

Living the Lab: Rethinking Collaborative Practices in Living Lab Contexts Amid Polycrisis

Antje Jacobs^{1,2} , Angela Hostetler^{1,2} , Koenraad Hinnekint^{3,4} , Yannis Perifanos⁵ ,
Juan Pablo Centeno⁶ , Rodrigo Cruz⁷ , Eylem Keskin⁸ , Louise Mazet⁹ ,
Giovana Navarro¹⁰ , Charlotte Parion¹ , Amber Jenny Sels¹¹ , Hanne Vrebos^{1,12} ,
and Karin Hannes¹ 

¹ Research Group TRANSFORM's Idiosyncratic Inventors Collective, KU Leuven, Belgium

² Faculty of Education, University of Melbourne, Australia

³ LUCA School of Arts, Belgium

⁴ Centre for Instructional Psychology & Technology, KU Leuven, Belgium

⁵ Centre of Expertise for Cooperative Entrepreneurship (KCO), KU Leuven, Belgium

⁶ Public Governance Institute (PGI), KU Leuven, Belgium

⁷ School of Slavonic and East European Studies, University College London, UK

⁸ Graduate School, Izmir Institute of Technology, Türkiye

⁹ Faculty of Architecture and Arts, Hasselt University, Belgium

¹⁰ Faculty of Social Sciences, KU Leuven, Belgium

¹¹ Faculty of Geosciences, Utrecht University, The Netherlands

¹² Research Group Sustainability Assessments of Materials and Circular Economy, KU Leuven, Belgium

Correspondence: Antje Jacobs (antje.jacobs@kuleuven.be; jacobs.a@student.unimelb.edu.au)

Submitted: 29 January 2026 **Accepted:** 21 April 2026 **Published:** 24 June 2026

Issue: This article is part of the issue “Compassionate Futures for Collective Well-Being” edited by Natalia Martini (KU Leuven) and Karin Hannes (KU Leuven), fully open access at <https://doi.org/10.17645/si.i477>

Abstract

Positioned as a response to the proposition of conducting research in times of polycrisis, this article explores attentive collaboration as a research praxis for addressing cumulative societal challenges in living lab contexts. While living labs are inherently collaborative spaces, they have been criticized for prioritizing productivity and scalability, making the relational dimensions of collaboration difficult to realize. At the same time, the capacity of living labs to meaningfully involve people who are not typically in positions of power, as well as those experiencing crisis situations, has often been overlooked. In response to these challenges, this article presents a living lab workshop, designed as a space to experiment with collaborative research approaches in response to crisis scenarios. Rather than framing the workshop as merely a participatory research event focused on studying crisis, we approached it as a generative site of care-full being-with. During the workshop, temporal, ethical, epistemic, and affective tensions emerged, informing our conceptualization of attentive collaboration in living lab contexts. We argue that living labs must cultivate attentiveness not only to the complexity of issues, but also to the relationships necessary for responding care-fully.

Keywords

attentive collaboration; collaboration; crisis; ethics; living lab; participatory research; polycrisis; slow science

1. Introduction

In this article, we respond to the proposition of conducting research in times of polycrisis. While a crisis emergency can be considered a sudden and harmful (series of) event(s), a polycrisis presents the interconnection between such disruptive happenings (Lawrence et al., 2024). The various crises we are struggling with (e.g., political conflict, climate change, pandemics, racial inequality, gender-based violence) are so deeply intertwined that they constantly reinforce one another: One crisis seems to exacerbate another, which in turn creates new problems. The combined impact of such entangled crises is often more severe than that of one crisis alone. As such, polycrisis can be understood as the entanglement and mutual reinforcement of problems, crises, and harmful processes (Mark et al., 2025; Rakowski et al., 2025). In this context, we should also consider the notion of slow violence: Those harmful, invisible, and ongoing processes that cross time and space, which are often not considered violent, yet bring about systemic harm (Dowler et al., 2024; Nixon, 2011, p. 2). In their book *A Billion Black Anthropocenes or None*, Kathryn Yusoff, for instance, shows how environmental harm is rooted in racialized histories, linking climate change to extractive and colonial powers (Yusoff, 2018). Polycrisis, as we understand it here, does not merely present the entanglement of several crisis events, but also considers the slow violences that underlie and further deepen those crises.

Whereas a single emergency crisis might require urgent responses, this notion of polycrisis calls for a rethinking and undoing of entire systems, asking for different research approaches to better account for the complex and cumulative challenges of our time. In the midst of polycrisis, Knight (2023) argues that methodological experimentation “provides openings for different ways of thinking about the rights and responsibilities of knowledge and how this responsibility is as much about rethinking the modes of information gathering as the theories informing those methods” (p. 38). Koro and Wolgemuth (2023) use the “apocalyptic world on fire” as an opportunity to rethink methodologies and consider what such new methodologies should do in apocalyptic times. Experimental methodologies that are responsive to the apocalypse, Koro and Wolgemuth (2023) contend, should “generate spaces for reparative methodological actions, which could lead toward less siloed, irrelevant, and efficient/rapid/simplified scholarship and practice” (p. 652). While dominant crisis discourses often steer research toward quick solutions in the name of urgency (Patterson et al., 2021), we argue that research practices must resist premature resolution and instead “stay with the trouble” (Haraway, 2016). That is, we need to learn “to be truly present, not as a vanishing pivot between awful or edenic pasts and apocalyptic or salvific futures, but as mortal critters entwined in myriad unfinished configuration of places, times, matters, and meanings” (Haraway, 2016, p. 1). Research practices must cultivate attentiveness not only to the complexity of issues, but also to the relationships necessary for responding care-fully (Bringhurst & Zwicky, 2018; Whyte, 2019).

Drawing on those insights, this article sits with the question of what research (methodologies) could be and do amid the complexity of polycrisis. As a response, we suggest the need for care-full research approaches to better account for the cumulative challenges we are experiencing. To do so, we explore *attentive collaboration* as a theoretical and methodological orientation to address the culminating challenges of our

time, as well as an ethical and ontological stance for engaging attentively in collaborative relationships in research and beyond. We consider attentive collaboration as a praxis for imagining and enacting more compassionate futures. To *attend* is to lean in, to direct your awareness; it is not merely registering that something exists but holding space for it. We explore this notion of attentive collaboration in the context of the methodological premises of living lab approaches. Living labs are generally considered collaborative and explorative research contexts that involve multiple stakeholder groups in early stages of research and innovation processes, aiming to address complex challenges (Følstad, 2008; Hagy et al., 2016; Pallot et al., 2010). Yet, their potential to include the voices of people facing crises remains underexplored. Whereas some describe the living lab as an approach, methodology, or tool to find solutions to so-called “wicked problems,” such as climate change, energy transition, food insecurity, or pandemics (Schuurman & Leminen, 2021), we consider living labs as explorative and collaborative *spaces* in which to critically and carefully attend to complex challenges *and* to each other, both within and beyond the living lab context.

