



Social Design at the Brink: Hopes and Fears

Mariana Fonseca Braga^a, Frederick M. C. van Amstel^b, David Perez^c

- ^a University of Salford, UK
- ^b University of Florida, USA
- ^c Lancaster University, UK
- *Corresponding author e-mail: m.fonsecabraga@salford.ac.uk

https://doi.org/10.21606/drs.2024.1538

Abstract: This hybrid conversation aimed to creatively explore and define the current and future roles and challenges of social design and designers in promoting positive societal changes. Our approach was inspired by Paulo Freire's culture circles, a conversation method in which images are displayed and decoded through a discussion. We aimed to critically explore and analyse the role of social design and designers in light of the contradictions of our modern societies involving, for instance, democracy threats and political polarisation, social inequalities, artificial intelligence/ignorance, and immigration. This conversation also aimed to contribute to the development of a social design Special Interest Group (SIG) proposal for the Design Research Society.

Keywords: social design; Future-Making; Critical Pedagogy; Democracy.

1. Conversation context

Contradictions like political polarisation, global warming, deep social inequalities, and disruptive innovations are taking contemporary worlds apart and jeopardising the universalization of human rights to historically oppressed people. For instance, the net-zero solar panels of developed nations are often built with materials extracted from illegal, deregulated, and polluting mines in underdeveloped nations, effectively creating a few sustainable worlds at the expense of many unsustainable worlds (e.g., Sonter et al., 2020). Instead of changing fundamental human-nature relations, the effort to produce a privilege directly or indirectly destroys the worlds of underprivileged people. Therefore, moving towards sustainable futures is critical and urgent. However, it is also imperative to make a green transition that is ethical and respectful of all the lives and places on the planet.



This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International Licence.



This conversation was convened by design researchers and educators who wondered whether social design can deal with such contradictions or is doomed to become irrelevant. Social design has a long tradition of creativity, problem solving, and resource creation. However, its future is currently unclear. Among diverse definitions, there is a tendency to define social design as democratic design practices and intentions that aim at positive changes in our societies (Resnick, 2019), deploying approaches, methods and skills that include a diverse range of people who would not benefit from design otherwise. Social design generally appeals to the social responsibility of professional designers (Papanek, 1971) and the democratic ideal of engaging different stakeholder groups across sectors (i.e., Fonseca Braga et al., 2023).

Nevertheless, there are strong geopolitical, cultural, and ontological differences in how social design is understood and practised. Global North approaches emphasise the meaning of the social in social design (e.g., social problems, social impact, social motivation, social sector) (Phills et al., 2008), the scale of interventions, from small-scale (e.g., molecular social design) to macro-structural changes (e.g. utopian social design) and the grounds on which they are based on (e.g., underpinned by sociological theories) (Koskinen & Hush, 2016). In either scale, social design often promotes participatory or collaborative attempts towards collective or social aims (Armstrong et al. 2014; Markussen, 2017) that tend to be place-based, occurring in a particular community, defined by shared experience and history (Chen et al., 2016; Le Dantec, 2016). Social design may also promote, sustain or hamper certain kinds of social lives or lifestyles (Tonkinwise, 2019). Furthermore, the tension between what is expected and what is delivered by social design in northern societies is still hotly debated (Nold et al., 2022).

Despite the good intentions of including the Global South as a third, underdeveloped, developing or postcolonial world in social design, there is a lack of voices in the field that can speak from and on behalf of this place. The coloniality of making (Saito et al., 2024) prevents scholars from the Global South from speaking and being heard in the design research spaces shaped by the Global North, yet social design can do its part to decolonize this relationship.

2. Conversation approach

Initially, we expected this conversation to explore and define further the potential and role of social design in tackling the above-stated contradictions, anticipating a proposal for a DRS social design Special Interest Group (SIG). Then we shifted to prospect the North-to-South, South-to-North and South-to-South dialogues we wished to foster in the field. Since we are from Latin America, we proposed a conversation structure inspired by Paulo Freire's culture circles, a literacy method developed across Brazil, Peru, and Chile (Freire, 1976) and his general critical pedagogy programme (Freire, 1970).

