Designing Transformative Futures

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Abstract: What makes the design of futures sufficiently transformative? Worldwide, people are aware of the need to change and keep changing to address eco-social challenges and their fall-out in an age of crises and transitions in climate, biodiversity, and health. Calls for climate justice and the development of eco-social sensibilities speak to the need for dynamic and provisional engagements. Such concerns raise age-old issues of inequality and colonialist destruction. Our designs carry the imprint of this current politics, wittingly or unwittingly, into worlds to come. This conversation asked how might we respond fluidly to coming uncertainties, questioning our own practices to sow the seeds of more radical transformation, while recognizing the structural forces that can limit or temper opportunities for design activism. It was organized in three quadrant exercises, which we also reflect upon.

Keywords: futures; design ethics; action methods; design for transformation

1. Starting Positions

Every act of design carries with it future-making potential and a politics of what that future might be. Design can be at once a proposition and a statement, 'This?' and 'This!' as Dilnot (2015) put it—'a conversation... [about] what to conserve and what to change' (Dubberly and Pangaro, 2015, p74)—but also an often self-fulfilling form of prediction about futures (Lockton & Ranner, 2017), which encodes the politics and assumptions of those who are involved in its creation. Viewing design as ontology and world-making (Willis, 2006) anticipates that the designer will engage through the lens of their character and identity in complex design judgments that are always already ethically-valenced—pointing towards ways

the world *could* or *ought to* be (Gray & Chivukula, 2019). Exploring this dichotomy – feeling the will to make a difference, whilst acknowledging the many privileges that inform design researchers' agency – is crucial in understanding how design should organise to address the omissions and erasures (O'Leary et al 2019) of social injustice and climate crises.

Brought together by the EU project *Creative Practices for Transformative Futures* project (CreaTures: https://creatures.eu) to consider how design can, will and should transform our worlds, each convenor contributed their own practice, politics and interest in reflection.

To give a flavor of their thinking: **Light** argues that 'the designed, therefore designable' (2011, 2019) nature of the world can be made more visible and used to prompt a wider franchise to include people who do not usually engage in futures work. This work must resist norms, promote the journeying of transformation and charge worlds with plural and motivating imaginaries (Light 2019; 2021). **Lockton** focuses on design in facilitating processes of collective imagination (Robinson, 2022; Mulgan, 2020)—developing tools and methods for participatory (re-)imagining, helping people together create, explore, and experience possible futures, and imagine new ways to live as part of transformative (and just) transitions to new visions of everyday life (Lockton & Candy, 2018). **Gray** attends to the ethical role and standpoint of the designer, seeking to identify opportunities for designers to become more ethically aware and able to act in complex ecological settings as they imagine and enact new potential futures (Chivukula et al., 2021; Gray & Chivukula, 2019). **Speed** addresses how values are mediated through participatory design methods and how what design makes (objects, methods, services) informs the representation of value. Whilst design is celebrated in facilitating value co-creation, it struggles to talk about value co-destruction (Echeverri, P. and Skålén, 2011), so how might data-driven platforms tip the balance from co-destructive business models to ones more likely to lead to a preferrable future (Speed & Disley, 2021)? **Forlano** considers posthuman (Forlano, 2016) and more-than-human relations that disrupt the binary separation of humans, machines and the environment, using autoethnographic reflection and participatory futuring that engages with praxis (hooks, 1991; Freire, 2018). The "future is not a solution" rather a way of knowing ourselves and our desires for human flourishing more deeply (Forlano, 2021). **Lindström** looks to restore a sense of responsibility and attachment to the future by attending to lived futures and by acknowledging the affective dimensions of futurity (Jönsson and Lindström 2022).

