

Jun 23rd, 9:00 AM - Jun 28th, 5:00 PM

Designing for Transitions and Transformations: resistance, recovery, reflection, and reimagination

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Citation

Coops, F., Lockton, D., Gaziulusoy, İ., Boehnert, J., Ortega Pallanez, M., Overdiek, A., Nilstad Pettersen, I., Culén, A., Juri, S., and Tonkinwise, C. (2024) Designing for Transitions and Transformations: resistance, recovery, reflection, and reimagination, in Gray, C., Hekkert, P., Forlano, L., Ciuccarelli, P. (eds.), *DRS2024: Boston*, 23–28 June, Boston, USA. <https://doi.org/10.21606/drs.2024.1696>

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Conversation: Designing for transitions and transformations: Resistance, recovery, reflection, and reimagination

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doi.org/10.21606/drs.2024.1696

Abstract: Our Conversation at DRS2024 involved around 130 participants in-person and online, exploring Design for Transitions and Transformations through the lenses of four themes aligned with the DRS2024 themes: Resistance, Recovery, Reflection, and Reimagination. In this paper, we share some of what emerged from our group discussions, in terms of emergent questions and ideas. In considering Resistance, we examined how we (as designers, researchers, educators, and practitioners) can transition from design that reproduces unsustainability. In Recovery we looked at how we can transition from unsustainability, but also what has become lost, that we want to recover. Reflection prompted discussion of how design can be transformed to enable strategic thinking and practices towards regeneration and flourishing, while Reimagination gave us the chance to address what new practices and education might look like—and how we can support new forms of imagination. We end with some reflections on ways forward.

Keywords: design, transitions, transformations, sustainability, climate crisis

1. Introduction

The urgency of crises in planetary health—climate, biodiversity loss, inequality, and others—has made design’s role in transformative change ever-more important in the pursuit of



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sustainable, just and resilient futures. Stemming from diverse academic traditions, disciplines such as design, futures studies, transitions, sustainability science, and related approaches are progressively interacting with each other, each coming with its unique norms, frameworks, and methodologies. This convergence gives rise to novel configurations and integrations, particularly in practical applications where policymakers, communities, businesses, and innovative organisational structures are actively addressing the multifaceted challenges. These efforts are often situated and local yet interconnected with the complex systems of both society and the environment.

In design research, approaches such as transition design (Irwin et al., 2015a) feed into a fertile landscape where futures studies, speculative and critical design, pluriversality (Leitão et al., 2021), imagination infrastructuring, justice (design justice, climate justice, just transitions), more-than-human and nature-inclusive perspectives (e.g. Veselova et al., 2022), emotions in transitions (e.g. Coops et al., 2024, Lindström et al., 2021,), alternative economics, regenerative design, non- and decolonial perspectives (e.g. Juri et al., 2021), systemic design, complexity theory, feminist perspectives, design education (and futures literacy), and many other lenses on transformative change are overlapping, creating a new space for exchange and exploration. In this space—which we have referred to as ‘Designing for transitions and transformations’ (D4TT)—a landscape of designing for transition and transformation is shaping itself. As more and more designers and researchers become part of this landscape, the need to connect, foster exchange and collaboratively discover also emerges, but also the need for clarity and addressing some of the important questions that are emerging, as outlined in the next section.

Traditional, modernist design paradigms compel designers to frame their work in ways that reproduce unsustainability. Transition theories can, in contrast, be a way of understanding and enacting movement from current ideas and practices that present obstacles to the futures we need to construct. The topic of designing for transitions and transformations is a subject of increasing interest to the DRS community, with tracks, conversations, and workshops at DRS2018 (Boehnert et al., 2018), DRS 2022 (Coops et al., 2022; Light et al., 2022), and a papers track at DRS2024 (Coops et al., 2024) specifically focusing on designing for transitions or nurturing transformative futures by/through design. Our conversation at DRS2024 emphasised not only learning from one another but also learning together, and strengthening each other, to better tackle complex challenges in our own contexts, in design research and education.