Following a recent trend initiated in Participatory Design (Serpa et al, 2020; Mazzarotto, 2023), we wanted to demonstrate the potential contribution of critical pedagogy to

social design. In the 1960s, 40% of Brazil's population could not read or write, and there was a law preventing illiterate people from voting. Paulo Freire devised a literacy method that enabled people who couldn't read and write to achieve the minimum literacy required to vote. His literacy method was based on three elements: generative themes, visual codification, and dialogue (Freire, 1976).

To find themes that could generate debate, a kind of participatory action research was necessary. Teachers had to immerse themselves in the world of the people they were educating and gather the words they used daily to talk about the contradictions of their lives. For instance, "voto" was a common word used in the Brazil of the 1960s to discuss the impact of politics in everyday life. However, this word also meant excluding illiterate people from politics. Once the generative themes were found, some of them were codified as an image to be presented before the words associated with it. These generative images tried to convey the contradictory aspect of the situation in which the words made sense.

After seeing a specific set of generative images, learners had a dialogue on the cultural relevance of what they were seeing on the slides and their own role in reading and discussing these slides. Freire called this activity culture circle (Freire, 1976) as learners realised they were as much as cultural producers as people who could read and write poetry. By mastering the written word, they could become more competent in their cultural production. Once they understood the cultural relevance of the word, then the method would break it down into its building blocks – its code.

To develop and prepare for this conversation, we had many debates amongst ourselves about potential generative themes in social design. We tried to grasp these themes in the form of questions garnered from our various experiences in the field:

- What can designers bring to the table (or make the table itself) regarding social change/impact?
- How to bring critical thinking to the span of design processes aiming at positive social change?
- How conscious do we need to be (implications of our actions) in this
 design process? What does need to be anticipated? What is the scope of
 our responsibility?
- How can our design capabilities develop further to effectively make a positive social change?
- Is social design still relevant in the face of more recent approaches such as pluriversal design? Why do we still need social design?
- Is there still a place for socialist ideas in design research?
- What are the social design's neocolonialist pasts that should be understood further and overcome now and in the future?
- Can artificial intelligence be designed to address social problems?

- How do other stakeholders and communities (e.g., the State, communities, and activists) do social design?
- Might social design become a totalitarian tool?
- What's next for social design?

After writing down these questions and discussing potential answers to them, we came up with four generative themes: 1) social inequalities; 2) unsustainability across worlds; 3) artificial intelligence/ignorance; and 4) immigration. We explored and created many possible images to associate with these themes (Figure 1).

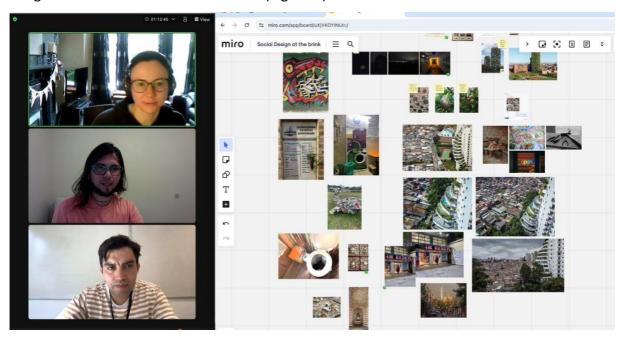


Figure 1 One of the convenors' online meetings to explore, discuss and define generative themes and images.

We selected one generative image for each of those generative themes, always trying to foreground the underlying contradiction brought by the theme. We did not explain nor provide labels for the images during the conversation session. Participants sat around the image in a virtual (online) or physical (in-person) circle to debate what they were seeing. Following the common design practice of fostering divergent thinking with sticky notes (Ball et al., 2021), participants decoded the images firstly by writing down what they saw and sticking a note on the image itself. After that, we encouraged them to have a dialogue about the various readings of it. They could add new sticky notes of a different colour in this collective decoding activity, which roughly matches how sticky notes are used for convergence (Ball et al., 2021). We did not allow them to move and group sticky notes before adding the yellow notes — as it is commonly done in design — because the sticky notes' position and their spatial references (e.g. comments about parts of the image) would be lost. Each sticky note contained, thus, a theme, realizing the intention of the generative theme behind each image. We did not expect participants to merely guess our intentions behind them. We were more interested in being surprised and challenged by their readings.



Figure 2 An in-person culture circle around one of the four generative images discussed in the conversation.

1.2 Session's further structure and details

This conversation session was run on the 26th of June and lasted for one hour and a half. It was held in a hybrid format; participant attendees could join it virtually or in person. There were around 23 people in the room and online participants ranged from 5 to 7. We had moments when online and in-person participants came together (hybrid) and others when they collaborated in groups separately (on the online platform and in the room). A summary of the key moments is provided in Table 1.