We argued that if we want transformed futures, we must ourselves be transformative. To consider this role further, we chose to address our positions and relations within the worlds of design research practice and invited others to join us through a series of participatory activities. We recognized that we can only consider our practice in the present (the moment available to us), but that it is a turbulent present when material consumption and other traditional characteristics of design will no longer be adequate, and the future feels more uncertain then ever. The workshop offered space and guidance for collective self-reflection on how DRS delegates' practice constitutes futures and how we might consider the redesign of

design research. The remainder of this paper gives a flavor of the method and outcomes of our engagement for the 90 minutes of our Conversation.

Figure 1: Hybridity matters when you are moving people through space. This workshop included participants joining us via Zoom (visible on the screen in the room) and the virtual conference platform along with in-person attendees (including facilitators Forlano and Gray, visible in the conference room in Bilbao).

2. The Conversation Structure

We had approximately 100 participants in the Conversation—significantly more than expected, perhaps reflecting a strong interest in questions of futures and transformation in design among the DRS community. Consequently, we chose to run four self-contained groups that only came together for an introduction and initial instructions in addition to a reflection section at the end of the session. This subdivision into smaller groups allowed more voices to be heard and made the activities feasible and useful for both virtual and in-person attendees. The session was offered in a hybrid format, with about ten online participants. We used an action methods style of engagement (Light and Holland 2010) to consider many aspects of futures succinctly and with room for self-orientation to intellectual and emotional aspects of how we understand ourselves as design researchers. This action methods style is based on evidence that people experience themselves differently if asked to occupy space that represents particular political or moral orientations and that walking between physical positions can then be informative at determining values, behaviors, and/or beliefs.

2.1 Set Up
The 90-minute event was hybrid, with most convenors in Bilbao and an online mediator for online participants. Because much "Futures" work uses quadrants to present/solicit

scenarios in which two variables differ, we used this pattern to break up the session into 3 active sections, which we could move people through. The numbers of attendees crowded into the room inspired us to propose breaking the participants into multiple sub-groups. In all, we held an online session using a Miro digital whiteboard and Zoom for virtual participants, and took two groups into the corridor of the conference venue, leaving just one group in the originally allocated conference room.

Figure 2: Participants interacting in the main conference room, with chairs used to indicate the axes for organizing bodily position, conversations, and Post-It notes.

2.2 The Quadrants

With different facilitators came different priorities and emphases, but the overall structure and set of quadrants we used were as follows:

•   Quadrant 1) concerned individual political orientation, following Latour's poles in *Down To Earth* (2018), which juxtaposes conservatism/progressivism and towards/away from Earth. We expected that our conversationalists would tend to collect in the progressive/earth-facing quadrant, raising questions about perspective, inclusivity and bastions of power and how one attends to others' views when they occupy a different starting point.

•   Quadrant 2) juxtaposed the axes of cultural/material transformation and prefigurative versus speculative work. We used these poles as a way into discussions of methodology and how this relates to what futures are hoped for. As expected, people brought different starting points and methods.

•   Quadrant 3) addressed the temporality of futures, with immediate/long-term considerations set against an axis of artifact versus systemic engagement.

*Figure 3: Participants in two additional breakout groups interacting through quadrants in the confer-
ence venue lobby. The group in the foreground followed an approach that was closely
matched with the conference room group, while the group in the background engaged in
more specifically embodied ways, modeling the "dance troupe" (see Section 3.2).*

3. What Happened

Although there were three quadrants to walk through in all, we spent most time with
the initial axes, both to act as introduction to the ideas and the process and because of
the intentional ambiguity and interpretability of the quadrant positions. This active and
participatory approach immediately caused discussion about the nature of the quad-
rants and the forced seemingly binary choices captured within them. All groups spent at
least some time discussing the naming and implications of the axes.

In Section 3.1, we summarize experiences from the main conference room and one of
the corridor breakouts; in Section 3.2 we summarize experiences from online partici-
pants on Zoom and Miro; and in Section 3.3 we summarize experiences of the remain-
ing "dancing troupe" group that met in the corridor. We reflect on some of our learn-
ings from this process in Section 4.

