et al., 2023). Arguably, these foundational investigations and a whole host of other-thanfinancial-profit-oriented provisioning systems provide key pieces in the degrowth puzzle.

Whether their orientation away from growth-based practices and arrangements is voluntary, quiet, or accidental, such undertakings are not simply micro-realizations of degrowth imaginaries. More often than not, these projects are accompanied with contradictions and ambiguities, evading neat categorizations. Some degrowth scholars further dissect these phenomena, focusing on concrete degrowth 'elements' (Nesterova, 2020) or degrowth 'practices' (Schmid, 2020); discussing how specific arrangements 'prefigure' potential degrowth futures (Van der Woude, 2021); or exploring the hybridity of growth/degrowth formations (Boonstra and Joosse, 2013). Here, we are less interested in developing an argument about what makes organizations or parts thereof (e.g. elements, practices) 'degrowth,' but rather in the consequences of such efforts to empirically locate degrowth 'in the world' (or the failure/reluctance to do so). Our central contention, elaborated next, is that connections between real-world practices and the concept of degrowth emerge not only through the already-existing world, but also through researchers' own gaze, argumentation, and examinations of the world, requiring a closer look at research practices themselves (Demmer and Hummel, 2017; Vandeventer and Lloveras, 2021). Focusing on method, the subsequent sections set out to address how degrowth becomes enrolled in research by utilizing the notion of diffraction, before applying a diffractive lens to two degrowth-related case studies.

3. Diffraction and degrowth research

To investigate how we methodologically navigated the question of degrowth in our research, we draw on the concept of diffraction (Barad, 2007), which is particularly attuned to difference – in our approaches, our selves, our findings, and the social phenomena we studied. To be certain, a shared degrowth sensibility motivated both empirical studies

we draw on below. But, by re-turning to our case studies through diffraction, we aim to (re)examine what notions of 'degrowth' did in and to our research through a contrasting discussion of our experiences and practices conducting fieldwork.

We conceptualize the research process as effecting methodological 'cuts, that is, draw[ing] different distinctions delineating the "measured object" from the "measuring instrument" (Barad, 2003:816, f21). Seen this way, research objects – degrowth-related phenomena – are contingent on the very act of research itself, including the chosen analytical approach, a project's situatedness within existing debates, and local researching practices. However, while these point to the ways differences are articulated through discourse, diffraction also pursues recognition of the materiality underpinning social phenomena.

Thrift (2007:77) suggests that any argument for the social sciences' ability to accurately represent reality has a 'tendency to assume that language is the main resource of social life.' This belies a deeper debate regarding the correspondence – or disjuncture – between phenomena in the world and the concepts, tools, and labels that researchers use to describe, discuss, write, and assign meaning (see, for example, Ingold, 2000; Mol, 2002). Indeed, diffraction seeks to overcome this by making space for not only discourse but also materiality, to turn from language to stuff, and explore the sociomateriality of phenomena that are organizing and constituting the world (e.g. Orlikowski, 2007).

Materiality clearly informs degrowth discussions, from rising global temperatures and the unprecedented rate of species extinctions to the capitalist mode of production and vastly inequal material conditions for prosperity both within and between countries. But matter also made itself known in our research in other ways, through such forms as voice recording devices, field notebooks, flyers, gardening and working gloves, parade floats, wooden vending machines, and countless others. Diffraction asks how these are woven together with discourse - which itself 'must be materialized in some form and in specific times and places in order to exist' (Orlikowski and Scott, 2015:699) - such that both matter and meaning contribute to the delineation (or lack thereof) of degrowth phenomena (Barad, 2007). By extension, researchers are themselves entangled with the world: researching contributes to the boundary-making demarcation of the world and the researcher her/himself. This reveals the potential for using diffraction to see the process of becoming-researcher as situated within empirical phenomena, whereby differences can be seen through each other and their interferences mapped (Haraway, 1992). By extension, we must scrutinize our performative role as researchers employing specific methodological approaches.

Pertaining to the issues outlined above, the performative orientation of diffraction points to the fact that degrowth is enacted (i.e. performed) (at least) in the process of research (see Vandeventer and Lloveras, 2021), through which material phenomena acquire degrowth meaning. Much is owed here to the embeddedness of diffraction within the wider schema of feminist thinking (Haraway, 1992), the ontological turn (Grusin, 2015) as well as recent developments in practice theories (Gherardi, 2017) and new materialism (Fox and Alldred, 2016), which point to the normative implications of performativity in research. In this vein, diffraction compels us to ask how our assumptions, understandings, and uses of degrowth have intervened in our research. This commences with the way a concept such as degrowth directs our attention, extending to the scientific framing of phenomena as degrowth-related - or the omission/qualification of that link. But performativity also extends into the doings and sayings in the field. When did or didn't we consider a phenomenon as, what one reviewer of this paper termed, 'degrowthy'? How did degrowth as a term emerge in conversations with practitioners and in our thinking as researchers? What are consequences of linking empirical, observed phenomena to degrowth debates (or not)? And who makes these and other decisions on terminology and framing?