Table 1 Structure and timeframe of the session.

ET Time	Duration	What	Format
12:30	5 min.	Welcome,	Hybrid
12:35		convenors' introduction, and housekeeping rules	
12:35	10 min.	Conversation introduction	Hybrid
12:45			
12:45	10 min.	Poster exhibition.	In-person
12:55		Participants are invited to look at the posters and give their initial views on them by sticking notes to them.	Online
		The questions below guided their reflections:	
		What do you see in this picture?	
		Who is doing what?	
		• Who is most benefited from that?	
		Why are things like that?	
12:55	25 min.	Group discussion (Figure 3).	In-person
13:20		Participants are divided into groups of 4-6 people. They introduce themselves to other participants on their team. Each group discussed one of the posters reflecting on the following questions:	Online
		 What type of challenges does the poster show/illustrate? 	
		 What type of consideration do we need to keep in mind? 	
		What can social design and designers do?	
13:20	35 min.	Main discussion.	Hybrid
13:55		Each group present a summary of what they have discussed	
		Groups share their reflections.	
13:55	5 min.	Session wrap-up, feedback and next steps (Figure 4).	Hybrid
14:00			



Figure 3 In-person conversation organized around culture circles. Participants could freely move from one circle to another.



Figure 4 Session wrap-up.

2. Conversation outcomes

We describe in this section the content of the conversations by the people in the room and by the ones who joined virtually. We tried to capture the participants' views as accurately as possible, however, we acknowledge that our description is partial and non-systematic. We rely on our episodic memory, the notes we took during the session and the pictures taken of the sticky notes left by participants.

2.1 In-person group discussion

In the in-person conversation, all four images were discussed simultaneously in each culture circle. The first generative image analyzed here is Figure 5. Before the group discussion, individual participants left comments on it (with blue sticky notes) highlighting various personal observations and critiques of the scene. One participant reflected on the commodification of everything, describing the scenario as a representation of the "global pet industry" and the "priorities of consumption." Other blue notes captured emotional reactions to the scene, describing it as "repulsive" and pointing out the "loss of compassion & empathy." There were also comments on the physical space, noting "broken elements," such as the unlit sign letters. One participant drew attention to the branding and imagery of the store, asking "Why is there a Cat?" and reflecting on the "red, white, and blue" brand, the participant came to the conclusion that "the US has ruined this place". Another observed how the store sets up barriers of "access (step)" for people with mobility disabilities.



Figure 5 Generative image for theme 1 (social inequalities). Taken in Rio de Janeiro by Frederick van Amstel.

During the group discussion (registered on yellow sticky notes), participants developed a structural understanding of the local and international inequalities depicted in the image. They highlighted how the "American Dream (for pets?)" is reflected in the store's advertising strategy, and noted that this dream is "slightly outdated" with "slight signs of wear," as seen in the broken "E" letter in the store sign. The group commented on how there is "so much

space for commodities but not for people," reflecting on the unequal distribution of space and questioning "spaces for desire. What about spaces for needs?" This discussion led to broader reflections on how the store represents pets in an abstract way, with participants asking, "Where are these pets beyond their representations?". One participant described the scene as "cringey," while another reflected on the entire scenario as "sadly familiar." One participant voiced that the group got it all wrong by focusing too much on the negative aspects of the image: "The comments contradict the usefulness of the store for pet owners".

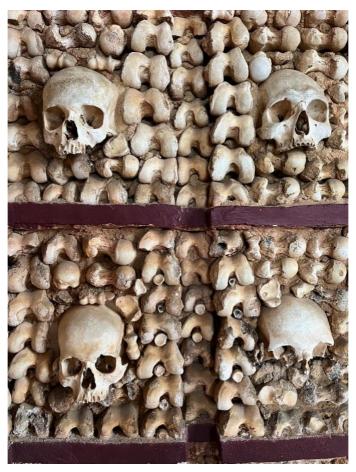


Figure 6 Generative image for theme 2 (unsustainability across worlds). Taken in Faro by David Perez.