This understanding of living labs and attentive collaboration evolved out of a living lab workshop that invited a group of early-career scholars to think-with the proposition of “living labs in (times of) crisis.” Rather than framing the workshop as merely a participatory research event focused on studying and addressing crisis, we approached it as a generative site of care-full being-with, where temporal, ethical, epistemic, and affective frictions guided collaboration and co-creation. The workshop process, collaborative practices, and generative discussions during the workshop made us reflect on how and when living labs can(not) be considered as spaces that elicit attentive collaboration. Here, the notion of attentive collaboration was not the starting point of the workshop, but one of its outcomes. We mainly draw on feminist theories and scholars that attend to care, complexity, and research (methodology) to unpack what attentive collaboration might mean in living lab contexts. In what follows, we discuss living labs and the workshop, highlighting the tensions that emerged and how the notion of attentive collaboration provides a response to these tensions.

2. Living Labs Amid Complexity

We begin our exploration of attentive collaboration as a research praxis by tuning into the methodological premises of living labs. Living labs present participatory and co-creative research contexts that aim to bring various stakeholder groups together to collectively develop responses to complex challenges through (iterative) experimentation of potential solutions in real-life conditions (Hossain et al., 2019). Those diverse stakeholder groups often cover the actors from the Quintuple Helix model for innovation (Carayannis & Campbell, 2012), including education and research, society, the private sector (e.g., industry, businesses), the public sector, and the environment (Baccarne et al., 2016). By bringing those actors together, the living lab approach has mainly been employed to discover new strategies suitable for approaching complex and real-world challenges (Bergvall-Kareborn & Stahlbrost, 2009; ENoLL, 2026). Such living lab approaches closely relate to participatory and user-centered design practices and have first been utilized in the development of technological and consumer-oriented innovation (Ballon & Schuurman, 2015). As an illustration, the Turin Living Lab actively involved city residents in co-producing and enhancing apps, carpooling services, and techniques for collecting environmental data (Nesti, 2018). Besides technology-based living labs, the methodology has also appeared in urban studies and sustainability research (Radulescu et al., 2022; Vicini et al., 2012), with applications in sectors like agrifood (McPhee et al., 2021) and healthcare (Kim et al., 2020). By including societal actors in the ideation of solutions, living labs aim to move beyond top-down and expert-driven development, fulfilling citizens’ unique needs (Ersoy & van Bueren, 2020).

However, as discussed by Pfothenauer et al. (2022), among others, the dominant focus of living labs as problem solvers and innovation producers might lead to solutionism, guided by hegemonic objectives of efficiency, productivity, and scalability. These normative aims tend to position living labs in support of enterprises and industry rather than users or participants, who are often granted only restricted access to user-generated innovations (Kommonen & Botero, 2013). This focus challenges the idea of living labs as genuinely open and co-creative spaces. At the same time, the “projectification” of living labs, where “experiments are shaped by a project logic that emphasizes delivery and implementation, strict monitoring of quantifiable outputs, and the expectation of efficient operations in a controllable and cost-efficient manner” (Sachs Olsen & van Hulst, 2024, p. 996), makes the relational dimensions of collaboration hard to realize. Only by rethinking hegemonic principles that privilege efficiency, productivity, and scalability can we make room for the relational dynamics, care, and compassionate explorations that are indispensable in times of polycrisis. While living labs have been successfully applied across various sectors, the relational capacity of living labs to meaningfully involve people who are not typically in positions of power (Taylor, 2021), as well as those experiencing crisis situations, has often been overlooked. At the same time, living labs cannot simply be used to come up with solutions that respond to all aspects of the complexity of polycrisis. As such, our perspective on living labs had to take a slightly different form, approaching them as a research praxis in which participants collaborate in an attentive and careful way to critically discuss complex challenges. We explored such collaborative practices in living lab contexts by organizing a living lab workshop that gathered a group of scholars to collectively experiment with living lab approaches in crisis contexts.

3. Designing and Living The Lab

3.1. Workshop Living Labs in Times of Crisis

The living lab workshop was directed at thinking-with the proposition of “living labs in (times of) crisis.” Its focus emerged from a collective concern about how to meaningfully engage people experiencing crisis situations in research, particularly in the context of the geopolitical conflict in Ukraine. Such conflicts often make in-person engagement impossible, prompting questions about the ethical responsibilities involved in discussing sites of crisis from the outside in order to contribute to finding answers. More generally, the proposition “living labs in (times of) crisis” focused on the challenges of doing research amid polycrisis. Crisis, as we understand it here, takes various forms. On one hand, we were thinking of interconnected crises, including but not limited to political conflict and sovereignty, climate change and social inequality, cultural erasure through colonial powers, national debt and socio-economic vulnerability, and lack of energy supply and issues of unequal access. At the same time, we also considered the idea that research in itself is in crisis, referring to the growing questioning of the sciences in post-truth worlds where perceptions of ‘truth’ are more dependent on collective feeling than on research (McIntyre, 2018), to misinformation and fake news seeping into mainstream discourse and understanding (Miró-Llinares & Aguerri, 2023), and to the issue that conventional and dominant approaches in research (methodology) are no longer equipped to respond to the complexity of our time (Vannini, 2015).

The living lab workshop consisted of two days of intensive collaboration to think about the potentialities of living lab approaches in polycrisis contexts. Taking place at the University of Leuven (Belgium), the workshop aimed to immerse participants in a living lab environment while actively engaging them in the rethinking and reimagining of living lab practices. While the invitation for the workshop was open to anyone interested in

joining, specifically addressing “researchers, industry professionals, and community leaders,” our group of fifteen people ended up mainly coming from academia, either as students, early-career researchers (doctoral or post-doctoral), or university staff, with only one exception (i.e., one participant coming from the public sector). To make relationship building and collaboration easier, our group of fifteen was divided into three smaller groups, each consisting of three to five members, that intensively collaborated over the course of the workshop, interspersed with group discussions for collective knowledge sharing.

To initiate the collaborative process, we drew on the Bristol approach for living labs and designed a roadmap to guide and structure the workshop activities (Zimmermann et al., n.d.). This roadmap outlined six stages we moved through collectively: identifying, framing, designing, reflecting, testing, and sharing (see Figure 1). A deck of guiding cards accompanied each step, prompting the small groups to deepen or redirect their collaborative engagement and shape emerging ideas. These stages were interspersed with plenary discussions on living lab methodologies and processes.

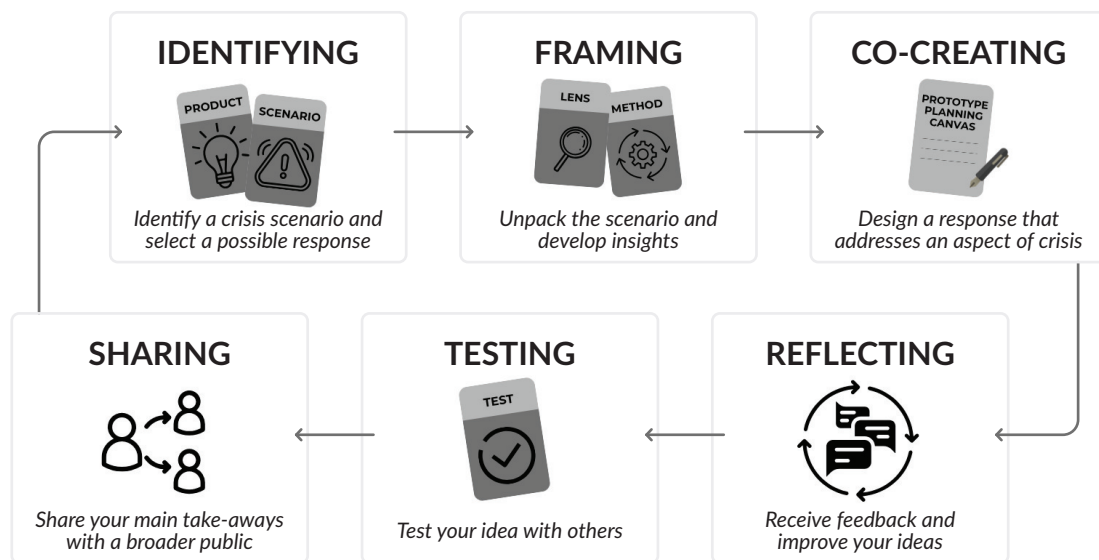


Figure 1. Overview of the six stages of the Living Labs in Times of Crisis workshop, based on the Bristol approach for living labs (Zimmermann et al., n.d.).