In a helpful commentary that discusses performativity in degrowth research, Demmer and Hummel (2017) outline the normative

orientations that are inherent in any research endeavor – not just in the case of degrowth. Citing Law and Urry (2004:404), the authors pose the question of how we want to interfere in the world 'because interfere we will, one way or another.' Exploring the 'ontological politics' of scientific research, Demmer and Hummel (2017:612) foreground their activist involvement and role 'in the politics of making realities through practices of knowledge production,' noting that 'scientific knowledge is just one among many other forms of knowledge (religious, spiritual, everyday, etc.).'

We extend the argument developed by Demmer and Hummel (2017) by urging researchers to trace the becoming-researcher of empirical inquiry alongside and together with, but also clashing against, the becoming-activist or becoming-practitioner. Diffractively situating the researcher in this field of tension, however, would only be half of the story. As much as the researcher navigates inquiry/theory and implementation/praxis, the 'practitioners' do, too. In this sense, we need to acknowledge the becoming of those we do research on and with (Kindon et al., 2007). This occurs both outside of our research endeavors in the everyday lives of practitioners as they reflect on and experiment with different practices and through the exposure to and enrollment in our research practices. Thus, just as performativity renders the position of the (politically, normatively) neutral observer untenable, it also confounds any a priori separation between researchers who do the theorizing and practitioners who implement alternatives. Against this background, we question the allocation of 'degrowth' solely to the sphere of abstract conceptual deliberation (the task of academics) and instead also explore what happens to and with the notion of degrowth in the field and amongst practitioners.

To summarize, our use of diffraction in this paper acknowledges the 'cuts' that delineate 'subject' and 'object', a process which is part and parcel of any research methodology. This starting point means that both discourse and materiality are consequential, not least in the patterns of difference they create during the course of researching. Finally, we foreground the fact of research(ers') performativity – the intervening in the world that produces effects. Together, this framing provides a set of conceptual tools to trace how degrowth itself comprises a becoming that is *done* through research – and practice.

The two projects we discuss subsequently both involved ethnographic methods, notably extensive participant observation and interviews. Both case studies have clear relevance to degrowth debates, including the ecological orientation of practices in the housing community and amongst eco-social entrepreneurs. In each, we grappled with placing degrowth in empirical research, while the use and effects of 'degrowth' largely remained under the surface during data collection and data analysis. Our conversations on the role of degrowth in research and how it directs our attention have emerged since, leading us to a return to our data and memories - but not to the field itself. What follows, therefore, is a diffractive excavation rather than a systematic study of our research practices. We trace the identification and use of degrowth in/during/after fieldwork and its consequences through a return to data, notes, analyses, publications, and memories rather than undertaking a new project with an explicit focus on what it means to do 'degrowth.' In the following, we integrate vignettes of our own experiences in the field, alongside interview excerpts, visual materials, and related data. Together, these enable a diffractive accounting of how degrowth comes to matter.

4. Navigating degrowth in empirical research: Experiences from two case studies

We draw on two empirical research projects, which were conducted by the first author (*Case 1*) in 2017–2018 (Vandeventer, 2020) and by the second author (*Case 2*) in 2016–2018 (Schmid, 2020). Respectively, these projects examined alternative ways of organizing of urban space and how community activism and civic engagement contribute towards transformative geographies. Evidently, our research questions shared an interest in spatial questions but, as we outline subsequently, each engaged differently with degrowth. To diffractively examine the consequences of negotiating degrowth in empirical research, our presentation of these cases is followed by a more theoretically-informed discussion that comparatively links our empirical fieldwork to conceptual and methodological questions about degrowth.