The next image (Figure 6) generated more diverse comments. Before the group discussion, individual participants left comments that indirectly touched on aspects of unsustainability but did not explicitly address the "unsustainability across worlds" theme. Many focused on the symbolic and aesthetic aspects of the image, describing it as representing "fear," "death," and "art." One participant commented on the "natural beauty" of the bone arrangement, while others speculated on the system behind it, asking, "What system is governing the burial?" These reflections captured individual curiosity and a sense of ambiguity but didn't directly address broader structural critiques of sustainability. Some comments, like the reference to the image being "resourceful," hinted at possible connections to the theme, but overall, the individual notes focused more on the imagery's emotional and artistic qualities rather than on the contradiction of unsustainability.

During the group discussion, participants came closer to the generative theme by exploring structural and temporal tensions in the image. They discussed the "tension between a good and bad time," suggesting a reflection on sustainability as a balance between present and future conditions. The note about the "present" and "future" specifically indicates an awareness of the consequences of present actions on future generations, aligning more directly with the theme. Participants also reflected on the contrast between "individuals (only four skulls)" and the "collective (many vertebra)," which could be interpreted as recognizing the unsustainable imbalance between individual actions and their collective impact. This collective interpretation suggests a growing awareness of how systems, whether human or natural, become strained when scaled across larger populations.

There was further exploration of intentionality and structure in the bones' arrangement, with participants noting the "intentionality in the order" and questioning whether the arrangement was "vertical or horizontal." This discussion seemed to move toward a critique of systems and structures, though the direct link to unsustainable practices was not always explicitly made. A few key group reflections, such as the observation that the image was "disturbing and calm at the same time," also spoke to the dual nature of unsustainability — how systems can seem stable and yet be deeply flawed beneath the surface. Additionally, the group's comment that "existing post-its made us speculate" indicates that the group was aware of how their interpretations built on each other, sparking deeper considerations about the image's meaning.



Figure 7 Generative image for theme 3 (artificial intelligence/ignorance). Generated with chatGPT/DALLE by Frederick van Amstel.

In the image for the theme 3, artificial intelligence/ignorance (Figure 7), participants initially observed the dystopian nature of the image, describing it as "disturbing in how manipulative

and exploitative". Several individuals noted elements of surveillance and control, including comments like "surveillance" and "control over humanity." One participant referred to the overall aesthetic as "The Matrix," perhaps drawing a parallel to the famous film's themes of control and manipulation. Other comments pointed out the broader societal implications, such as "homelessness," "capitalism," and "extraction," indicating that the image critiques how technological and industrial systems affect society. Additional comments touched on specific elements like "brain in arms" and the "industrial revolution," connecting the imagery to themes of mechanization and the loss of human autonomy. A few blue notes also highlighted the theme of "future and past" as well as "ignorance" and "automation," suggesting a critical view of how technology impacts society, knowledge, and agency.

During the group discussion, participants collectively explored the deeper implications of the image, particularly focusing on the themes of power, control, and technology. One note highlighted the "themes of government & social control," while another pointed out the "design to create disconnection," suggesting a critique of how technological systems are deliberately structured to alienate individuals from each other. The group further discussed the "manipulation of the mind," noting how the imagery reflects a system that "appears nice, but takes power." There was also a focus on the role of technology, with participants identifying a "religious devotion to technology" and labelling the imagery as "authoritarian cosmic post-human." The group appeared to agree that the image reflected a "dystopian singularity," where technology and control converge to reshape human existence in increasingly authoritarian ways.



Figure 8 Generative image for theme 4 (immigration). Taken in Lancaster (UK) by Mariana Fonseca Braga.

From Figure 8, participants reflected on the feelings of being in danger, isolation, and despair evoked by the depicted environment. Before the group discussion, individual participants left personal reflections about the tunnel's physical and emotional qualities. One participant noted, "I wouldn't use this if I am alone," while others described the space as "unsafe" and "hopeless." However, some individual reflections hinted at hope and

possibility even within the perceived darkness and danger. Comments such as "light + dark" and "interpretation changes as you go further" suggest that the tunnel could represent a challenging journey but one with the promise of something better at the end, much like the immigrant's journey toward a new life. Another participant remarked on the "human scale" of the tunnel, and some saw signs of "life," signalling that despite the intimidating space, it is still a place where life and movement occur. There was also recognition of the voices within the space, as someone observed that the tunnel could serve as a "space for graffiti artists without voice." This reflection begins to touch on the theme of marginalized groups finding ways to express themselves in spaces where they may otherwise feel invisible, a connection to how immigrants often occupy marginalized spaces within society.