The workshop began by *identifying* what specific crises we wanted to explore and how we intended to respond. Using scenario-cards and product-cards, each small group selected one of each to define a shared crisis focus and possible response types, such as designing an intervention plan, running an educational workshop, developing a policy guide, setting up a museum exhibit or artwork, among other possibilities. This first phase helped participants connect with one another and establish a foundation for collaboration before delving into deeper conversations about crises. In the *framing* phase, the groups unpacked their selected scenarios to gain a more nuanced understanding of the complexities and challenges of responding to and researching crises. Each group selected a framing lens and method card from the card decks provided. These cards shaped participants’ inquiries, suggesting different ways to approach the scenarios, for instance, through stakeholders’ profiles, systems and relations mapping, speculative storytelling, or media and narrative analysis. In this process, specific emphasis was placed on critically reflecting on who is affected by crises, while remaining attentive to how these voices are often marginalized or unheard.

The resulting insights opened new ways of seeing the problem, which then informed the *design* phase. In this phase, we used a prototype planning canvas that helped groups map their key insights, outline their intended responses, and consider how they addressed aspects of the crisis scenario. Once their responses were formulated and created, each group presented its ideas to the others, who could offer feedback and comments. These comments were used in the *reflecting* phase to generate insights into recurring feedback, potential improvements, underlying assumptions, and unexpected perspectives. Based on these reflections, the groups designed small-scale experiments to test their ideas, which could take the form of roleplays, rapid iterations, brief interviews, or mock-ups. After completing these experiments, each group created a *sharing* or legacy card, summarizing the ideas they had co-created or discussing their key takeaways. Figure 2 illustrates the material dimensions of the workshop.

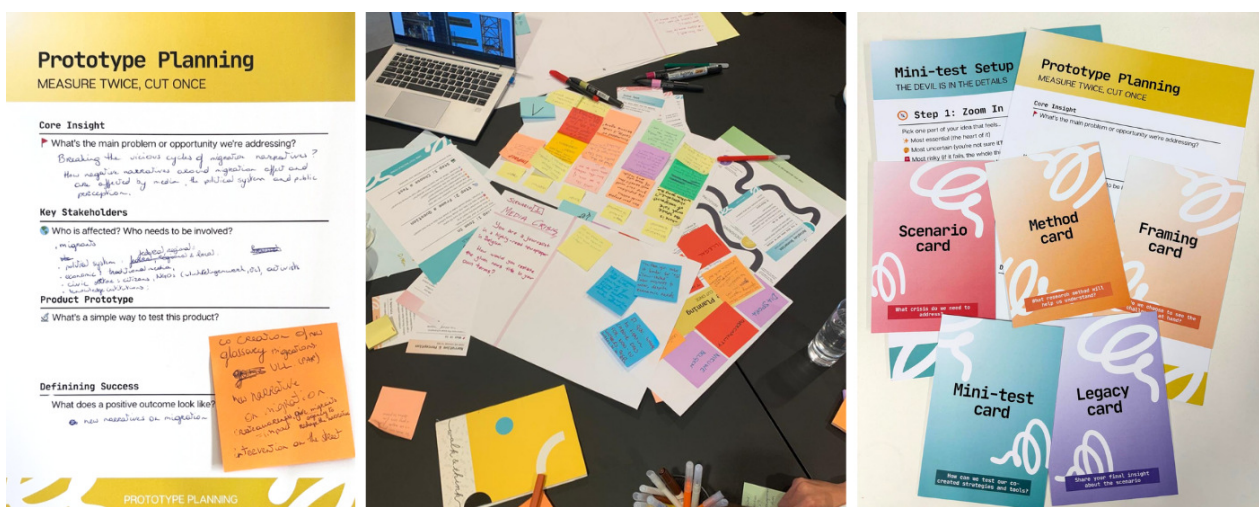


Figure 2. Photographs taken during the Living Labs in Times of Crisis workshop. From left to right: prototype planning canvas, material and creative dimensions of the co-creation phase, and selection of cards used to guide the process.

3.2. Creative Outcomes of the Workshop

The workshop process led to each of the three groups presenting a final design. The first group proposed the creation of a new urban living lab focused on developing a fair migration glossary as a response to the often-negative perceptions of migrants in the media, public discourse, and politics. Another group addressed the lack of national debt literacy by designing an interactive media campaign that visualized what healthy debt might look like in Belgium. In response to the “cumulative weight” of overlapping crises, a third group developed an affective and performative role-playing game that used emotions as stakeholders or characters. The three responses did not directly align with the theoretical and methodological proposition of this article on attentive collaboration. However, the collaborative processes, plenary exchanges, and the thoughts that lingered afterwards made us reflect on the need for and value of collaborative and relational spaces in research, especially when navigating the complexities of polycrisis.

This collaborative reflection also gestured towards rethinking publication practices. Participatory and co-creative research practices, such as those presented in the living lab workshop, generally focus on generating new understandings about certain topics. Without the involvement of participants, these new understandings would take different forms or would not even emerge. In such contexts, we should rethink

conventional approaches to “research data” and instead emphasize the notion of “shared knowledge.” Simply using co-constructed knowledge as “research data” and without involving those who co-created it would raise some serious ethical concerns about intellectual ownership. As discussed by Stouten et al. (2025), participatory and co-creative forms of inquiry require adapted ethical considerations that specifically address the relationality between participants and researchers (if the divide still stands), response-ability to the unpredictability of co-creative research, and acknowledging the situatedness of a research project. In response to these renewed ethical considerations, this article is not so much concerned with analyzing what participants produced during the lab. Rather, it conceptualizes the emerging ideas and understandings that we collectively developed throughout the process. “We,” the authors of this article, refer both to those who conceptualized and organized the living lab workshop, and to those who participated in it and continued to collaborate afterwards. As such, this article essentially presents (parts of) the shared knowledge that emerged during the workshop. We extend our notion of attentive collaboration by not only focusing on the relational dynamics part of the collaborative process, but also on the aftermath of presenting and disseminating that shared knowledge.

4. Towards a Praxis of Attentive Collaboration in Living Lab Contexts

The concept of attentive collaboration evolved from our collective living lab experience and ongoing discussions thereafter, grounded in concerns that the capitalist institutionalization of ethics in times of polycrisis has reduced matters of care to matters of efficiency, leaving room for slow violences to continue their progress in the meantime (de la Bellacasa, 2017; Nixon, 2011). To trouble the dominant imaginary of living labs as problem solvers and innovation producers, we argue for attentive collaboration as a central characteristic of living lab approaches. This resonates with Stengers’s (2018) argument for slow science, where “slowing down means becoming capable of learning again, becoming acquainted with things again, reweaving the bounds of interdependency. It means thinking and imagining, and in the process creating relationships with others that are not those of capture” (p. 82). By naming attentive collaboration as the much-needed relational dimension we need to work towards in living labs, we hope to define an aspect of slow science.