3.1 Multiple Belongings through Embodied Movements

Facilitators Colin Gray and Dan Lockton co-led participants through the quadrants in the
main conference room, while Kristina Lindström and Chris Speed led two different breakout
groups in the corridor. Across these groups, we had several discussions on what it would
mean to position oneself in a particular place within the quadrants. While some expressed
that they felt more comfortable and politically aligned in certain places, most expressed a

need to move around—occasionally prompted by the facilitators—and to not simply stay in one spot. Perhaps we can see these different bodily positions as an expression of a need for multiple belongings. For example, one participant expressed that she mainly identified with in the progressive side, while at the same seeing the need for more conservative or protective actions (for example protecting ecologies and ways of living). So, she suggested that she would have to visit the conservative side every now and then, but then go back to the progressive. Participants also placed Post-It notes at the border between axes, considering what impact the binaries suggested in the quadrants might have on their reasoning (Figure 4).

In the second quadrant, it was noticeable that most participants in one of the corridor groups positioned themselves in the center of the quadrant - the conversation mostly focused on the ways in which the themes on the axes are related or even dependent on each other (Figure 5). As such it became less interesting to think of where to position oneself in the quadrant, but to find ways to move within and inhabit the space, individually and collectively. One participant suggested that we could try and understand the axes in the quadrant as points in time rather than a points in space. Others suggested that we could change the axes to a spiral. One participant proposed that the quadrants could be used in setting up a project group to distribute competences and responsibilities.
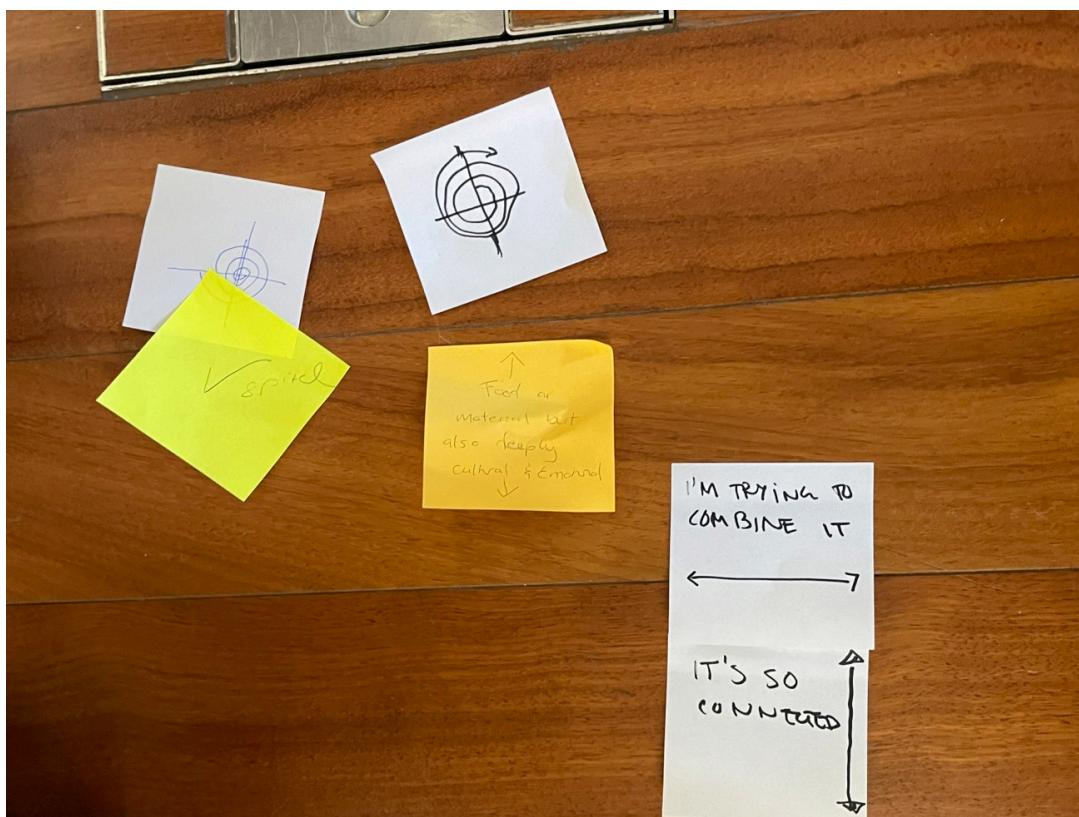