4.1. Case 1: A housing estate and a parade

In 2018, residents of 'the Redbricks,' a housing estate near Manchester's city center, were invited to contribute a float to the annual Manchester Day Parade. I was regularly involved in activities on the estate at this point, from gardening in large permaculture gardens and setting up the monthly give-and-take stall to attending resident group meetings and helping update a guide to activities on the estate. My project focused on how the shared spaces of the estate are organized in alternative ways, seeking to analyze the 'alternative organizing' (Reedy et al., 2016) of community initiatives from a geographical perspective. Having previously come across links between the study of 'alternatives' and degrowth (Parker et al., 2014), and given my existing research interests, I was curious how degrowth might manifest in this empirical context. Already beginning to sense how the estate's everyday activities resonate with degrowth, I was interested in exploring these in a formal setting. So, when several residents suggested I attend the initial planning meeting for the float, I leapt at the opportunity.

Led by a facilitator, the meeting began with a brainstorm of possible ideas that the float could capture, with residents also describing what mattered to them about the Redbricks. The ideas that emerged were captured by the facilitator on two flipchart sheets (Fig. 1), with many points raised also present in degrowth literature and practice. Rather than selectively articulating themes from my privileged vantage as researcher, the flipcharts concretize the participants' wor(l)ds and the event of the meeting itself.

With the residents' ideas as a starting point, the facilitator and an artist, both of whom worked at an arts organization which won the grant to support the parade, moved the conversation to developing the float's key message. This coalesced around the idea that the estate stands in contrast to, or even against, the rapidly expanding urban developments of Manchester. These developments, epitomized in the high-rise buildings increasingly dominating the city's skyline (including several close to the Redbricks), have increased rapidly in recent years, driven by the financialisation of the city's housing market (Silver, 2018). Witnessing these changes during my research had given me a sense that the

Redbricks was a place where difference had settled and endured amidst a rapidly changing city. I often heard this expressed by residents as well – which was vividly captured in the brainstorm flipchart when one resident described the estate as an 'oasis in the desert of commercialism'. The meeting ended with a general decision for the float to show the highrise housing developments happening across Manchester and the estate's resistance to them.



Fig. 2. The 'Highrise Outcry' parade float (Redbricks.org, online. Available at: https://www.redbricks.org/files/2018/06/HighriseOutcry.jpg).

DO IT TOGETHER SUBSERSIVE IN A DESPR PARTIES COMMERCIALISM TI-CAPITALISM GARDENS. LEAFST.

Fig. 1. Flipchart sheets with brainstorm of ideas for float (sent to author).

The actual float, named 'Highrise Outcry' (Fig. 2), was constructed several months later with residents' assistance, and I was again invited to participate. We painted the boards that became a homogeneous highrise building, added colorful streamers cascading down from the structure's top, spray painted its sides, and helped the artist make a papier mâché phoenix which rose out of the top. Working on the float, I came to notice how it materialized a set of contradictions: notably, the commentary on Manchester's political economy embodied in the float's design sat in tension with materials themselves, which were purchased using national and local grants, and with the artist's support, whose salary was grant-funded. Indeed, a prominent sponsor of the Parade was the City Council itself, which had historically sought to stifle activism by Redbricks residents on several widely-recalled occasions. The Council was also responsible for approving dozens of planning permits for the very high-rises critiqued by the float, and for giving developers exemptions from their legal requirement to provide affordable housing. In a later interview, one resident found reason to revel in this contradiction:

Bearing in mind how, you know, the Redbricks' previous relationship with the Council, for them to be at the center of a Councilpromoted and -sponsored event, and to be celebrating the Redbricks in the midst of it all, it was quite a lovely, poignant moment. (res6)

There was further complexity to this parade-estate-Council relationship, such as how planning the float privileged the voices of certain residents at the expense of others, including residents who were not engaged in community activities or those who were unwilling or unable to participate. Similarly complex were the views of residents involved in the parade and float planning, who described how the process:

...bulldozes through everything, but with sensitivity...if you don't do that then nothing gets done basically. But yeah, then at the same time you've got people who actually have to make it happen, not completely happy with the whole process.

(res19)

...is so contrary to anything that I've tried to build up with other people on the estate in terms community involvement, to use the stupid term, so I'm not gunna do that again.

(res13)

Here, participation in the parade revealed to interviewees one tension associated with alternative organizing: getting things done can come at the expense of involvement and participation. I asked myself: how does such a tension square with my underlying interest in degrowth? Looking elsewhere, what was I to make of the reliance on grant funding? There appeared to be a challenge between voicing critique of Manchester's increasingly homogenized and individualized housing market and the reliance on grant-funding to support this. But then again, my own project was funded through a university scholarship – itself inevitably tied up with government grants dispensed to support research...