For us, attentiveness means not only paying attention to what demands our attention, but to what matters to those involved and those that remain invisible. Attention is your object of focus, what you are looking at, scrutinizing. To attend is to lean in, to direct your awareness; it is not merely registering that something exists but holding space for it. Attending is closer to care, meaning that it is relational and processual (Mol, 2008). María Puig de la Bellacasa suggests that “relations of thinking and knowing require care” (de la Bellacasa, 2012, p. 198). Care, here, is understood as “vital ethico-affective everyday practical *doings* that engage with the inescapable troubles of interdependent existences” (de la Bellacasa, 2012, p. 199, original emphasis). Such doings are always context-specific, and an ethics of care calls for situated engagements with its complex conditions (Williams, 2017). When you attend to something, you do not simply register it; you stay with it and live-with it (de la Bellacasa, 2017). You respond and adjust yourself around it, allowing it to matter in a way that changes you. You must acknowledge, in attentiveness, that your involvement changes what you attend to as well. Whereas attention keeps the subject-object distinction intact, attentiveness dissolves it. It implies ongoing involvement, as a form of collective care that is developed reciprocally, including both human and other-than-human worlds (Rigkos-Zitthen & Granberg, 2024).

Drawing on what emerged during the workshop, our shared experiences, and the discussions and reflections that continued in the aftermath, we identified a set of tensions that prompted us to reflect critically on living lab processes. In the following sections, we flesh out the temporal, ethical, epistemic, and affective tensions we encountered and consider the possibilities of incorporating a notion of attentive collaboration within living lab settings. As such, our exploration of attentive collaboration responds to the identified tensions, offering an alternative lens to engage with them. We highlight these tensions and potentialities through vignettes, presenting brief scenes, experiences, or reflections from participants (e.g., about the workshop, living labs, or personal experiences), which serve as propositions to further conceptualize attentive collaboration.

4.1. Temporal Tensions: The Urgency of Crisis, Living Labs, and Attentive Collaboration

Attentive collaboration draws on Stengers' (2018) call to slow down as "speed demands and creates an insensitivity to everything that might slow things down: the frictions, the rubbing, the hesitations that make us feel we are not alone in the world" (p. 81). In other words, speed diminishes our capacity to attend to what truly matters. Yet, when this need for slowness and attentiveness is combined with the urgency of crisis and the practice of living labs, a temporal tension emerges. Vignette 1 highlights a friction between the desire for efficiency and the need for building trustful relationships.

Vignette 1. Reflections on temporality

Working with migrants and mobile communities in a living lab setting surfaces tensions: between protection and autonomy, between institutional expectations and lived uncertainty, between the desire for efficiency and the need for trust building. But these tensions can also open other conversations. When researchers and communities co-create tools, stories, or spatial practices, new forms of agency become visible. Crises can generate experimental spaces where solidarity networks strengthen, where alternative infrastructures appear, and where people reimagine mobility not as vulnerability but as resilience.

This tension is echoed in a question raised by another participant: "Where is the mental space to think beyond survival in this situation to participate in a living lab?" Crises of climate, conflict, economic instability, or health are often framed through urgency, yet within this urgency lie relationships, trust, accountability, and forms of situated knowledge that only emerge through attentive, place-based engagement (Whyte, 2019). In this context, Dowler et al. (2024) emphasize how responses to the Covid-19 crisis produced slow violences rooted in the material and bodily precarity of marginalized communities, including Black, Indigenous, People of Color, and Queer and Trans communities. Whyte (2019), similarly, discusses how urgency-centered discourses on climate change are often used to "justify solutions that ultimately harm Indigenous peoples," such as the dispossession of Indigenous lands in the name of forest conservation (p. 5). In doing so, these discourses neglect the relational qualities necessary for just responses to crisis:

Consent, trust, accountability, and reciprocity are qualities of relationships that are critical for justice-oriented coordination across societal institutions on any urgent matter. Yet they are precisely the kinds of qualities of relationships that take time to nurture and develop. That is, they are necessary for taking urgent action that is just, but they cannot be established urgently. (Whyte, 2019, p. 2)

We agree that real-life challenges, such as flooding, *do* ask for urgent responses, but they *also* and *always* ask for considered, care-full relationships. Rather than positioning urgency and care as oppositional, research in times of crisis might aim to cultivate responses that are ample enough to hold both. In such contexts, different researchers within one team can attend to different temporalities of response, without urgency excusing careless action. From this perspective, the epistemic potential of living labs extends beyond the sharing and creating of problem-based knowledge to include experiential knowledge about relational qualities of consent, trust, accountability, and reciprocity. Such qualities essentially relate to being attentive to multiple needs (both urgency and care) that operate across different interests. Yet, the ability to slow down in research is not a universal privilege, as many scholars, especially those in precarious positions, are compelled to maintain accelerated research and publishing rhythms.

4.2. Ethical Tensions: Stakeholder Inclusion and Real-Life Challenges

Living labs are known for their engagement with various stakeholders. One of the greatest concerns for us coming out of the workshop was that, as researchers experimenting with real but removed crisis scenarios in a contained two-day lab, we were acting as if we were pretending to be “outside the worlds we wanted to see transformed” (de la Bellacasa, 2017, p. 11). Vignette 2 reflects this tension, showing the importance of stakeholder inclusion in real-life crisis contexts.

Vignette 2. Ethical reflections on inclusion

As a former aid worker in Haiti, the notion of attentive collaboration triggers an internal dilemma. In Port-au-Prince, even years after the destructive earthquake hit, mothers are buying mudcakes to feed their children—or at least still their feeling of hunger, as the dried mixture of soil and water does not provide any nutritional value. She moves on to the makeshift shelter her household lives in, a shack that hardly offers any protection against the surrounding violence or the elements, be it the soring sun or the torrential Caribbean rains...Water sources polluted, the rich forest disappeared, the coastline full of plastic against a backdrop of polycrisis, including gang-violence, political instability, fragile infrastructure, a high risk to flooding, earthquakes and hurricanes, poverty and public health crisis. It is clear that it is exactly the actors suffering from the consequences from these crisis are to be centrally engaged in addressing them, on both a strategic and practical level, as the communities living in these dire conditions, the organizations working with them and the environments and biodiversity present are exactly the ones holding the knowledge and the key to change the way crises are addressed.

In our workshop, we were concerned that there were not enough entangled stakeholders involved to make the workshop grounded in a sociomaterial reality. Were we basing our speculation on situated knowledge (Haraway, 2016), or acting like “an enlightened outsider who knows better” (de la Bellacasa, 2017, p. 11)? Sitting with this discomfort, we wonder what a living lab would look like that did not center its speculation on out-there scenarios, but the scenarios that affected the lives of the participants directly. Some felt uncomfortable working on topics we are not necessarily experts in, lacking emotional closeness and situated insights on the complexities. As Tronto (1998), we wonder: “Who gets to articulate the nature of needs and to say what and how which problems should be cared about?” (p. 18). At the same time, and in a cosmopolitical sense, we wonder how we are complicit in being captured by systems we are a part of, rather

than being responsible for how we are entangled in causes and capable of change (Stengers, 2018). Maybe we were presuming our own right to judge, or maybe we were denying our ability to respond.