2. Set-up of conversation

We invited participants to explore the process of transitions and transformations in design practice and theory. These processes are transforming within the field, particularly in addressing the intricate and interconnected socio-ecological crises of today. Through the framing of DRS2024 themes (resistance, recovery, reflection, and reimagination) participants collectively explored questions around:

- **Resistance:** How do we transition from the design ontologies, ideas, practices, and structures that reproduce unsustainability? How can design enable more effective resistance where resistance is needed? How can we respond when theories and practices present themselves as transition design but could be better understood as 'transition-washing'? What interpretations of transition design theory and practice hold most potential?
- **Recovery:** How can we transition from unsustainability? What kind of design practices should we unlearn, deepen, problematise, or abandon? What got lost that we want to recover? And how do we do this? What are we recovering from? How do we move away from this?
- **Reflection:** How can critical reflection transform design to cultivate strategic thinking and practices toward regeneration and flourishings? What role does reflection play in challenging design legacies of unsustainability?
- **Reimagination:** How do design knowledge and practices that are engaged with transitions look like? What new promising directions for design research and practice to play a role in transitions are already visible? How can design contribute to (re)imagining sustainable, resilient, just, desirable futures? How do a reimaged design practice, design education, design research look like?

The conversation followed a hybrid format where over 100 participants attended physically and about 30 online. After a short introduction of the goal of the conversation, the participants were divided over the four tables – each table covered one of the R's and had its own host. The participants rotated during the conversation, making sure they visited all four tables and thus topics. The same format was followed online, using the online whiteboarding platform *Miro* as a collaboration and facilitation space. To close the conversation a plenary sharing took place where each host shared what insights stood out during the discussions.

3. Discussions on the 4 Rs

Following the topics of Resistance, Recovery, Reimagination and Reflection, this section outlines the takeaways from the tables and online session.

3.1 Resistance: Joanna Boehnert and Anja Overdiek

How important is resistance in transition design? The Resistance topic in-person session started with questions including how we can transition away from the design ontologies, ideas, practices, and structures that reproduce unsustainability and social harms—and what the most effective and powerful forms of resistance could be in a design context? Can strategies of resistance inform responsive actions where the language of design for transitions is appropriated with what we might call "transition-washing"?



Figure 1. Post-it notes from Boston DRS2024 Resistance session arranged on an Actors Map (Jones and Van Ael, 2022, p.50-51).

This topic emerged in our planning for the track as a trend that could damage the transformative potential of the most potent idea and strategies of transition design.

We distributed post-it notes and asked everyone to take a couple of minutes in silence to write one idea of resistance on the post-it note and place it on the table on a scale of ontological to physical acts of resistance. We then attempted to read all the answers (Figure 1) in the remaining time in each of four sessions. One suggestion was that we should be using the word “resilience” rather than “resistance.” Some prominent themes are summarized with the following contributions:

- “Facilitating dialogue to make multiple perspectives visible and valuable”
- “Make projects that support collective imagining futures without capitalism”
- “Refusal to use polluting materials”
- “Critical design that re-distributes authority/power (aka revolution)”

- “Educating design students with a focus on sustainment / socio-political-economic context not service to commercialism”
- “Advocate for those who can’t do it for themselves”
- “Challenge the design education paradigm”

Each of the four groups emphasized the need for strategic action to reorient design towards sustainable and socially just ends.

The online session revolved around three main themes. The first was the need for resistance to existing regimes like academia and paradigms like capitalism, consumerism, modernism and (design) solutionism. Design research and designing for this theme was mostly articulated as (learning about) changing system goals and paradigms, and deeper analysis of social systems. One quote from a participant was: “We need resistance to existing regimes, particularly academia. We as designers should make institutions we are working in, like academia, models of transformation”.

The second theme revolved around unpacking the ‘how’ of D4TT from a resistance perspective. A typical quote here was: “How to resist better? We need to recognize the need for resistance to existing systems in a more nuanced way. What exactly needs to go in and out? What is there to keep from the old, what is there to leave behind and what do we need to build up?”. Here the emphasis on both breaking down and building up by design was interesting. The need for designing for in-between old and new systems was mentioned. We see connections with antecedent work from Design for Sustainability Transformations here.

Thirdly, resistance against D4TT was discussed. “Paying more attention to resistance is necessary. As a designer when we try to make a change we are confronted with resistance. Can we stand still with this resistance and open up to its nuances?”—embracing resistance and learning with it bears links with Community Design, but participants articulated the need to understand larger scale resistance like the “yellow vest” movement. Overall, we see different themes arising from this conversation for a research agenda:

- Deeper analysis of social systems relating regime and paradigm-shifting to designing for D4TT
- Combining breaking down and building up in D4TT
- Unpacking resistance against change and its challenges and opportunities for D4TT
- Designing for the in-between in the sense of acknowledging that many people make a living in between old systems and (niche) cultures of resistance

3.2 Recovery: Femke Coops and Silvana Juri

During the conversations that focused on recovery, we discussed *what has been lost that we would like to recover*, in the context of D4TT. In addition, we reflected on *what we are recovering from* and how we could possibly move away from this. Several overarching

themes emerged that highlighted the need to recover foundational aspects of human and planetary well-being. Central to this was the restoration of human values such as trust, empathy, intuition and the embracing of emotions as these are essential in fostering a deeper connection and understanding among people. This re-centring of human values is intrinsically linked to a broader sense of genuine care—care for each other, care for the planet, and care for oneself, with rest embraced as a vital creative practice.