During the group discussion, participants began to uncover themes that more closely aligned with the intended message of immigration, even without realizing it. They noted that the tunnel could be a "social space for groups without space," directly connecting to the idea that immigrants, or other marginalized communities, often inhabit spaces that the dominant society overlooks or deems undesirable. Another reflection highlighted how the tunnel was "context-dependent," acknowledging that different groups — such as immigrants, locals, or authorities — might experience or interpret the space in vastly different ways. For some, the tunnel may feel threatening or exclusionary, while for others, it could be a space of opportunity or community.

The theme of control also emerged during the discussion, with one note simply stating "control," potentially reflecting how certain groups, including immigrants, may feel controlled or restricted in public spaces. The note about "emptiness" further emphasized the alienation and disconnection that marginalized groups might experience. At the same time, the group acknowledged that "journeys are uncomfortable," which aligns with the immigrant experience of navigating difficult and sometimes perilous paths in search of a better life. One group comment also discussed the duality of the tunnel, noting that it is "descriptive of what is there versus a projection of what is there," hinting that people may project their own fears, hopes, and assumptions onto the space — just as immigrants project their desires for a better future onto a new and unfamiliar country.

While the participants were not explicitly informed of the immigration theme, their reflections — particularly around the ideas of space, marginalization, control, and hope — showed that they were beginning to engage with aspects of the immigrant experience. Their observations about spaces for people who don't have a place in society connected closely with the idea of immigration, where individuals and groups often find themselves on the margins, navigating complex and uncomfortable journeys with the hope of finding light at the end of the tunnel.

2.2 Online group discussion

In the online session, first, participants made their annotations on the sticky notes on the four posters responding to the posters' exhibition. Different interpretations of the images

emerged. In the American Pet image (Figure 5), participants referred mostly to social inequalities by pointing out the people shown in the photo and their different social statuses (e.g., "there is a homeless"; consumers - "a father? And a son buying something" and "someone might buy things for their pet"). Also, the homeless person's location at the store façade was noticed with notes such as "outside the store" and "a bright and well-lit shop, a dark corner" — making a reference to the position of the homeless person and in contrast to the "well-lit store" where people buy things for their pets. Additionally, the USA flag reference in the store sign on the façade was noticed.

The skulls and bones poster (Figure 6) had varied annotations. Some considered its physical and likeness aspects (e.g., skulls, bones, end of life, death) and others were subjective (e.g., referring to spirituality, privilege, inspiration, power, equality and cultural diversity). The AI in the mirror image (Figure 7) was related to capitalism and its exploitations' impacts, artificial intelligence, power and control over and between groups of people as well as AI as something that "takes from humans" or is human-sourced and has its influencers. Additionally, whether AI could be deployed towards more socially just worlds was mentioned. Finally, the dark underpass photo (Figure 8) was connected with two main aspects. First, its structure was related to a transitional space that connects and belongs to different places and its darkness-light contrast was noticed. Second, the graffiti on the walls was interpreted as an opportunity for people to anonymously express themselves "outside the system".



Figure 9 The four generative images on the online platform (Miro).

After exploring the posters' exhibition, online attendees chose to work together on the American Pet poster (Figure 10). The challenges the poster showed were related to inequality in modern society and its connected binary oppositions such as community issues/individual issues; individual wellbeing/community wellbeing; and high consumption/deprivation. Additionally, the meaning and limitations of humanity in practice were questioned in this context.

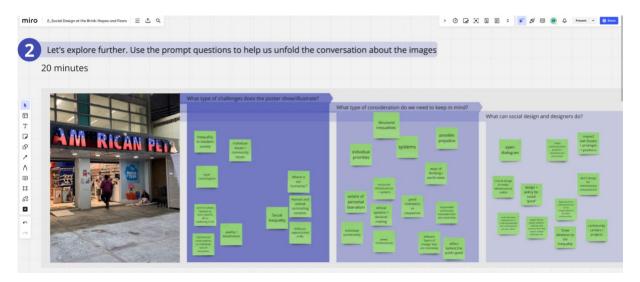


Figure 10Online participants explored and defined further the challenges, considerations and social design and designers' potential.