Our unease was not incidental but instructive, signaling that speculation becomes meaningful only when it attends to the realities we are already part of. Perhaps the role of a living lab is not so much about inventing “the” solution for any complex topic in society, but to grapple with themes that are part of our everyday lives and emotionally significant to us. Living labs do not resolve big unknowns of crises but help participants develop skills to navigate them. In this setting, attentive collaboration can take the shape of co-creating new stories for the future using pieces of the present and fragments of the past. In this way, attentive collaboration is messy, but “what is messy is not defective but simply that with which we have to learn to live in and think with” (Stengers, 2018, p. 120). At the same time, for us, attentiveness should be concerned with what matters to those involved or those affected yet unable to participate. This involves but also goes beyond multiple stakeholder inclusion. The European Network of Living Labs (2026) argues that, by including citizens, academia, the private sector, and public authorities, “living labs create a neutral and trust-based environment.” We contend, however, that living lab processes are never neutral, nor should they be, and that simply assembling a diverse group of stakeholders does not guarantee just transformation or innovation. Taylor (2021), for instance, argues that living labs risk reproducing power asymmetries by attracting stakeholders “who are already on the receiving end of power” (Sachs Olsen & van Hulst, 2024, p. 996). Attentiveness refers not only to cultivating relationships among those who participate, but also attending to those who remain uninvited or unable to join the discussion, for example, by considering how outcomes of a living lab extend beyond those represented in the room.

This perspective moves beyond a focus on human actors alone and should encompass other-than-humans, such as non-human animals, plants, landscapes, and more. As living labs are not isolated units of inquiry, attentiveness requires considering how their activities and outcomes affect broader human and other-than-human actors and environments. In two labs situated in Australia and South Africa and (co-)facilitated by some of the authors of this article, attentiveness particularly extended to other-than-human environments with the aim of eliciting a collective imagination of multispecies urban and community spaces (i.e., Jacobs et al., 2026). Here, attending to the place and context in which the labs unfold also allows engagement with the specific histories and sociomaterial realities that shape these settings. It is exactly this attentiveness that allows for rethinking power dynamics within the living lab itself. In doing so, attentiveness enables living labs to generate more just and care-full practices (Williams, 2017).

4.3. Epistemic Tensions: The Challenge of Being Stuck and a Practice of “Unlearning”

For us, attentiveness means not only paying attention to that which demands our attention, but to what *matters* to those involved: Our values must reflect the here-and-now sociocultural, environmental, affective materialities with which we live. Adjusting that relationship toward some kind of harmony is a part of the messy work. In this way, there is an epistemological aspect to attentiveness as well, because “the answer to the question, ‘is it a fact?’, belongs to those for whom this question is a matter of concern” (Stengers, 2018, p. 83). We understand that values and science can go hand in hand when we realize that the facts of the crisis are made up of situated knowledge (Haraway, 2016), rather than deferring to general authority. What matters and what is valued becomes a collective negotiation taking place in context. In this manner, we are trying to learn “what a life worth living demands, and the knowledges that are worth being cultivated” through research in times of crisis (Stengers, 2018, p. 82).

The unease and uncertainty we felt regarding stakeholder inclusion allowed further explorations on living lab approaches and inclusion, providing an opportunity for collective learning. During the workshop, we worked with card stacks to form rearrangeable narratives that encouraged a “sense of multiple subjectivities” (Hostetler, 2022, p. 24). Yet, this multiplicity of possibilities created a delicate balance between offering enough structure for participants to feel confident in their actions and maintaining openness for new ways of thinking and acting. Participants also struggled with the uncertainty and complexity of the issues, group dynamics, and interdisciplinary collaboration. Vignette 3 highlights how collaborative processes generate feelings of difficulty and unease, inviting a practice of unlearning.

Vignette 3. Epistemic stuckness

Coming from diverse backgrounds and experiencing the world in diverse ways, this led to speaking different languages in our group during the workshop. At times, this led me to feel a bit helpless and frustrated, losing the flexibility and playfulness that is so key to untangling such complex crises in living labs.

What is the role of emotions within such more improvised living labs? I wondered not only about my own internalized frustrations of not moving forward and uncomfortableness to work on topics I am not an expert; but also about the level of complexity and “emotional closeness” a non-expert living lab can and should have. Living labs should provide the room to get “unstuck” together with fellow worried citizens in those topics we otherwise experience as unsurmountable.

This vignette highlights the difficulties of collaboration, as strangers navigated the delicate process of becoming a possible “us,” often generating feelings of stuckness. Being open to these feelings is not the same as inaction, or as Mol (2008) says, “doubt does not preclude action” (p. 93). Whereas we often expect to address problems in a kind of transactional way, such as by creating a product that can be given or sold as the solution, our conceptualization of attentive collaboration is more in line with Mol’s (2008, p. 18) ethic of care in which care is “an interaction in which the action goes back and forth (in an ongoing process).” Stuckness invites a tolerance for ambivalence and uncertainty, epistemically and affectively. After all, discomfort can be pedagogical (Boler, 1999).

In this context, living labs should offer opportunities for becoming ‘unstuck’ when faced with topics that otherwise appear unsurmountable, attending to alternative possibilities, generating a space for “learning again, becoming acquainted with things again, reweaving the bounds of interdependency (Stengers, 2018, p. 82). They function as environments for piecing, re-piecing, assembling, constellating, and collaging elements together that may initially seem disparate. From this perspective, living labs align with a rhizomatic mode of inquiry that connects any point in a system in a non-hierarchical way, thereby creating new units of meaning and action (Lapointe, 2020). Attentiveness within living labs, then, involves exploring new or diverse knowledge sources to encourage alternative ways of understanding crises, leveraging existing knowledge to reach shared views on how to address them, and sustaining and valorising epistemic diversity sources throughout collaboration. This attentiveness to multiple ways of knowing (and being) can guide the development of creative, innovative, and just ideas.

Attentive collaboration strives to hold space for this discomfort with openness, acceptance, and equity by meeting each participant where they are, understanding that each person comes with their own prior experiences, which build our understandings and responses in crisis. In this context, stuckness signals a commitment to care deeply about the issue at hand by attending to its complexity, discomfort, and dilemmas, while avoiding what Whyte (2019) calls “relational tipping points.” The stuckness experienced in the collaborative process gestures towards a critical need for unlearning. Natasha Myers suggests:

Sometimes we need to forget and unlearn what we think matters. We need to rearrange our sensorium and sense-making practices and disrupt disciplinary thought styles and ways of seeing so that other worlds within this world can come into view. (Myers as cited in Truman et al., 2019, p. 232)

The issue of polycrisis in particular, with its low levels of certainty and agreement on its causes and how to tackle them, resists linear thinking and conventional problem-solving approaches.

4.4. Affective Tensions: Building Affective Relationships in Collaborative Processes

Presenting a space for collective meaning-making, we also consider living labs as an affective site of encounter, both between participants and between participants and the topic or issue at stake. Within these encounters, affect emerged as a central dimension. We understand affect as the relational dynamics that unfold and develop between actors (both human and non-human), which shape living lab experiences and the emotions that emerge from them (Clough & Halley, 2007; Massumi, 1995). As participants collaborated in response to crisis scenarios, affects existed and emotions emerged. These affects and emotions influenced how one builds relationships during the workshop, and how one relates to the topic. Vignette 4 addresses these dynamics by focusing on relationship-building within living lab conditions.

