

# Decolonizing Design Practices: Towards Pluriversality

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## ABSTRACT

Decolonizing discourses teach us that we need to move away from the universalizing ‘grand narratives’ of knowledge production and focus on contextualizing diverse and situated experiences, epistemologies and narratives. Yet, few contributions actively demonstrate what a shift to decolonizing design means in practice. Participatory Design (PD) approaches are particularly well-suited to contributing to contemporary debates of decolonization in design due to PD’s long-standing political traditions and values of equality and empowerment, but even here empirical methods and techniques to fully realize pluriversality in design are lacking. In line with the CHI 2021 theme of *Making Waves. Combining Strengths*, this interactive workshop will invigorate the debates and practices in HCI of decolonization by bringing together and demonstrating how designers and researchers in diverse global contexts are working with and adapting modes, concepts, methodologies and sensibilities into decolonizing design practices. Not only will this workshop provide new ways of thinking in HCI but also fuse theories and practices to develop truly transcultural approaches to HCI.

## CCS CONCEPTS

• **Human-centered computing** → **HCI theory, concepts and models.**

## KEYWORDS

decoloniality, pluriversal, transcultural, participatory design

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## 1 BACKGROUND

### 1.1 Rationale

While increasingly more present in the global narratives of design, the decolonizing discourse has not yet fundamentally affected HCI theories, concepts, models or practices. Contemporary global challenges of racial justice, economic and political inequality are urging the HCI community to address aspects of power, inclusion, and decoloniality in technology research and design. Yet, there seem to be theoretical and methodological gaps in design when it comes to contemporary discourses of decolonization [25, 26, 28, 30]. Such gaps are visible also in practice in different domains, from the widespread generalization of design methods, to non-profit organizations’ commodification of aid in the underdeveloped world [15], and industry development and distribution of one-size-fits-all tech applications to the global market.

Postcolonial computing, as introduced by Irani et al [22] one decade ago, addressed a then growing concern in HCI of a lack of cross-cultural sensitivity and problematization of power relations with users from previously colonized contexts. Meanwhile postcolonial theories have received much criticism, failing to embrace marginalised perspectives, considered to be a “Eurocentric critique of Eurocentrism” [3]. Thus, one could argue that well intended (postcolonial) HCI practices intrinsically still promote neocolonial design. A decolonial perspective on the other hand, points to the fact that design practices are far from universal, and are still based

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on Western epistemologies and applied in countries otherwise, such as developing countries, without much consideration of the local knowledge systems [8, 14, 15, 28]. Schultz [26] suggests that only through the inclusion of marginalised perspectives, such as, the previously colonized, indigenous communities and the socio-economic marginalised can we break out of our own 'colonized minds' and manage to achieve plurality in design. This embraces a plurality of social groups, such as, marginalized immigrants in European cities, black, Hispanic, and Asian populations in the US, and the global-south populations at large. This is what Escobar [15] terms a pluriversal world - 'a world where many world's fit' contributing to the coexistence of people and the coming together of different worldviews [15]. Thus, the decolonizing design discourse is of an ontological nature and requires a transcultural [32] and transdisciplinary approach to radically transform design [26].

We lean on Participatory Design (PD) as our epistemological and methodological beacon to guide us in this pursuit. PD has a long history of addressing power relations and issues of democracy and empowerment with special attention to engaging local and marginalized groups, citizens, and organisations in processes of mutual learning and bottom-up development [7]. Equally, the ongoing appropriation of PD outside of Scandinavia in particular to the global south, has focused on the inclusion and 'empowerment' of local communities and citizens, but also prompted critical concerns of the original Westernized model's applicability to the rest of the world [6, 31]. It promotes a certain epistemological and practical discomfort as it encourages us to stay in trouble [20], to *make waves*, and question often taken-for-granted assumptions, values, methods, and epistemologies. We argue though that PD, as a loosely coupled approach with a richness of adaptable tools and techniques for developing new PD practices [10] does not in and by itself hold the full potential of addressing decolonisation of knowledge in postcolonial contexts [28]. The full potential lies in PD integrated with other approaches with a deeper attention and understanding of the cultural realities and ontological entanglements of everyday practices when working with non-Western as well as minority communities and stakeholders. There is a lot of scope for designing modern technologies that bolster inclusive and comprehensive computing [23]. When inclusive and diversity sensitive research explorations are considered, it empowers participants and provides legitimacy to the pragmatic results of a project [21]. However, how such visions translate into concrete research practices and strategies for pluriversal participation and knowledge production, still need more attention.

## 1.2 Decolonizing Design theories and practices

The workshop examines how (participatory and inclusive) designers and researchers are responding to the critical calls for humanistic, contextualized and de-westernizing approaches to design and development across local and regional research contexts. Based on promising examples of decolonizing directions on different continents, described in the following, we aim to create a basis for evolving decolonizing design practices connected to such domains as:

*Transcultural technology design:* Community engagement through a transcultural approach, looks beyond traditional individual cultures and focuses on transcultural technology design methods that adopt, support and continuously create new meanings from diverse settings. A transcultural approach focuses on being culturally aware when designing with culturally diverse communities and groups, embracing pluralistic social practices and increased awareness [8, 32].