I began to ponder such questions more as tensions and contradictions became increasingly visible, while notions of degrowth pulsed in my thoughts. When degrowth did surface in conversation, I used it warily. For example, in my fieldnotes, I recall a gardening day:

We get to chatting about my research, and I tell them about degrowth. Jane [name changed] says it aloud, 'degrowth,' almost seeming to see how it feels on her tongue. I try to briefly explain what it is, before the conversation moves on and we continue pruning the fruit bushes.

In this fleeting encounter, both my own reticence to expand on degrowth and its novelty to participants capture discursive choices in the field. Only once did a resident mention unprompted that he believes in the need for degrowth. We wandered the estate after this exchange, discussing how everyday activities in shared spaces echoed degrowth proposals. Yet, despite the endurance of residents' efforts to maintain convivial and autonomous shared spaces – clearly important in a degrowth transformation – I could not shake my hesitance at claiming or asserting that degrowth politics is located in them.

How, then, can I unravel the entanglement of the estate, a citywide parade, grant funding, the City Council, an arts organization, and the politics embodied in alternative organizing of urban space? Ultimately, I have concluded that undertaking research with a degrowth interest was a fruitful means for me to look anew at the multiple complexities and contradictions, but also already-existing and as-yet-unrealized potential, that exists in places like the Redbricks. The ability for residents to live with, or perhaps despite, the tensions I surfaced in my research does not undermine; on the contrary, this resilience is a strength. More fundamentally, would similar contradictions not also exist in a world with lower material throughput and greater equality? Perhaps learning how already-existing examples like the Redbricks negotiate a balance between institutional pressures and everyday practices, between critique and affirmation, can help anticipate the difficult realities degrowth entails.

4.2. Case 2: Eco-social entrepreneurs in Stuttgart

In 2018, I met with a selected group of nine eco-social entrepreneurs in suburban Stuttgart (Germany) to discuss preliminary findings of an ongoing research project and ways to move forward. Knowing about the tight schedules and financially little-compensated 60-plus hours workweeks of those involved, I was excited to get a chance to tap into the group's collective experience. My expectations were not disappointed and the conversation turned out to be a central piece of inspiration for the project, which focused on the transformative geographies of ecosocial organizations for a degrowth transition.

During the nearly three-hour long conversation, we repeatedly touched on issues that are central themes in degrowth debates. For instance, when one of the participants remarked:

That's exactly that, when we talk about growth now...that is, as said before, what jars with me. Because we have to get out of this typical thinking: acceleration, more, increase... From my perspective it is about the acceleration of deceleration. And this leads to positive sideeffects: more time, so to speak, for completely different things (F_01; 2 h17).²

Another remark even makes direct reference to a pioneering thinker of the German-speaking degrowth community:

Niko Paech proposed what I consider a good vision, when he said: work 20 h a week for money and 20 h for subsistence and community. And my personal goal is to work 10 h a week for money, for a meaningful project. And then have the greater part of time for leisure and unconditional support (F01_2h03min).

Given that the conversation revolved around the projects, initiatives, and organizations these participants represent, it suggests itself to explore them from a degrowth perspective – maybe even call them 'degrowth-oriented.' However, in the entire 3-hour conversation, the keyword 'Postwachstum' – German for degrowth/post-growth – only came up three times. And all three times, I was the one using the label. When I went back to the material of other recorded conversations, I found the pattern repeat itself in other exchanges. I knew that the label had been used by some participants – even on publicity material of one of the organizations, an open workshop, that takes a central role within the broader community of Stuttgart's eco-social entrepreneurs (see Fig. 3). Also, many interviewees clearly stated that their key objectives revolve around deceleration, decommodification, commoning, and

² All quotes are translated from German into English by the author. For more details on the project that is discussed see Schmid (2020).



Fig. 3. Publicity material of the open workshop 'Hobbyhimmel.' The middle box at the bottom reads 'Our solution: We want to bring the problems and causes to light and point out possibilities how everyone can contribute to change. The open workshop, for us, is a central tool to do so, for it combines and realizes important approaches such as sharing economy, open source, co-working, degrowth and commons [...]' (author's translation). (

participation - key principles encapsulated in degrowth.

After revisiting the data, it struck me that the spare reference to degrowth was not so much due to unfamiliarity with the concept, but that some participants did not agree to of feel comfortable with that framing. I rediscovered responses such as:

What is very important to me: neither I nor the people from our team are dogmatists. It's not about – and that's something that bothers me a bit in post-growth economics – that we say what it is supposed to be like. Instead, we criticize the current situation and want to use our concepts to initiate a debate on that subject (I_E02a).