Vignette 4. Building affective relationships

Relations emerge between the members of the group working together in the living lab. These relations can seem to flow naturally, or be more contentious, as for example, several members might have a strong personality and harshly disagree during the discussions. This generates other affects that can reinforce or modify our previous state of mind/heart regarding the subject.

In our group, these affects were very much felt, and I think that it is why we created a role-playing game where each character was assigned a specific emotion. Instead of socio-economic, political, or religious elements constituting the fundamental characteristics of the character, it seemed natural to us to put the emotion central, showing how affects matter. They really matter, in the sense that they have a materiality, an impact. We thought that emotions particularly shape people’s reaction to a crisis, and therefore we wanted to use the role-play game to encourage people to try and understand others’ emotions when dealing with a crisis.

Vignette 4 illustrates how affective relationships within living labs and polycrisis are not static but emerge dynamically through the process. This process shows the relationality and complexity of collaborative spaces, where emotions such as anxiety, hope, frustration, and curiosity, among others, shape both the social fabric of the group and the epistemic engagement with the issue at hand. In this sense, affect operates as a mediating force, influencing how participants position themselves and negotiate meaning collectively. De la Bellacasa

(2017) highlights that “a politics of care goes against the bifurcation of consciousness that would keep our knowledge untouched by anxiety and inaccuracy. Involved knowledge is about *being touched* rather than observing from a distance” (p. 93, original emphasis). Attentive collaboration within living labs reflects this stance in that it should generate a space to affect and to be affected (Latour, 2004), whether arising from interpersonal interactions, the topic under discussion, the process itself, the workshop environment, material infrastructures, other-than-human actors, or other affective and embodied intensities that shape the living lab space.

Rather than treating affect and emotion as secondary, some of us made them a central aspect of our inquiry during the living lab workshop. This choice illustrates what living labs can enable. From the perspective of attentive collaboration, living labs become a site of proximity, co-presence, and ongoing interaction that allows us to develop a sensitivity for subtle affective cues and emotional responsiveness. This sensitivity should pick up what remains unsaid. In such a context, emotions become infrastructures of care, supporting collaborative decisions, ethical adjustments, and inclusive knowledge production. Developing a feel for others is not just ethically important, it is a methodological necessity and ontological precondition for engaging in collaborative relationships in times of crisis, both within research and across wider fields of practice, including politics, policymaking, education, and social or institutional engagements.

5. Concluding Remarks

Based on our experience in and reflections after the workshop Living Labs in Times of Crisis, we have identified temporal, ethical, epistemic, and affective tensions that helped us conceptualize attentive collaboration. Through these tensions, we came to realize that a notion of attentive collaboration treats knowledge as plural, contextual, and co-emergent, honoring alternative ways of knowing, including affect as essential rather than incidental. It sustains the relational fabric by building trust across differences in ways that allow people to think, feel, and act together and alongside uncertainty. Attentive collaboration, then, is not simply a method; it is an ethic. It moves away from quick-and-dirty solutionism; instead, it stays with the discomfort. Building on those insights, we invite readers to engage with the following questions to reflect on attentiveness within (your) collaborative research contexts:

- Responsible action beyond urgency: Where might intentionally slowing down lead to more responsible and care-full forms of action, even under pressure? Urgency should not justify careless action, for neither action nor collaboration can ever be neutral. Evaluate which dimensions of practice allow slowness in order to ensure attentive, careful, and relational forms of collaboration. We have considered living labs as a way of redistributing temporal labor rather than choosing one pace over another. Some work must move fast, and other work must slow down so that speed does not become a form of violence.
- Inclusive and reflexive engagement: Whose perspectives or lived experiences can further deepen and steer attentiveness in practice? Actively include stakeholders to meaningfully engage with the issue. But even when one is not directly affected by a crisis, critical reflection is required to examine possible complicity or avoidance of responsibility for transformation. This calls for a critical reflection on one's positionality, since the realities we study are always shaped by our presence as researchers. Such reflections also involve attending to those not present in the room, both human and other-than-human, while critically examining assumptions that define “we” versus “them” and who has the power to decide the “what, when, and how” of the polycrisis.

- Embracing discomfort: What assumptions, habits, or dominant practices might I need to unlearn to allow alternative possibilities to emerge? Stay with discomfort rather than rushing to resolve it. During discomfort, create space for “unlearning”: Shift from dominant paradigms and practices, enabling new directions to take shape. Attentive collaboration reframes “being stuck” as an epistemic event, pushing back against methodological norms that equate fluency with rigor. Here, difficulty becomes evidence of ethical attunement rather than incompetence.
- Affect as epistemic insight: What emotional and affective dynamics are present in this collaborative space, and what might they be revealing about the situation? Recognize living labs as affective sites of encounters where actors, both human and other-than-human, mutually influence one another. In this context, emotions provide essential epistemic insights. Living labs have always operated affectively, whether acknowledged or not. Prioritizing affective care as a part of attentive collaboration simply makes this explicit and accountable.

These guiding questions can enable attentive collaboration and help activate the “living” dimension in living labs, which involves cultivating attentiveness and care within its collaborative processes. De la Bellacasa (2017) challenges us to think of research as a form of living-with each other, leading us to ask: What does it mean to live-with polycrisis? As discussed by de la Bellacasa, the notion of living-with attends to building caring and affective relationships amid urgency, uncertainty, and discomfort, both in human relationships and with other-than-humans. The “living” in living labs, thus, reflects a commitment to interdependency, reciprocity, and compassion, encompassing both living-with each other (i.e., building caring and affective relationships) and with the issue (i.e., attending carefully to it). These “living” qualities become a counter-practice to polarization, individualism, fear, and social fracture that increasingly shape contemporary life. In this way, attentive living labs can become forms of resistance in themselves. Activating this notion of living in living labs and in research more generally holds potential for shaping more caring and compassionate societies.

We suggest that, in polycrisis, one such act of care lies in cultivating relational capacities rather than prioritizing outputs. Something important is lost when living labs are judged by output alone, and so we wanted to consider, in our workshop and this article, what becomes possible when living labs are treated as “living” sites of epistemic humility and care. In this sense, it pushes back against the prevailing demands for productivity and efficiency in academia and related fields. In naming attentiveness and attentive collaboration, we aim to offer not a method to be replicated but a stance for research in polycrisis: one that slows down (on occasion), honors situated knowledge, and sustains the relational conditions needed for collective response. Living labs, approached this way, become more than innovation infrastructures; they become spaces where care, imagination, and responsibility can be practiced together. There lies an opportunity here to further flesh out what it means to build meaningful relationships in living lab and polycrisis contexts. In times when crisis demands rapid action yet resists simple solutions, cultivating attentiveness may be one of the most meaningful contributions the humanities and social sciences can make.

Acknowledgments

We would like to express our gratitude to KU Leuven’s Young Researchers’ Careers Centre for their support of this initiative.

Funding

This article was developed as part of the doctoral fellowship of one of the authors, funded by the Research Foundation Flanders (Project: 11Q4S24N). Publication of this article in open access was made possible through the institutional membership agreement between the University of Melbourne and Cogitatio Press.

Conflict of Interests

The authors declare no conflict of interest. In this article, editorial decisions were undertaken by Ulf R. Hedetoft (University of Copenhagen).