Another significant theme was the importance of community collectiveness, and relationships, which are nurtured through (human) touch, interaction, and intimacy. This sense of connection forms the foundation to create playfulness, joy, and a sense of wonder and hope in our processes, all of which are vital to envisioning and working towards a better future. Relating to this, time emerged as another crucial topic, encouraging a balanced approach to time that allows for patience, rest, and attention, while recognizing slowness and even boredom as fertile grounds for creative emergence. The practice of slow-making could lead us back to craftsmanship, with respect for materials and local skills, while we call for letting go of the unsustainable pace and practices of modernity and capitalism.

Recovery, in this context, is also about healing—acknowledging grief and collective sorrow, and creating safe spaces for these processes. There is a deep awareness of the accountability we must bear for what cannot be recovered—the destruction of the earth and the resulting loss of irreplaceable aspects of our world. These losses need to be acknowledged, grieved and incorporated when we are designing for societal change. Lastly, we discussed the importance of other ways of knowing—valuing diverse histories and cultures alongside non-human perspectives and the knowledge of non-designers. Recognizing the need to move beyond singular, universal worldviews and instead embracing contextual, socio-ecological-political-historical understandings that, while diminished, are not beyond recovery but do need space and attention to be nurtured and appreciated.

Overall, we see different themes arising from this conversation for a research agenda:

- Redefining time and practices for creative emergence, unpacking the concept of time as our ability to find balance, attention and rest as creative practice in D4TT
- Deeper analysis of our accountability for what cannot be recovered and how this is entangled in our processes of D4TT
- Embracing diverse knowledge systems and creating space for other ways of knowing in processes of D4TT
- (Re)building community and collective relationships, exploring the role of community, collectiveness, and interpersonal relationships in D4TT
- Exploring the role of grief, sorrow, and collective mourning in D4TT, particularly in relation to the loss of irreplaceable aspects of the earth and society.

3.3 Reflection: Marysol Ortega Pallanez and Alma Leora Culén

During the in-person conversation about Reflection, conversations gravitated toward the question: what role does reflection play in transforming design to contribute to planetary regeneration and flourishings? Each round began with a silent personal reflection on the question; reflections accumulated and informed subsequent rounds. The conversations explored the following reflective qualities for design and designers working toward planetary sustainment and flourishing:

Complexity and validity

Participants questioned what counts as reflection, noting that academic forms typically privilege written articulation. They highlighted the limitations of relying solely on written expressions to capture depth and complexity and connect with design practitioners and other co-creators of transition paths (see Figure 3). In line with emerging design theory and practice in this space (Ortega Pallanez 2023, 2024), a key question was, “How can we develop other reflexive expressions (e.g., artistic, embodied)?”



Figure 2 *Impromptu reflection through artistic means on the complexity and plurality of forms of design reflexivity by Caroline Hummels.*

Fluctuation

Reflection requires reframing efficiency in design, moving beyond the fast-slow dichotomy to incorporate pauses and changes in speed based on context and current capabilities. Participants stressed the need to develop sensibilities to varying situations, balancing immediacy with long-term needs.

Participation and Access

Design must create spaces for reflective collaboration, acknowledging those who cannot (e.g., more-than-human) or do not wish to reflect as expected/desired. Participants

emphasized the importance of rethinking the synergies between humans and nature in how we conceive participation and recognizing that not making and unmaking are also design acts (Korsmeyer et al., 2022; Lindström & Ståhl, 2020; Sabie et al., 2022)—from material to ontological, underscoring that reflection in design education is often overlooked.

The final round reflected on metacognition and meta (un)making, discussing how awareness and constant reexamination of our thinking, biases, and external forces (social, ecological, economic, political) shape design decisions and actions.