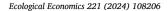
At first, I dismissed such objections as superficial or one-sided understandings of degrowth. After all isn't degrowth exactly about that: initiating a debate on the subject of growth? Nevertheless, during fieldwork, it was still relevant to me as researcher to understand how practitioners themselves saw their practices in relation to a more farsighted strategy (be it degrowth or other). One interviewee moved so close to key degrowth ideas when describing his organization, Smark, – a company that works on fully automated sales of regional and organic food – that I almost forced the label onto him: '...and here I would be interested if degrowth is a concept that you consider or where you see points of connection' (interviewer), prompting the following response:

Exactly, I believe that there is a huge potential to make use of that. And this is a bit like...as soon as we can fully act out our communication that you don't say: 'consume more so that we earn more' but rather communicate: 'do you really need this or can you do without it? And because it's important that we consume less and consume even less resources ... That's not possible by buying more sustainable things but rather you have to refrain from many things. This is what we try to live. And as soon as we have the opportunity, we want to integrate that into our business model.

(I E06a)

But why was I so eager for him to call this degrowth? What did it add to the description that was already rich in examples in what ways the organization distances from profit-orientation and consumerism? The interviewee's response indeed provides a pointed summary of what a degrowth orientation *could* mean for his organization (note the conjunctive mood in the previous quote). Furthermore, the project was tangible – in a literal sense (Fig. 4). Every time I visited Stuttgart, I passed by the first (temporary) store that was set up in the city's main train station. With its wooden façade made from recycled timber from a former (local) barn, the store was a complex blend between new technologies and old materials, between full automation and personal contact (to ensure the functioning, initially one team member was present at/in the store most of the time), conscious consumption and pervasive commercialism.

Moving through the field with a 'degrowth gaze', I paid particular attention to aspects that resonate and align with degrowth principles, at first. Reading the interviewee's thick description of his organization from this perspective, however, runs the risk of veiling the tensions and ambiguities at play. The diverse practices that constitute the organization express a foundational challenge of eco-social entrepreneurship: to develop business models *within* economic framework conditions that counteract some of the fundamentals – especially prices as primary steering mechanism – of these conditions. The interviewee moves through these tensions on a daily basis putting cost-oriented calculations next to the idealism of sustainable food consumption and trading off between return on investment and his organization's impacts. While



5. Diffracting degrowth

It is clear from both vignettes that we have mobilized degrowth quite differently, as interpretive tool, lens, label, and/or benchmark. In the study of Manchester's Redbricks estate, degrowth served as cautious note and tentative orientation, leaving much room for other lenses (on part of the researcher) and for the framing, ordering, and sense-making practices offered by practitioners. Even when it came to bear in conversations, note-takings and analyses, degrowth stayed in the background, accompanied with a wariness not to impose a constrictive framing on the doings and sayings of the Redbricks residents or to veil the differences and contradictions encountered. In contrast, in the research on Stuttgart's eco-social entrepreneurs, degrowth was employed in a less restrained and more direct vein. It served as lens or 'search mode': its use selected for practices and organizations that resonate with a degrowth gaze - carving out relevant undertakings but also putting less emphasis on the endogenous ways participants framed their practices. In interactions with practitioners, degrowth served as (not always shared) reference point to flesh out ideals, inspirations, and strategies and was mobilized as a (critical) conceptual lens to evaluate the practices of eco-social organizations.

These differences in how degrowth participated in research practices reveal a tight-rope walking in either giving weight to the framing offered by participants – especially those we deem knowledgeable of degrowth – and our interpretation of the practices we observe against the background of our reading of degrowth and related concepts. The variation also suggests we approached differently the ethical question of wherein our responsibility as researchers lies. Should we work towards socioecological transformation by bringing new ideas into field discussions, or through making visible practitioners' existing ways of sensemaking and doing? Rather than take a normative stance one way or another, we would suggest that facing such a question and making one's own decision is precisely the point.

At the same time, the vignettes make clear that our own exclusions indelibly marked the research process. Was this the result of differing preferences as academics working in different environments (a business school versus a geography department)? Or due to the discursive and material conditions we faced in the field? Certainly, we have read different books - although, in the course of writing this paper, we have started to build a shared bibliography. But the meanings, objects, and artefacts we encountered and which stabilized our empirical work also matter. A flipchart or Hobbyhimmel publicity materials, born of others' (residents and facilitators or open workshop organizers) work, reveal many established meanings already existing for their practices. Mornings spent gardening on the Redbricks often led to tracking muddy shoes into a business school doctoral suite, surrounded by colleagues mostly studying 'traditional' business activities. The Smark store's location in Stuttgart's main train station meant regularly passing it on the way to 'the field' and witnessing its (mis)functioning - people were often present because it did not run smoothly yet. As a consequence, Smark featured more prominently in the study than it would have otherwise. These (and other) material features were essential parts of both projects. Yet, such mundanities do not feature so prominently in our conceptual work to connect the Redbricks or eco-social entrepreneurs with degrowth. Nevertheless, our struggles with degrowth surface and emerge in the middle of this interplay between the conceptual and lived.