References

- Baccarne, B., Logghe, S., Schuurman, D., & De Marez, L. (2016). Governing quintuple helix Innovation: Urban living labs and socio-ecological entrepreneurship. *Technology Innovation Management Review*, 6(3), 22–30.
- Ballon, P., & Schuurman, D. (2015). Living labs: Concepts, tools and cases. *Info*, 17(4). <https://doi.org/10.1108/info-04-2015-0024>
- Bergvall-Kareborn, B., & Stahlbrost, A. (2009). Living lab: An open and citizen-centric approach for innovation. *International Journal of Innovation and Regional Development*, 1(4), 356–370. <https://doi.org/10.1504/IJIRD.2009.022727>
- Boler, M. (1999). *Feeling power: Emotions and education*. Routledge.
- Bringham, R., & Zwicky, J. (2018). *Learning to die: Wisdom in the age of climate crisis*. University of Regina.
- Carayannis, E. G., & Campbell, D. F. (2012). Triple helix, quadruple helix and quintuple helix and how do knowledge, innovation and the environment relate to each other? A proposed framework for a trans-disciplinary analysis of sustainable development and social ecology. In E. G. Carayannis (Ed.), *Sustainable policy applications for social ecology and development* (pp. 29–59). IGI Global Scientific Publishing.
- Clough, P. T., & Halley, J. (Eds.). (2007). *The affective turn: Theorizing the social*. Duke University Press. <https://doi.org/10.2307/j.ctv11316pw>
- de la Bellacasa, M. P. (2012). 'Nothing comes without its world': Thinking with care. *The Sociological Review*, 60(2), 197–216. <https://doi.org/10.1111/j.1467-954X.2012.02070.x>
- de la Bellacasa, M. P. (2017). *Matters of care: Speculative ethics in more than human worlds* (Vol. 41). University of Minnesota Press.
- Dowler, L., Hyndman, J., & Sharp, J. (2024). Feminist geopolitical futures. In F. Manga, C. Nagel, K. Grove, & K. Peters (Eds.), *Political geography in practice: Theories, approaches, methodologies* (pp. 53–67). Springer International Publishing.
- Ersoy, A., & van Bueren, E. (2020). Challenges of urban living labs towards the future of local innovation. *Urban Planning*, 5(4), 89–100. <https://doi.org/10.17645/up.v5i4.3226>
- European Network of Living Labs. (2026, January 20). *Living labs-ENoLL*. <https://enoll.org/living-labs>
- Følstad, A. (2008). Living labs for innovation and development of information and communication technology: A literature review. *eJOV: The Electronic Journal for Virtual Organization & Networks*, 10, 99–131.
- Hagy, S., Morrison, G. M., & Elfstrand, P. (2016). Co-creation in living labs. In D. V. Keyson, O. Guerra-Santin, & D. Lockton (Eds.), *Living labs: Design and assessment of sustainable living* (pp. 169–178). Springer International Publishing.
- Haraway, D. J. (2016). *Staying with the trouble: Making kin in the Chthulucene*. Duke University Press.
- Hossain, M., Leminen, S., & Westerlund, M. (2019). A systematic review of living lab literature. *Journal of Cleaner Production*, 213, 976–988. <https://doi.org/10.1016/j.jclepro.2018.12.257>

- Hostetler, A. (2022). *Edu-crafting teacher identities: Diffractive auto/ethnography through cartomancy* [Unpublished master's thesis]. University of Alberta.
- Jacobs, A., McKenzie, M., & Truman, S. E. (2026). *Emplaced speculation: Imagining multispecies worlds in the colonial ruins of the Anthropocene*. Manuscript submitted for publication.
- Kim, J., Kim, Y. L., Jang, H., Cho, M., Lee, M., Kim, J., & Lee, H. (2020). Living labs for health: An integrative literature review. *European Journal of Public Health*, 30(1), 55–63. <https://doi.org/10.1093/eurpub/ckz105>
- Knight, L. (2023). Inefficiently mapping extinction: A research-creation, practice-led approach to visualizing biodiversity loss. *Research in Education*, 117(1), 11–25. <https://doi.org/10.1177/00345237231200623>
- Kommonen, K. H., & Botero, A. (2013). Are the users driving, and how open is open? Experiences from living lab and user driven innovation projects. *Journal of Community Informatics*, 9(3), 1–11.
- Koro, M., & Wolgemuth, J. (2023). Methodologies for the apocalypse: Unthinking the thinkable. *Qualitative Inquiry*, 29(6), 651–658. <https://doi.org/10.1177/10778004221142805>
- Lapointe, D. (2020). Du living lab rhizome, des usagers et de la multiplicité du chercheur. In V. Lehmann & V. Colomb (Eds.), *L'innovation collective: Quand créer avec devient essentiel* (pp. 87–94). Presses de l'université du Québec.
- Latour, B. (2004). How to talk about the body? The normative dimension of science studies. *Body & Society*, 10(2/3), 205–229. <https://doi.org/10.1177/1357034X04042943>
- Lawrence, M., Homer-Dixon, T., Janzwood, S., Rockstöm, J., Renn, O., & Donges, J. F. (2024). Global polycrisis: The causal mechanisms of crisis entanglement. *Global Sustainability*, 7, Article 6. <https://doi.org/10.1017/sus.2024.1>
- Mark, S., Holder, S., Hoyer, D., Schoonover, R., & Aldrich, D. P. (2025). Understanding polycrisis: Definitions, applications, and responses. *Global Sustainability*, 8, Article 35. <https://doi.org/10.1017/sus.2025.10018>
- Massumi, B. (1995). The autonomy of affect. *Cultural Critique*, 1995(31), 83–109. <https://doi.org/10.2307/1354446>
- McIntyre, L. (2018). *Post-truth*. MIT Press.
- McPhee, C., Bancercz, M., Mambrini-Doudet, M., Chrétien, F., Huyghe, C., & Gracia-Garza, J. (2021). The defining characteristics of agroecosystem living labs. *Sustainability*, 13(4), Article 1718. <https://doi.org/10.3390/su13041718>
- Miró-Llinares, F., & Aguerri, J. C. (2023). Misinformation about fake news: A systematic critical review of empirical studies on the phenomenon and its status as a 'threat.' *European Journal of Criminology*, 20(1), 356–374. <https://doi.org/10.1177/1477370821994059>
- Mol, A. (2008). *The logic of care: Health and the problem of patient choice*. Routledge
- Nesti, G. (2018). Co-production for innovation: The urban living lab experience. *Policy and Society*, 37(3), 310–325. <https://doi.org/10.1080/14494035.2017.1374692>
- Nixon, R. (2011). *Slow violence and the environmentalism of the poor*. Harvard University Press.
- Pallot, M., Trousse, B., Senach, B., & Scapin, D. (2010). *Living lab research landscape: From user centred design and user experience towards user cocreation*. HAL Open Science. <https://inria.hal.science/inria-00612632v1/document>
- Patterson, J., Wyborn, C., Westman, L., Brisbois, M. C., Milkoreit, M., & Jayaram, D. (2021). The political effects of emergency frames in sustainability. *Nature Sustainability*, 4, 841–950. <https://doi.org/10.1038/s41893-021-00749-9>
- Pfotenhauer, S., Laurent, B., Papageorgiou, K., & Stilgoe, A. J. (2022). The politics of scaling. *Social Studies of Science*, 52(1), 3–34. <https://doi.org/10.1177/03063127211048945>
- Radulescu, M. A., Leendertse, W., & Arts, J. (2022). Living labs: A creative and collaborative planning approach.