During the online session on reflection, we sought deeper insights into how design might transform to enable strategic thinking and practices toward regeneration and flourishing. Despite the inherent difficulties in addressing such a broad and complex topic, the participants' engagement underscored the relevance and importance of such reflections. Participants forwarded various perspectives (a selection is shown in Figure 2). One of the post-its instantly captured our attention— it called for the distinction in reflecting on transition/transformation as a broader concept and transforming the design discipline itself to further strategic thinking and practices leading to regeneration and flourishing. These aspects are not necessarily separate, suggesting the opportunity to consider synergies between them as one of the core areas for reflection.

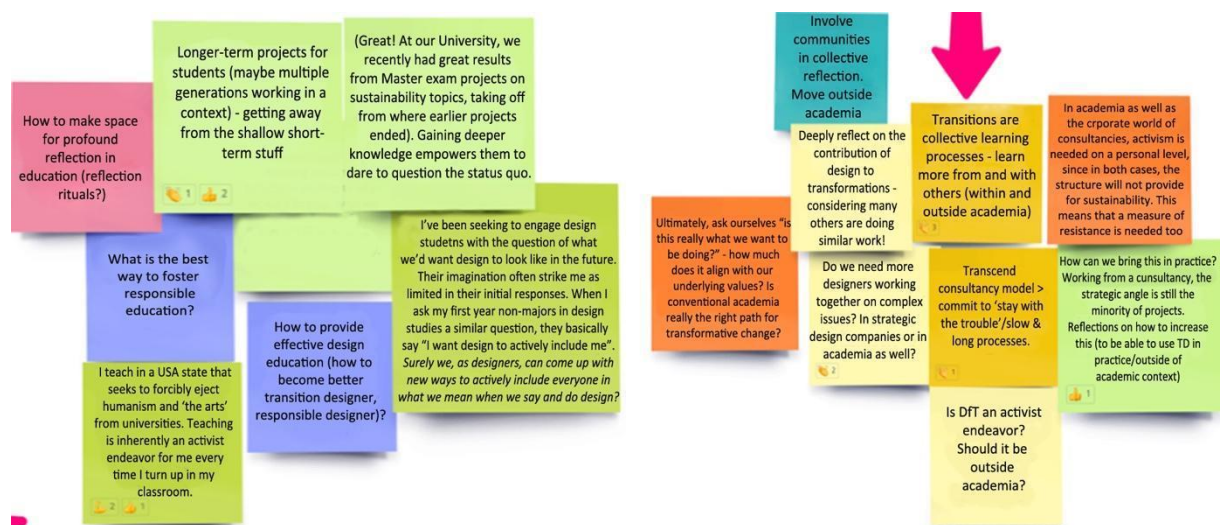


Figure 3. Reflections on the role of education (left) and where to place the design work (right).

Three central themes emerged through affinity mapping:

1. **Non-Human Perspectives:** Participants stressed the need to consider our interconnectedness with nature, advocating for radical non-human perspectives as a shift from designing for users to designing with users toward planet's well-being. This aligns with research on integrating nature, and especially technology, into transition/transformation design for flourishing futures, e.g., Boehnert (2018), Coyne (2020), Irwin and co-authors (2015b), and Jonas (1985).

2. **Transition Design in Academia:** A strategic reflection concerning the impact of transition/transformation design on the society also depends on how and where it is positioned. Opinions varied on whether transition design should reside within academia, industry, or new hybrid spaces. The discussion highlighted the importance of partnerships, collective learning, and community work in driving transformative design.
3. **Evolving Design Education:** Given the increasing complexity of challenges that design faces, education's role must change appropriately (Stevens & Culén, 2024). Suggestions included incorporating 'reflection rituals', extending project timelines for deeper learning, and involving students in co-designing their education. The role of education as an activist tool was also emphasized.
4. **Other Factors Influencing Transitions:** encompassed a range of considerations outside the above categories, including the importance of reflecting on collective and individual values, designers' autonomy, the role of infrastructure, and the need for critical reflection on the 'ugly' aspects of design. Participants also emphasized the importance of distinguishing between design-led and designer-led approaches and learning from experimental practices. While the schedule allowed for only a few deeper inquiries, the multifaceted nature of the topic was well highlighted: the main take-away was that it is crucial for D4TT to continually reflect on its strategies and practices.