Regarding the considerations that social designers should keep in mind, power infrastructure, structural inequalities and their related systems, the extent of an individual's respectful attitude and openness to allowing different types of beliefs and behaviours (e.g. "liberalism"), prejudice, the opposition between good intentions and cooptation, the change that might be required at different levels, the ethics of the public good as well as responsible community empowerment and ownership were points made.

The role of social design and designers was related to

- facilitating open dialogues,
- making the infrastructure visible by utilising critical design,
- making the lived experiences of underrepresented, marginalised or "invisible" groups visible and represented,
- contributing to the design of policies for the social good better informing public systems, policies and services from the outset of their development,
- being attentive to their own biases, privileges and positions,
- playing a role in community centres and projects,
- creating communication and experiences for interaction,
- the commitment to declining to design for "unnecessary" consumption.

Online participants also suggested further images/themes to discuss in relation to social design: disability and neurodiversity, power dynamics and relations, social expectations; agency, positionality, intersectionality, and identity in their situated/local contexts. Additionally, the paradox between social design and capitalist purposes was pointed out by one of the online participants with a critical question: "Can social design exist within a capitalist model? Or is it just trying to fill the gaps that a capitalist model creates?".

3. Our reflections

The four generative images reached their goal to stimulate a lively debate around social design themes, not necessarily in the way we intended. By mixing the culture circles method (Freire, 1976) with designerly sticky noting practices (Ball et al., 2021), we encouraged having multiple interpretations of the same situation while still maintaining a sense of closure and achievement. This is often a limitation of design methods that work from more defined frameworks like "How Might We" (HMW) questions that present a clear focus.

It was good to have different interpretations, but we did not and still don not know what to do with them. In this report, we offered an integrative analysis that foreground the underlying themes between them that are relevant to social design. For instance, the dark underpass had different perceptions such as a space of free expression where everyone can have a say through graffiti (social role and expression) and an urban structure that enables us physically to get past underneath (functional sense). Yet, we did not touch upon how to design or redesign such structures in a socially impactful way.

Considering the above-mentioned points, we concluded that our "design culture circle" hybrid method enabled social designers and design researchers to creatively explore contradictions, and it is very accessible to people with different backgrounds as such images make use of visuals that people use to read the world. However, the flip side is that when answers to specific questions are expected, other methods could be more effective. Therefore, this method has great potential to contribute to creative and divergent cycles in social design work.

As a metareflection, we understood that the convergent quality of these discussions matches the inner discussions about what social design is. Social design is a deep contextual practice, open to various interpretations and approaches depending on the specific environment in which it is applied. As a concept, social design is dynamic, existing in a state of flux as it adapts to the diverse social challenges faced by communities from different backgrounds. Methodologically, social design practice aligns with the "triple S" framework outlined by Kaszynska, Kimbell, and Bailey (2022). This framework characterises design research projects as situational (carried out in specific contexts), situated (aware of its position relative to other forms of research), and situating (contributing to an existing body of knowledge). While looking at the discussion raised by these images and the history of social design, we are still puzzled: is social design on the verge of being fully harnessed, or is it simply ill-defined? Should our focus be on developing a precise definition of social design or instead keep multiple interpretations about it?

Based on the discussion, design researchers apply social design in various ways, guided by the contextual conditions in which it operates. For some participants, social design might relate to indigenous practices, while for others, it may pertain to health and wellbeing. In all cases, social design involves the application of design principles to address contradictions, aiming to develop a better society for people of all backgrounds. Finally, social design tenets

challenge capitalist systems and rationale. However, how and if social design could be effective and thrive, especially in the long-term, operating within our capitalist infrastructures is still an unanswered question.

We will discuss and understand further the perspectives of our design community on the directions social design and designers could take regarding their potential and role in tackling societal challenges. In our future engaged scholarship, we plan to promote other open activities and continue developing our social design SIG proposal for submission.

Acknowledgements: We thank all our design community members who participated in this conversation, contributing greatly to our reflections and helping to shape our future steps. We also thank Sofia Bosch Gomez, the DRS 2024 Boston Conversations chair, for her help and support during the final arrangements for this session.