Figure 4: Placement of Post-It notes at the intersection of the two axes in the main conference room, indicating proposed spiral flows to account for multiple quadrants, or to indicate desired connections across the binaries suggested through the axes.

	PROTECTIVE/CONSERVATIVE		
LOOKING OUTWARD	• Freed of "earthly" constraints • What is there to protect if I do not care? • I'm very uncomfortable here. Feels like it's me & Musk • Not all innovation is good, if it costs the earth • I'm trying to work out what Musk is even thinking RN [right now]?! Do I have the right to value-judge him?!	• An alternative to mono-cultural forests • I'm happy with small changes • I don't want to live on Mars! • Conservative can also be sort of restorative, and I think we can learn from looking back • Preserve autonomy + care for everyone	**CARING ABOUT EARTH**
	• Progression is movement — moving for the sake of moving? • Depends on the intent of the moving? "Innovation" vs "uprising" • Transformation requires addressing social injustices and inequality on earth • The outward as the other strange, different from me/us • Admit defeat	• Caring about the local • My neighborhood • Tension between scales—how am I at a local level vs global level. For me, outward might still be on earth (i.e. not Mars!) but outward from my immediate world – global – local • But progressive is sometimes also interrupted as sort of…smart city – progressiveness, that's not me! • I can also approach the future from a protective perspective	
	PROGRESSIVE		

Table 1: Example Post-Its from the main conference room in response to the first prompt, organized by quadrant.
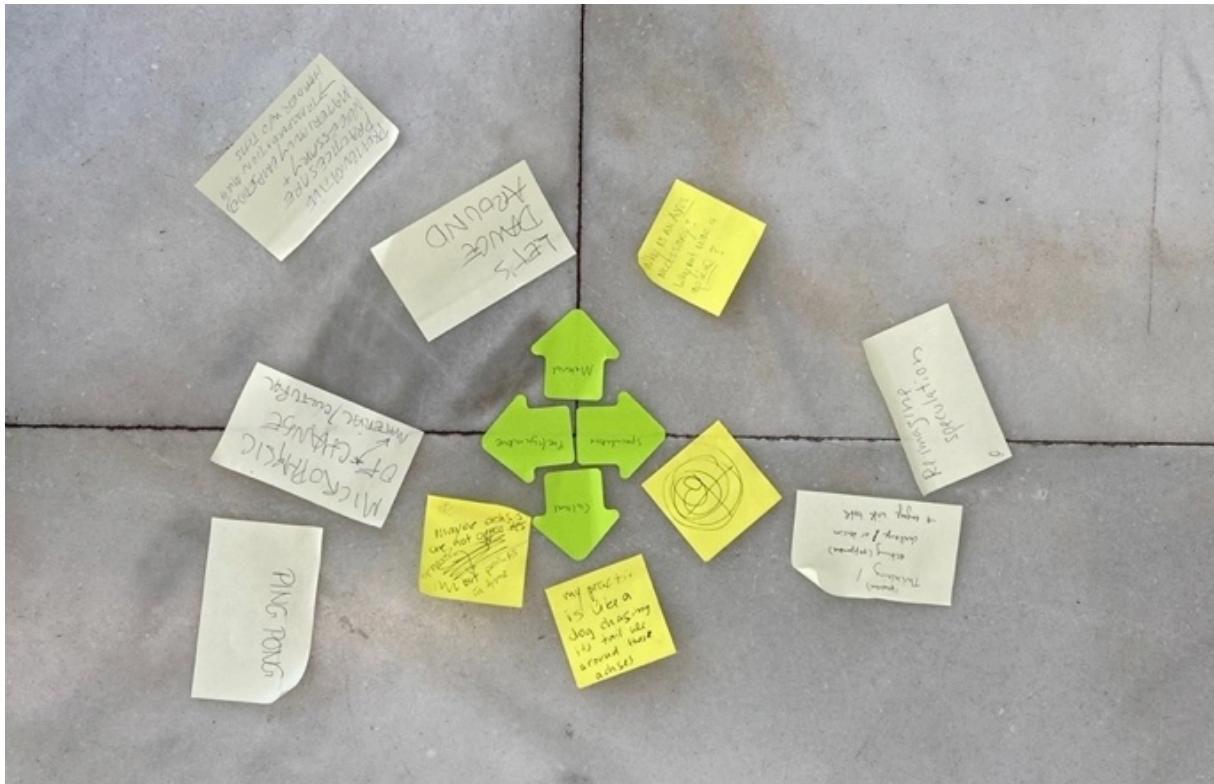
Figure 5: Post-It notes placed in the center to support conversation about quadrant relations, dependencies, and other interactions.