Overall, we see different themes arising from this conversation for a research agenda:

- Exploring diverse reflective practices in D4TT, developing new methods of reflection in design that go beyond traditional written articulation
- Investigating the role and positioning of D4TT within different contexts, such as academia, industry, or hybrid spaces
- Evolving design education for complexity, transforming design education with a focus on D4TT to be able to address complex societal challenges

3.4 Reimagination: İdil Gaziulusoy and Dan Lockton

Addressing the topic of Reimagination, we worked with the question of "How should we reimagine design research, design practice, and design education?". One key point was that (re)imagination is not new to design generally, or to sustainable design more specifically. For example, a video of a workshop organized by the O2 Global Network in Rotterdam in 1993¹ features many ideas put forward by the sustainable design community thirty years ago which are still valid as images of sustainable futures, yet to be realized, although some of the ideas have also been prototyped. What is new to design (re)imagining these days is an emphasis on shifting to more-than-human-centric approaches and challenging the industry-serving mission of design, which had been fundamental in the establishment and

¹ O2 Event Sustainable Lifestyles, Rotterdam, 1993, posted by De Graaf & Co
<https://www.youtube.com/watch?v=cu7cWhxfPdM>

development of the profession. Another point discussed at the (re)imagination table was the need for design research and practice to “stop doing all the talking, and starting to listen”, paying attention to and weaving multiple knowledges together including not only scientific, but also indigenous, traditional and local. Regarding design education, participants emphasized the need to teach reflexivity, criticality and awareness of manifesting one’s politics and values into the world through designing. In addition, participants suggested that design education should focus less on skills and more on competences. Another, very important discussion topic was the current state of the world and how to keep hopeful. These wise words contributed by Ezio Manzini (as a participant) resonated with us all: “As designers we bet on possibility and accept the complexity, accept that the answers to the questions we struggle with may not emerge in the now but in the future. You cannot be a pessimistic designer; if you don’t see any possibility, you should go and do something other than designing.”

Our online conversation around (re)imagination explored participants’ ideas around how we can use the positions we have—as researchers, educators, and designers—to facilitate, prompt, spark, and enable the imagining of more radical futures collectively. We felt that going through the sequence of resistance, recovery, and reflection together had led us to a point where we saw the need for action, putting processes of reimagining (institutions, education, societal actors) into practice through experimentation and creative collaborations.

One strong theme that emerged was reimagining (or perhaps transforming) the roles that designers take in society. Ideas included: “designers transitioning towards being process facilitators”, perhaps aligned with the emergent ideas of imagination infrastructuring (Robinson, 2022), imagination activism (Tickell, 2022), a resurgence of interest in imagination as politically important (Benjamin, 2024; Mulgan, 2020), and a wider focus on imagination in design education (e.g. as Lockton & Coops (2024) explore in relation to sustainable futures). One idea here proposed “inspiring everyone to exchange jobs/positions each year”; designers as community organisers and stakeholder connectors, seeking out transformative potential and helping amplify it; designers becoming policy-makers in government; and designers themselves living in more radically different ways to exemplify, prefigure, and experiment with alternative futures. We imagined new more exploratory forms of alliances and collaborations (including the more-than-human, e.g. “co-creation with wolves” was mentioned!) along with a general commitment to (facilitating) imagining futures reflecting a more plural, or even pluriversal, set of perspectives, learning from non-western cultures and traditions and how cultures have “held sacred knowledge for sustainable ways of being and existence”. An interesting suggestion was made that we should acknowledge and learn from design’s own heritage and existing roles more, and “insist on using its discourse to alter current perspectives” while making sure to “go beyond giving new names to old concepts”.

The biggest opportunities that participants identified in their own work were around education as a context where we potentially have more agency to act in the world. It was

averred that “design education cannot be other than transdisciplinary” and that “ecological / sustainability literacy” must be “core and normalised” along with a form of “imagination literacy”, as explored by Barton (2024), and crucially, teaching responsibility. It might involve educating students to be “change agents” and “to find their own imaginations—and empower them to use these—building their confidence to re-imagine”. It was also noted that design education itself could be much more integrated into real-world contexts and problems of transitions—we “cannot ‘train’ designers on ‘fake’ projects [any more]—there are plenty of real issues to work on everywhere”. Educational possibilities in relation to transition go beyond traditional university structures, with courses and coaching for professional designers (or alumni of design programmes) and non-designers being a further way to create momentum in spaces where the ideas have a stronger possibility of being applied directly in practice.