Disturbing our methodologies and degrowth in this way can be a fruitful endeavor when attuned to difference and exclusions. However, we do not want to suggest that such considerations are simply theoretically interesting, nor are they only the realm of academics. Debates on degrowth, indeed, are known to many practitioners – including in both our cases, to varying degrees – who develop deliberate stances within and towards (different notions of) degrowth. A neat categorization into academics and practitioners does not hold up, in this regard: it would privilege 'cuts' that mark academics as 'subjects' and eco-social entrepreneurs or a housing estate and its residents as 'objects.' Instead, our

Fig. 4. First 'fully-automated' store for regional organic food located (temporarily) at Stuttgart main station (Author's own).

these trade-offs do not diminish the organization's relevance for degrowth research, they do raise the question what interests and calculations are behind them as the line to green growth can be a thin one. Regarding 'Smark', I noted the following in my research diary:

Frank [name changed] said that they were hoping for a big investor, not to make a lot of money, but to scale the project. It sounded a little bit like green economy thinking to me, at first, but with a different nuance. I don't think there is any radical criticism inherent in the project (as is the case with others), however it is not about profit maximization with green technology/green approaches either. Another conversation will show more.

(B_E06c)

Bringing up degrowth in the discussion, I hoped to make (more) sense of the diverse and (partially) contradictory practices I observed. There is, so to speak, a sort of validation (or dissension) that I attached to the (non-)use of the 'signifier' degrowth in the description of the ideas and practices that carry and constitute the organization. Degrowth, thereby, functions as a stand-in for other – often more targeted – notions: the kind of organizations practitioners collaborate with; the role of sufficiency strategies; and, not least, the structural changes deemed necessary to enable eco-social enterprises to thrive.

Revisiting these interviews and notes, I became increasingly sensitive to the effects the utilization of degrowth can have (as can other lenses as well). What effects does it have to use move through the field with a degrowth gaze and (selectively) use the term with practioner (-reseacher)s? Is it an academic concept that is ill-fit for the use with research participants? Is it too complex, multi-layered, abstract? Is it an academic arrogance to claim to have a more 'correct' or comprehensive understanding of degrowth, given that practitioners also know about (some of) the debates on degrowth? Could or should I use degrowth to frame projects that do not identify as degrowth – or even oppose such a framing – if their practices are aligned with (some) degrowth principles?

Now, several years after these data have been collected, the ideals of regional and local food distribution have largely vanished from Smark's internet presence. Instead, the visitor is offered a 'robotic micro warehouse [as] the easiest entry into digital retail and more' (https://smark. de/). Has the organization fundamentally changed its orientation? Has my degrowth-inspired approach led me to read too much into the organization all along? Or is all of this embedded in a larger strategy to address the challenges of eco-social entrepreneurship? Only a deep and honest conversation about the reasoning and decisions behind this would tell. If degrowth would be a useful point of reference in such a conversation, I do not know.



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diffractive analysis resists the temptation to foreclose the possibilities that practitioners' own lifeworlds will reveal new forms of knowledge – and new degrowths – in empirical encounters. This extends the idea of 'lay expertise' by asking academics to step back and appreciate the 'cuts' practitioners enact to delineate their own being-in-the-world. In other words, alongside (and within) the becoming-researcher is the journey of becoming-practitioner; perhaps, this humbling impulse will remind degrowth researchers of the limits to their/our own role in performing research.

A re-reading that is attuned to difference allows us to make visible and better understand the decisions we make – consciously, but more often unconsciously – and the effect they have on our findings, interpretations but also on the field itself. This includes the ideas, perspectives, and practices that we include and exclude; voices we foreground and others we overwrite; notions that we (perhaps naively) adopt and others we (too) critically (re)interpret; developments and chances that steer us and others that we are steering; thing that we learn from diverse encounters and how our engagements (might) shape others. In the remainder of this section, we draw out two methodological modes of thinking that build on these diffractions and outline general insights that might support degrowth researchers and practitioners in the future.