Interactions with the second prompt also underscored the challenges of creating binaries that were—in many ways—not true opposites. This facet of the exercise prompted discussions regarding where the quadrants could converge or diverge, and as illustrated through some of the example Post-Its from the main conference room in Table 2, interactions resulted both in evocative questions that could be framed within a single quadrant but also instances where the juxtapositioning of elements from two or more quadrants could reveal or problematize some of the futures being articulated.

To sum up how these groups reacted, the exercise of moving around and positioning oneself allowed for a nuanced elaboration and discussion of the meaning and relevance of the themes that we had placed in the quadrants. In particular, the conservative-progressive axis became a topic for discussion. One participant strongly argued that we need to be progressive as designers, even though he felt that it has become a dirty word lately. Another participant questioned the relevance of these terms, as they might not capture the complexities of transformative work. For example, using electric cars is not progressive as such, he suggested, but rather conservative, unless we rethink mobility in new ways. He also mentioned attempts to bring back social organizations from the past, that would require radical changes in the way we live now. Responding to discussions on the relevance of the themes, alternative themes were proposed such as incremental and radical innovation. Furthermore, one participant found it problematic to fit situated practices into universal categories, and thereby suggested that we might need another kind of typology that is less abstract.

	MATERIAL		
SPECULATIVE	• Materializing ideas into new forms • Design as progressive triggers • Culture is always material • Imaginative futures in concrete-material ways • The unreal to push the real • BioDesign: Speculative experimentation with different species • This is where I moved to / claim to promote. • Can we afford endless material experimentation?	• Working within the confines of our current reality • Tangible small actionable changes now • Innovation design engineering: in between implementation and future facing speculation • Creating alternate "futures" in the now through products & services and getting people to live them • Dance between the quadrants. • Placing immaterial technology into material practice	**PREFIGURATIVE**
	• For who? To who? From who? • How is surplus food/food waste conceived of in different cultures • Cultural view is a bottom-up method of behaviour change • Culture & speculation always part of the acting & material • And how we participate or have feelings of belonging or to be alienated • Questioning how we understand and define "cultures"	• Practical change that improves life environmentally • Optimal is action can have + impact on culture • Who benefits from your acted solution? • Everything is eventually material • Real, lasting change: values, imaginaries • No blank canvas we work from and with "what is"	
	CULTURAL		

Table 2: Example Post-Its from the main conference room in response to the second prompt, organized by quadrant.