- In A. Franklin (Ed.), *Co-creativity and engaged scholarship: Transformative methods in social sustainability research* (pp. 457–491). Springer Nature.
- Rakowski, J. J., Schaan, L. N., van Klink, R., Herzon, I., Arth, A., Hagedorn, G., Rode, J., Creutzig, F., & Pe'er, G. (2025). Characterizing the global polycrisis: A systematic review of recent literature. *Annual Review of Environment and Resources*, 50, 159–183. <https://doi.org/10.1146/annurev-environ-111523-102238>
- Rigkos-Zitthen, I., & Granberg, M. (2024). Exploring democracy in the Anthropocene: The case of practices of collective care. *Socialism and Democracy*, 38(1), 40–63. <https://doi.org/10.1080/08854300.2024.2378397>
- Sachs Olsen, C., & van Hulst, M. (2024). Reimagining urban living labs: Enter the urban drama lab. *Urban Studies*, 61(6), 991–1012. <https://doi.org/10.1177/00420980231187771>
- Schuurman, D., & Leminen, S. (2021). Living labs past achievements, current developments, and future trajectories. *Sustainability*, 13, Article 10703. <https://doi.org/10.3390/su131910703>
- Stengers, I. (2018). *Another science is possible: A manifesto for slow science*. Polity.
- Stouten, E., Idrees, S. S., Jacobs, A., & Hannes, K. (2025). From risk-averse to opportunity-led ethics: Renegotiating institutional ethical guidelines for co-creative types of research. *Qualitative Inquiry*, 32(5), 386–400. <https://doi.org/10.1177/10778004251334057>
- Taylor, L. (2021). Exploitation as innovation: Research ethics and the governance of experimentation in the urban living lab. *Regional Studies*, 55(12), 1902–1912. <https://doi.org/10.1080/00343404.2020.1826421>
- Tronto, J. C. (1998). An ethic of care. *Generations: Journal of the American society on Aging*, 22(3), 15–20.
- Truman, S. E., Loveless, N., Manning, E., Myers, N., & Springgay, S. (2019). The intimacies of doing research-creation. In N. Loveless (Ed.), *Knowing and knots: Methodologies and ecologies in research-creation* (pp. 221–250). University of Alberta Press.
- Vannini, P. (2015). Non-representational research methodologies: An introduction. In P. Vannini (Ed.), *Non-representational methodologies: Re-envisioning research* (pp. 1–18). Routledge.
- Vicini, S., Bellini, S., & Sanna, A. (2012). The city of the future living lab. *International Journal of Automation and Smart Technology*, 2(3), 201–208. <https://doi.org/10.5875/ausmt.v2i3.134>
- Whyte, K. (2019). Too late for Indigenous climate justice: Ecological and relational tipping points. *WIREs Climate Change*, 11(1), Article 603. <https://doi.org/10.1002/wcc.603>
- Williams, M. J. (2017). Care-full justice in the city. *Antipode*, 49(3), 821–839. <https://doi.org/10.1111/anti.12279>
- Yusoff, K. (2018). *A billion Black Anthropocenes or none*. University of Minnesota Press.
- Zimmermann, F., Ponomareva, A., Spagnoli, F., HES-SO, & ENoLL. (n.d.). *Bristol Living Lab*. https://openlab-project.eu/app/uploads/Bristol-Living-Lab_Bristol-UK.pdf

About the Authors



Antje Jacobs is a joint PhD candidate at KU Leuven and the University of Melbourne. Her research explores climate change through creative lenses, particularly focusing on speculative and multispecies worldbuilding. In this context, she is interested in collaborative and creative research methodologies, including living lab approaches, research-creation, and speculative inquiry.



Angela Hostetler is a joint PhD candidate in education and sociology at the University of Melbourne and KU Leuven. Her current a/r/tographic research explores how various media contribute to meaning-making about climate futures. Methodologically, she engages with and creates texts that function as open and dynamic places of learning.



Koenraad Hinnekint is a project facilitator at LUCA School of Arts (Brussels) and a doctoral researcher at KU Leuven (Faculty of Psychology and Educational Sciences). His research interests centre on the (future) educational design in higher arts education institutions, focusing on ecologies of justice explored through posthumanist and post-digital perspectives.



Yannis Perifanos is a doctoral researcher at KU Leuven, studying the intercooperation activity among cooperative enterprises as a means of increasing their legitimacy, societal contributions, and sustainable impact. He has long experience in social economy organizations that address social inequalities, and he is a former Marie Skłodowska-Curie Actions fellow.



Juan Pablo Centeno is a PhD researcher at KU Leuven Public Governance Institute (PGI), investigating the knowledge circulation practices shaping co-creation and innovation processes. His previous academic and consulting work on research and innovation policy spans different regions, including the United Kingdom, Latin America, and the Caribbean.



Rodrigo Cruz is a Marie Skłodowska-Curie Postdoctoral Fellow at UCL School of Slavonic and East European Studies (SSEES), where he investigates LGBTI+ movements' struggles against online disinformation and for social media regulation in Brazil and Poland. Rodrigo's research focuses on political sociology, digital politics, gender, and sexuality.



Eylem Keskin is an architect and PhD candidate at Izmir Institute of Technology (IZTECH), supported by the CoHE 100/2000. In 2025, she was a TÜBİTAK 2214-A Fellow visiting researcher at Utrecht University's Centre for Living Labs. Her work explores the "campus as a living lab" approach to sustainability in universities.



Louise Mazet (she/her) is a participatory design researcher with a background in communication and media, philosophy, gendering practices, and design research. She is currently a PhD candidate at Hasselt University, where she works on co-creation and regional Living Labs for the Einstein Telescope using desire frameworks to navigate uncertainties.



Giovana Navarro is an MA candidate in social and cultural anthropology at KU Leuven with a background in Latin American literature. Her current research, alongside an Ax'mein from the Mayan Yokot'an community in Mexico, focuses on the tensions in teachings shared in transnational spaces such as cacao circles in Europe.



Charlotte Parion is a PhD candidate in sociology at KU Leuven, in the research group TRANSFORM. She studies how augmentation technologies such as non-medical implants are used by early adopters. She seeks to conceptualize human augmentation and dive into people's lived experiences and the implications they could have in the future.



Amber Jenny Sels is a PhD researcher at the Urban Futures Studio and Energy and Resources Section at Utrecht University. She studies the cultural politics of a circular economy. More specifically, how a circular future is imagined, and how diverse actors compete to (re-)define what the CE is and could become.



Hanne Vrebos is a postdoctoral researcher at the research groups of Sustainability Assessments of Materials and Circular Economy (SAM) and the Idiosyncratic Inventors Collective at KU Leuven. She studies urban transitions through participatory action research and coordinates the research project Circocreation, using living labs to foster collaboration and circularity in urban construction.



Karin Hannes is a professor at KU Leuven and coordinates research group TRANSFORM's Idiosyncratic Inventors Collective. She specializes in arts-based, place-based, multisensory and community-based research, as well as futures studies and qualitative evidence synthesis as a meta-review technique. She works from an inclusive, academic activism perspective and develops methods for positive change in society.