Overall, we see different themes arising from this conversation for a research agenda:

- Exploring how research, practice, and education around D4TT can move away from an industry-serving mission towards approaches that consider more-than-human perspectives
- Redefining the role of designers in society, focusing on process facilitation, community organization, policy-making, and connecting stakeholders.
- Explore how designers, educators, and researchers can use their positions to foster collective reimagining of institutions, education, and societal roles

4. Discussion

This was a successful conversation, in terms of attracting a large number of participants, both in-person in Boston and online around the world. About 25% of all DRS conference attendees joined the conversation (around 100 in-person, and 30 online). The enthusiasm for new ways of thinking about design and designers’ role in transitions and transformations was very motivating, especially in conjunction with the popular papers track (Coops et al., 2024), and overall this demonstrates great potential and interest in the area. The discussion prompted by the four Rs gave us some potentially interesting directions—a partial research agenda—to explore around what we as a community of designers, researchers, and educators can actually do, or at least bear in mind, in practice, in the organisations and contexts in which we have the ability and agency to initiate change.



Figure 4. This photo capturing roughly half of the room, shows about 50 in-person attendees to the conversation prior to the breakout tables/conversations

However, while this is a sign of hope, it also raises some risks and concerns: there are varying degrees of familiarity and expertise with both theories and practice of designing for transitions and transformations. Some participants gave us feedback that they felt the inclusiveness also muddled the clarity of the concepts. A finding is perhaps the need to publish something which clearly defines what D4TT entails, and key principles and references, while still being open enough to new perspectives. There was a concern that as noted in section 3.1, a lack of clarity makes ‘transition-washing’ more likely – or opens a door for ‘design for transition’ to become just another buzzword without the transformative impact it aims to bring about. While this is too new a field to have an established ‘canon’ of literature, we must make sure not to lose or ignore previous work on design, transitions, and transformations, and indeed the wider field of transitions research which is well-established in social and environmental sciences contexts, building on it, but not being constrained by it. To use a somewhat laboured metaphor, we must avoid reinventing the wheel—but perhaps we need to understand existing wheels to help us prototype some alternatives.

It feels as though there is value in the fact that we as a community have gravitated toward each other, even if some of our shared interests are unclear. There is a useful overlap with other communities within design research and practice which take broader approaches towards seeing bigger pictures, across (eco)systems and temporally. Kjøde (2022) positioned Transition Design and other systemic design approaches in relation to transitions models more widely, such as the multi-level perspective for socio-technical transitions (Geels, 2002)

and sustainability transitions (Grin et al., 2010), suggesting that designerly approaches to transitions can be seen as an “interdiscipline” (Kjøde, 2022, p4). This is paralleled by Anja Overdiek’s reflection on the emergence of the field of ‘Systemic Co-design’ in the Netherlands as a way of relating a systemic orientation and participatory design, along with approaches such as system-shifting design (Drew et al., 2022; Leadbeater & Winhall, 2020), scaling literacy (Mulder, et al., 2022, Lake et al., 2022), and reflection on systemic design practice (Zifkovic, 2018; Birney, 2021) and reasoning (van der Bijl-Brouwer et al., 2024), all of which use concepts from transition studies and systems thinking, and build frameworks from practice.

As we saw with the papers track (Coops et al., 2024)—on which, for example, İdil Gaziulusoy reflected (p3) on D4TT as “a design research track that is not only growing but also consolidating and starting to develop its own voice (more precisely, a plurality of voices) with references to but no longer dominated by its multiple parent disciplines and their research traditions”—there is some sense that D4TT is now sufficiently developing as an area of design in its own right, that it can be treated as a research community. Taking this stance aligns with our original intention with the Conversation and track at DRS2024—that it could be a step towards organising a DRS Special Interest Group on this topic.

We see the potential for the SIG as being an opening of a conversation—the creation of an open space, a forum for connections and mutual learning, including sharing examples and practices, in education and design practice, cross-culturally—applying a form of cosmopolitan localism (Kossoff, 2019) with a mindset centred on learning and sharing. We could collectively engage with theories of change, particularly those from within complexity and systems sciences, big history and meta-futures, and theories from myriad disciplines that deal with the evolution of individuals, societies and civilisations, so that what we as a research community put forward is not focused only on incrementally changing the world, but facilitating the required deep transformations. Together we could, for example, collate, share, and develop resources for working with designers in organisations and industry, outside of academia, who want to apply D4TT thinking and principles in practice.

Without becoming gatekeepers, our SIG could help define a minimal set of (dynamic) principles of D4TT (which also emerged in the four reflections) and see this as a collective exploration of the spectrum for design that is more suited to the challenges we and our planet face. Please see this also as an invitation to join us!

Acknowledgements: We want to thank all the participants of the conversation for sharing their reflections with us.

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