3.2 Intimate Stories from the (Virtual) Board

It was different to run the quadrant exercises on Miro, not least as there was no real proximity possible. Facilitator Ann Light led online participants through the three sets of quadrants, focusing on what embodied opportunities were available in a digital format, including ways to indicate temporal or positional "trails" for a single participant over time or in relation to different readings of the quadrants.
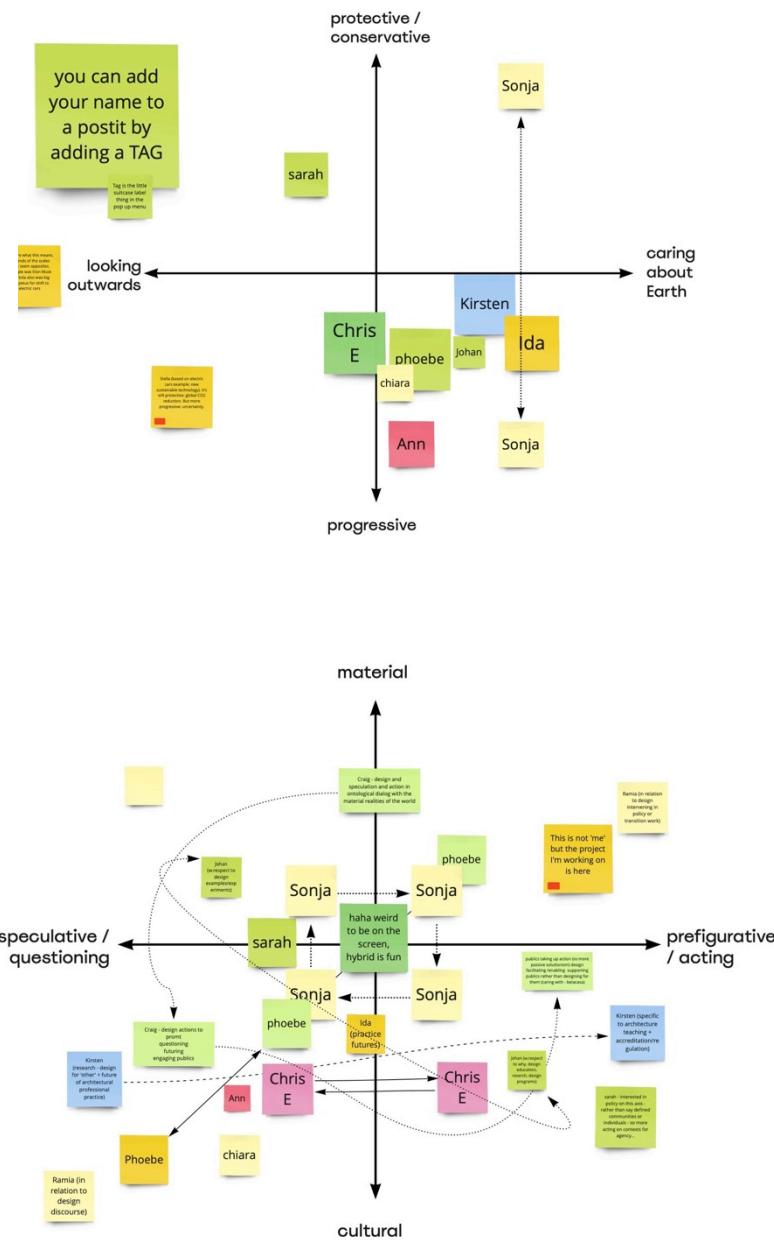
Figure 6: Miro interactions from the first (top) and second (bottom) prompts.

A snapshot of the three boards in Figures 6 and 7 indicates the concluding version of each frame when participants had finished their contribution. Answers became more sophisticated over the course of the conversation as people's ambitions to tell a story were better met.

A principal question for the first board was whether protection/conservation can also be radical. But countering that concern was another, that customers and others occupy a very different orientation to these positions than the designer researchers working with them. Was it reassuring or not that the designer researchers were in a place with such different values?