5.1. Translation, or making-otherwise

Diffracting degrowth means recognizing the processes of translation that are constantly engaged in as researchers and practitioners: to cooperate within and across these distinct worlds, we must enlist shared imaginaries of degrowth and negotiate differences – a process this paper initiates. In the translation process, however, the boundaries between social worlds are themselves brought into question. Diffraction is thus a refusal to capture the 'essence' of degrowth and foreclose all its possibilities, allowing for other meanings and materials to acquire significance for both researchers and practitioners.

So, what can be said about these translations in our cases? Certainly, degrowth helped us clarify a critique of growth's political-economic dominance in the 'here and now' while also tracing areas of diverse practice – community groups and eco-social organizations – that do not (or less) adhere to this prevailing paradigm. At the same time, degrowth enables forward projection by offering a set of visions for the utopian 'there and then' of potential futures, while emphasizing the urgency of averting further socioecological destabilization in realizing those visions. Equally, we have foregrounded tensions, such as the engagement with grant funding and prevailing institutions or the practical limitations associated with locating the boundaries and thresholds of degrowth in everyday practices.

Rather than being provided with a stable core (or essence) of degrowth that awaits uncovering and against which practices can be evaluated, degrowth researchers face a multiple concept which is the product of endless translations between theory and practice. The function of degrowth methodologically is itself diffractive, favoring a multiple/multiplying view of the spatio-temporal configurations contained in particular moments. Our role in these different framings, and in the production of the multiplicity of degrowths, is to work with the sense-making tools and analytical categories at hand. Instead of accepting a priori fixed categories that we can look through to (almost) measure and compare practitioners/organizations, diffractive analysis calls attention to this object-ification and faces the question of simultaneously affirming and doubting the boundaries of what *is* degrowth.

Translation(s) thus point to the limitations of locating degrowth at a specific scale (as macro-level concept or form of micro politics) or in a specific realm (as academic discourse that is removed from practitioners' lived experience). Neither, however, is degrowth an unbounded object, an empty signifier that is simply 'diverse'. Rather, it is a contested field that includes translations, navigations, and positionings. It is part of lived spaces as much as it is a representation of space (Lefebvre,

1991), and thus it is not interchangeable with other lived-andconceptual approaches which would elicit different interactions, reactions, conversations, and learnings. While related forms of knowledge and knowing are not less or more productive per se, a diffractive reading of our cases uncovers the conscious and unconscious decisions and consequences that come with the (non)mobilization of degrowth – effects that elude straightforward translations. In its various dimensions, this productive role of doubt, this process of *making-otherwise*, sharpens our focus as researchers on socioecological injustices and the possibilities of building different worlds – in both empirical contexts and our own institutional settings.

5.2. Operationalization, or difference-within

If translation foregrounds the negotiation of degrowth meanings and materialities within/across worlds, at a certain point these deliberations cross a threshold and participate in practices. Here, too, the messy complexity of reality means the act of degrowing (Ehrnström-Fuentes and Biese, 2022) coexists with prevailing practices of organizing housing, entrepreneurship, and others. In this sense, the operationalization of degrowth means allowing for such contradictions. In our vignettes, we observe that those seeming, in some ways, to more closely resemble *our* view of degrowth (sometimes) understand their own practices very differently (e.g. the Redbricks float brainstorm) or align only selectively with degrowth. Others (e.g. Smark) seem to have an (even) more contradictory relation but are nonetheless ready to accept the framing or identify with aspects that we see as part of degrowth (e.g. sufficiency).

This begs the question: would delimiting degrowth to particular phenomena etch a fixity of meaning into empirical contexts that – despite the utopian imaginary of degrowth (Kallis and March, 2015) – undermines the multiplicity of places and organizations? Conversely, does, as a result of allowing for difference, any 'correct' understanding of degrowth dissolve? Is it thus impossible to locate any correspondence between our (conceptual) understanding of degrowth? We would suggest that operating with degrowth in research and practice is a choice to hold diverging values as a part of any research or practical project – to embody *difference-within*.

Yet, while translations allow degrowth to serve as a waymarker rather than a map or identity, we do not know or control what consequence this has for others – readers, participants, researchers – and even for our own thinking. In its operation, degrowth carries multiple and potentially diverging meanings that have effects on how speakers and listeners make sense of social phenomena described as degrowth. This, as a matter of course, is not specific to degrowth but is true for all signifiers. Language is always at risk of evoking some meanings while foreclosing others. A diffractive approach does not purport to overcome these challenges, but rather helps to unveil the consequences of using one term over another.