4. References

- Armstrong, L., Bailey, J., Julier, G., & Kimbell, L. (2014). social design *Futures: HEI Research and the AHRC* (p. 84). Brighton: University of Brighton.
- Ball, L. J., Christensen, B. T., & Halskov, K. (2021). Sticky notes as a kind of design material: How sticky notes support design cognition and design collaboration. *Design Studies*, 76, 101034. https://doi.org/10.1016/j.destud.2021.101034
- Chen, D.-S., Lu-Lin, C., Hummels, C., & Koskinen, I. (2016). social design: An Introduction. International Journal of Design, 10(1). https://www.proquest.com/docview/1788926043/citation/692101FAEA764CB7PQ/1
- Fonseca Braga, M.; Perez Ojeda, D.; Owen, V.; Zhang, L.; Brewster, L.; Galabo, R.; Changede, S.; Kwon, N.; Summers, S. (2023) Shaping social design with communities. *IASDR 2023: Life Changing Design*. 9-13 October, Politecnico di Milano, Milan, Italy.
 - https://dl.designresearchsociety.org/iasdr/iasdr2023/fullpapers/78/
- Freire, P. (1970). *Pedagogy of the oppressed* (M. B. Ramos, Trans.). Herder and Herder.
- Freire, P. (1976). *Education: The practice of freedom*. London: Writers and Readers Publishing Cooperative.
- Kaszynska, P., Kimbell, L., & Bailey, J. (2022). Practice research in design: Towards a novel definition [Report]. University of the Arts London.
- Koskinen, I., & Hush, G. (2016). Utopian, Molecular and Sociological social design. *International Journal of Design*, 10(1), 65–71.
- Le Dantec, C. A. (2016). Designing Publics. The MIT Press. doi: 10.7551/mitpress/10513.001.0001
- Markussen, T. (2017). Disentangling 'the social' in social design's engagement with the public realm. *CoDesign*, 13(3), 160–174. https://doi.org/10.1080/15710882.2017.1355001
- Mazzarotto, M. (2023). Paulo Freire's critical pedagogy contributions to emancipatory design: From cultural invasion towards cultural synthesis. *Base Diseño e Innovación*, 8(9), 11-22. https://doi.org/10.52611/bdi.num9.2023.973
- Nold, C., Kaszynska, P., Bailey, J., & Kimbell, L. (2022). Twelve potluck principles for social design. DISCERN: International Journal of Design for Social Change, Sustainable Innovation and Entrepreneurship, 3(1), 31–43.

- Papanek, V. J. (1971). Design for the real world. London: Thames and Hudson.
- Phills Jr., J. A., Deiglmeier, K., & Miller, D. T. (2008). Rediscovering Social Innovation. *Stanford Social Innovation Review*, 6(4), 34–43. https://doi.org/10.48558/GBJY-GJ47
- Resnick, E. (Ed.). (2019). The social design Reader. London: Bloomsbury.
- Saito, C., Freese Gonzatto, R., and van Amstel, F. (2024) Anticolonial prospects for overcoming the coloniality of making in design, in Gray, C., Hekkert, P., Forlano, L., Ciuccarelli, P. (eds.), *DRS2024: Boston*, 23–28 June, Boston, USA. https://doi.org/10.21606/drs.2024.255
- Serpa, B., Portela, I., Costard, M., & Batista, S. (2020, June). Political-pedagogical contributions to participatory design from Paulo Freire. *Proceedings of the 16th Participatory Design Conference 2020-Participation (s) Otherwise-*Volume 2 (pp. 170-174). https://doi.org/10.1145/3384772.3385149
- Sonter, L.J., Dade, M.C., Watson, J.E.M. et al. (2020). Renewable energy production will exacerbate mining threats to biodiversity. *Nat Commun*, 11, 4174. https://doi.org/10.1038/s41467-020-17928-5
- Tonkinwise, C. (2019). Design's (dis) orders: mediating systems-level transition design. *Cuadernos del Centro de Estudios en Diseño y Comunicación. Ensayos*, (73), 84-95.

About the Authors:

Mariana Braga is a University Fellow in Transdisciplinary Human-Centred Design Innovation and Practice at the University of Salford. She is interested in the transformative role of design and designers in the transition towards healthier, more just and sustainable societies.

Frederick (Fred) van Amstel is an Associate Professor in the Graphic Design/Design & Visual Communications program at the University of Florida. His research agenda addresses especially contradictions in design: why and how design projects face dilemmas, trade-offs, and complexity.

David Perez is lecturer in Radical Co-Design at Lancaster University, explores social design's role in enhancing lives through collaborative projects, including social entrepreneurs, third-sector organisations, local governments and communities. Perez integrates co-design and participatory practices, focusing on impactful, community-centric solutions.