Unlike the contributions in physical space, which, beyond noticing one's physical position, could be conducted anonymously, interactions on Miro were focused on marking one's position and using that positioning as a launching off point for conversation. Yet, despite the lack of freedom to move bodies in the digital context, people found ingenious ways to consider their relations to the quadrant axes and show how they would move. Particularly, in the last quadrant exercise, some participants felt they needed to sketch a trajectory from bottom right to top left, indicating that, though they had a focus on artifacts and near-term activity, they thought that they needed to be thinking more about systems and longer-term transformations in the face of global challenges. Hence, the last diagram (Figure 7) shows great arcs, alongside statements of intent and hints about working practice placed across the image.
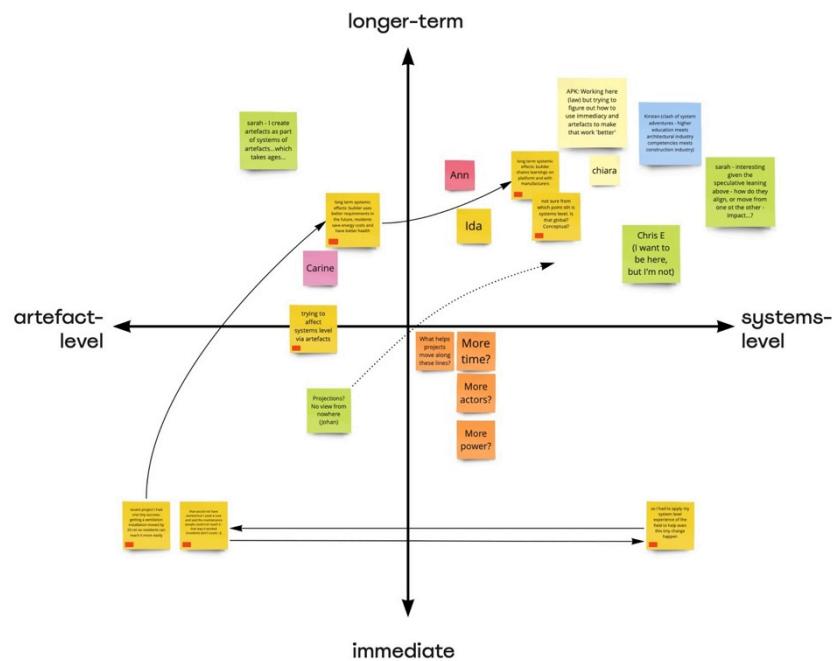

Figure 7: Miro interactions from the third prompt.

3.3 The Dancing Troupe!

Facilitator Chris Speed took around 25 people out into the foyer of the venue. There was a moment of 'what now?' from participants and, in response, he adopted a game show host role to structure the activity—for better or worse shouting instructions at them. This managed the time and activity in particularly guided ways that potentially inhibited the chance for strong critique of the quadrants, but did allow a criticality to emerge according to the sequence of positions that participants were asked to adopt. This group chose to discard the individual post-its and use video as a document and dataset. Chris reports his experiences conducting this dance-focused version of the quadrant exercise below:

Across the three quadrant my intention was to reveal participant "contortions". I use the term contortion to describe the contradictions that we face as design researchers as we adopt positions by working with partners, often funded by public monies, pursuing projects that we consider to do "good". The quadrants offered an interesting opportunity to reflect upon the our positionality, from the perspective of others, and the time of the planet. The contortions become manifest as a sequence of dance moves as I asked participants to change their location within each quadrant according to three provocations: design methods that have failed, that they would like to move toward (make better), and an external condition that challenges the former.