This strikes a chord with ongoing debates within degrowth scholarship whether to use degrowth or similar concepts such as post-growth, agrowth and others besides. Proponents of degrowth generally refer to its function as 'provocative denomination which challenges the consensus on growth in parliamentary politics' (Demaria et al., 2013:210) and as 'a 'missile word' to re-politicize environmentalism' (D'Alisa et al., 2015:9). Others meanwhile have questioned using a term that defines the movement primarily through that which it turns against: economic growth (Drews and Antal, 2016). Beyond mere terminological preferences, the choice of words, seen diffractively, leads to different understanding and misunderstandings such as the long-burning issue that degrowth is 'in every way the opposite of a recession' (Hickel, 2021:1108).

Of course, as much as they can bring together disparate communities (see above), operationalizing degrowth can also divide. A provocative missile term might not appeal to everyone. Luckily, there are other choices at hand. Not choosing to operationalize degrowth, hence, can be a tactical or practical decision; maybe even one born out of caution and respect. Positive framings around sustainability, solidarity, alterity, or community – as, for instance, in the terms sustainability initiatives, alternative organizations, community-based or community-led organizations, or solidarity and community economies, to name but a few – might be better suited to maintain an openness to configurations, allies, and practices which practitioners and observers don't see well described with degrowth. The same is true for cautious allies of degrowth that position themselves as agnostic to growth, such as the 'doughnut' economy (Raworth, 2017), or qualify their positioning as 'precautionary' (Petschow et al., 2020). We don't see this as a matter of categorization or typologization, but rather an argument for the consideration of context and tactics.

6. Conclusions

This paper has sought to show how navigating the boundaries of degrowth in research and practice can contribute to furthering the ongoing societal project to move towards more sane and just economic relations. There is no underriding requirement that research practices seek out true 'alignment' with degrowth, but rather an opportunity to navigate the translations and operationalizations of degrowth in research and practice together. Such an invitation troubles the boundaries between research and practice; becoming-researcher and becoming-practitioner are journeys of becoming-together.

As degrowth is increasingly attributed to empirical phenomena, the diffractive lens developed in this paper offers a means for investigating how degrowth is brought in/to research. We thus contribute to methodological debates about what it means to enact or *do* degrowth (Demmer and Hummel, 2017; Vandeventer and Lloveras, 2021) by making visible the challenges of working with degrowth, or rather of even deliberating on degrowth's possible manifestations in the present.

We have taken a novel approach to showing how degrowth is brought into being in empirical research methodologies, pointing to the ways degrowth's multiplicity requires both translations and operationalization – with attendant navigation of paradoxes, ambivalence, and contradiction to unlock degrowth's potential. Our paper thus encourages scholars to consider the many possibilities for placing degrowth amidst the complexities of social phenomena. Conducting research with diffraction helps in this regard, maintaining careful attention to the differences within and between the orientations and doings of research and practice – which indeed are woven together.

We therefore call for further work attuned to difference amongst degrowth scholars and those in related movements like ecological economics, political ecology, postcapitalism, and others. We offer a way to think (and talk or write) differently about the 'cuts' enacted in research, the relationship between material and discursive arrangements, and the performative nature of research in making-real degrowth and related concepts. Still, while degrowth is emerging as a useful tool for both questioning existing spaces and injecting new thinking into them, our paper also points that the tactical deployment of degrowth may not always be appropriate.

Finally, our paper also hints at the existence of thresholds for degrowth. How far does degrowth apply? When is the invocation of degrowth versus allied concepts more appropriate? For example, how should we confront those wielding state power? As policymaking is increasingly seen as necessary to avert socioecological collapse and implement a degrowth transition to a post-growth economy (Koch, 2020), the effective mobilization of theories with political actionability becomes ever more important. While the recent 'Beyond Growth' conference in the EU Parliament showed promise, it was also derided by major institutional voices (The Economist, 2023). When, then, we invoke degrowth becomes a strategic question for deliberation amongst the participants. Despite the ways for translating and operationalizing degrowth we have outlined here, we must surely maintain healthy doubt about enacting degrowth (*in*) every moment. Far from undermining, this

rather points to the choices involved in deliberatively deciding when and how to place limits on real-izing degrowth in the world. Acknowledging limits is, after all, foundational to degrowth.

CRediT authorship contribution statement

James Scott Vandeventer: Conceptualization, Formal analysis, Funding acquisition, Investigation, Methodology, Writing – original draft, Writing – review & editing. **Benedikt Schmid:** Conceptualization, Formal analysis, Investigation, Methodology, Writing – original draft, Writing – review & editing.

Declaration of competing interest

The authors declare that there are no conflicts of interest.

Data availability

Data will be made available on request.

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