For the first quadrant the provocations were:

1. Situate yourself in a place which represents a failed design research method according to a position that you took across protective / progressive / looking outwards / caring about the earth

2. Move to a place that you think will offer a position from which to make a 'better' difference

3. Let's assume that in 10 years time climate crisis has accelerated - how might you reposition yourself when you account for the planet
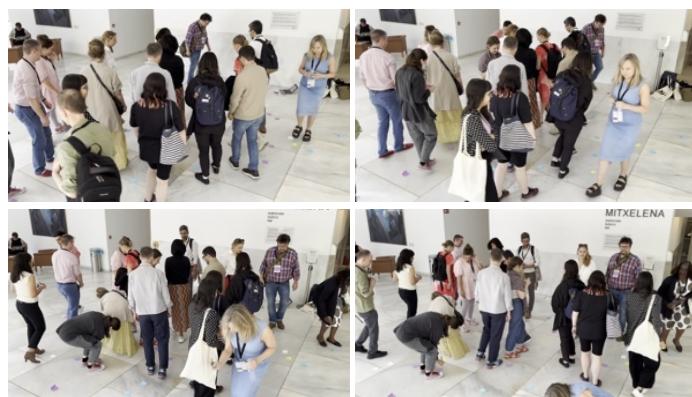
Figure 8: Snapshot of dance move 1 / Q1—failed research practice to better practice.

For the second matrix, the instructions were as follows:

1. Situate yourself in a place which represents a failed design research method according to a position that you took across material / cultural / speculative / prefigurative

2. Move to a place that you think will offer a position from which to make a 'better' difference

3. What were you doing 10 years ago - what was your entry position to design research?

Figure 9: Snapshot of dance move 1 / Q2—better practice to practice 10 years ago.

For the third matrix, the instructions were as follows:

1. Situate yourself in a place which represents a failed design research method according to a position that you took across longer term / immediate / artefact / systems level

2. Move to a place that you think will offer a position from which to make a 'better' difference

3. What position might your participant need to you adopt? Let's assume that they are facing changing and challenging social and economic circumstances, that their taxes may even be paying for your research. That they need you to help them.

Figure 10: Snapshot of dance move 3 / Q3.

The outcomes of this structured approach are manifest primarily in the movements of individuals that are documented in three videos (#1: https://youtu.be/K9mz_SRDpgg #2: https://youtu.be/EXNwcwZxk-A #3: https://youtu.be/c4u7sQ2SsdI) that capture their contortions and embodied interactions. Some participants repositioned themselves significantly across the 25m² quadrants, while others chose to remain closer to a consistent 'practice'. It was noted that senior design researchers were less likely to move dramatically through the 'third' movement because their methods are perhaps more proven to cope with questions of time and public investment. However, there was a significant difference in position regard-

ing working with materials. The most dramatic "dance move" was when participants were asked to consider a position according to what their participants might need them to adopt. In response, many ran toward the *immediate impact*.

4. Reflections on Using the Quadrants

As part of including three different versions of the same action-focused activity— online, face-to-face and conducted as a performance–we learnt about the quadrant methods we had devised beyond design researchers' thoughts on designing futures. For instance, we learnt:

- **There were many different ways of conducting what is ostensibly the same exercise.** With four different facilitators, the nuances were highly varied and having one online version made an interesting comparison too, because the actions people took were not embodied in the way that the physical walk-throughs were.

- **People were as concerned about the naming and themes of the different quadrant spectra as putting themselves on the graphs**, giving rise to a good research discussion about what we ask and how. The nuance of the naming (which we as facilitators had discussed and iterated upon at length prior to the workshop) gave rise to particular choices, conversations, and embodied interactions that a slightly different set of terms might not have done. This suggests that there is value in holding space for these kinds of discussions as part of participatory processes: while it is often easy to see "semantics" as a trivial part of a process, it may be that these discussions, and the alternative framings they enable to be "tried on", are a crucial part of collaborative futuring.

- **Quadrants were easy to understand and use as a mechanism, but also difficult to embody,** leading to some ongoing moving around as well as simple positioning. As intended, moving around the quadrant allowed participants to try out positions (which was particularly true for people actually walking through the space because standing somewhere can lead to a feeling of rightness or wrongness). But moving also happened because people wanted to be in multiple places or felt that they were somewhere now but would be (or wanted to be) elsewhere in the future. This temporal dimension of engagement was used to good effect to enable participants to think about futures but it also raises a more abstract question about the utility of quadrants as holders of 'the future'.

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