*Humanizing emerging technology:* Increasing debates of the inherent biases in AI, such as cultural bias and variations in the ethical debates of autonomous vehicles and social robots, suggest the realization for action [16]. Focusing on integrating human and computational aspects, designers and researchers are working against the colonial impulse in ubiquitous computing [13] and hybrid intelligence [2], to develop ethical and responsible approaches, principles and guidelines for decolonizing emerging technologies [5, 24].

*Participatory action research:* Historical traditions from Latin America echo strong decolonizing practices that focus on the social realities, political struggles and empowerment of marginalized communities [9, 15, 18]. Where some contributions suggest the systematization of experience to validate alternative southern epistemologies [4, 33], Escobar argues for notions of 'pluriversal design' [14]; creating multiplicity of voices and the emergence of pluriversal ways of worldmaking. Such southern approaches are echoed strongly in recent contributions to decolonising design [11, 12].

*Design anthropology futures:* Contributions from design anthropology offer decolonizing approaches to the situated values, ethics, and politics of future making [19, 27, 32]. Researchers use anthropological approaches and cultural sensibilities to co-create 'correspondence' through a continued commitment to particular people and lifeworlds, that are aligned with local epistemologies. Such sensitivity relates also to Akama's [1] use of the Japanese concept of Ma, 'between-ness', to explore how designers can work through processes of becoming together.

*Design tech for social and racial justice:* Expanding the debates on diversity and inclusion in the design, development, and use of technology, the debate on tech for social and racial justice aims to unpack and expose the structural, and often implicit, forms of discrimination, prejudice, and bias [17]. It shifts the attention away from the often feel-good, integrative solutions toward exposing, debating, and creating conditions for co-existences of differences, *combining strengths*

The pluriversal, participatory and culturally situated approaches to knowledge production have potential for generating new understandings and practices in the decolonization of design in HCI. To identify and map possible decolonizing practices in transcultural and transdisciplinary settings, four questions are addressed:

- What are state-of-the-art examples of decolonizing practices and epistemologies in/for contemporary HCI research and practice?
- What can we learn from PD experiences of decolonizing practices applied in diverse contexts; geographical, academic, corporate, not for profit?
- How are theoretical discourses of decolonization integrated into concrete practices, methodologies, or modes of knowledge production in the research?

- What are the future trajectories of decolonizing HCI practices for pluriversal approaches to design and technology?

### 1.3 Concrete goals for the workshop

The workshop will engage participants in interactive activities with a focus to generate plural understandings and epistemological views through the use of participatory and inclusive methods in HCI. Further, it will create insights into the different ways choices are made based on diverse epistemologies, methodologies and continental demarcations. The workshop looks beyond traditional HCI narratives towards adoptable PD approaches and methods within a pluriversal and transdisciplinary mode. A central aim of the workshop is to gather a diversity of decolonizing practices; methods, concepts and approaches applied in diverse contexts, that demonstrate research and knowledge practices for plural epistemologies, marginalized voices, situated socio-political and historical contexts, through participatory processes.

## 2 ORGANIZERS

The authors represent diverse disciplines and approaches across design, anthropology, technology and innovation, from Africa, Latin America, Europe, Asia and the US.

*Rachel Charlotte Smith* is Associate Professor of Human-Centred Design at Aarhus University. Her research focuses on participatory design and design anthropological modes of research, social transformation and digital future making.

*Heike Winschiers-Theophilus* is a Professor in Computer Science at the Namibia University of Science and Technology. Her work revolves around community-based co-design with indigenous and marginalized people. She promotes a transcultural approach to technology design.

*Daria Loi* is Senior Director at Mozilla, where she heads the Experiences & Design organization. Her work combines design strategy and user experience research to enrich people's everyday life, with an emphasis on emerging technologies.

*Rogério de Paula* is a Senior Research Scientist at IBM Research, and manager of the Tech for Impact Research Group. His research interest is in the intersection of AI and human machine interaction, and studies of science and technology.

*Asnath Paula Kambunga* is a Marie Curie PhD fellow at Aarhus University. Her research interest is on decolonial approaches to youth communities and collaborative explorations of future memory making in Namibia.

*Marly Muudeni Samuel* is a PhD student at Glasgow School of Arts. Her research focuses on community co-design with an emphasis on innovation, cultural heritage, indigenous ocean knowledge and ocean governance in Namibia.

*Tariq Zaman* is Associate Professor at the School of Computing and Creative Media, University College of Technology Sarawak. His research reflects the multiple voices of indigenous wisdom and cultural understanding by converging local, scientific, traditional and cultural knowledge.

## 3 PRE-WORKSHOP PLANS

Upon acceptance of the workshop a website will be created which will comprise of information on the workshop, participation requirements, and short abstracts and bios of the organizers, and later participants. The workshop will be advertised through the CHI community and strong global academic and industry networks to attract diverse participants that represent a global community of HCI researchers working in different contexts and domains. In particular, we will emphasise the recruitment of Asian and Japanese researchers through our existing networks in the region.

The minimum number of participants is 10 and the maximum number is 25. Participants will be asked to provide 2-4-page position papers describing examples of rich on-the-ground research cases that demonstrate or conceptualise decolonizing approaches and practices to design and technology. Authors are requested to elaborate on their own practical experience as well as provide suggestions for possible methods, techniques and concepts aiming at embracing multiple epistemologies in design and knowledge production. Before the workshop, position papers will be shared among participants, and they will be asked to provide 'probes' from their work for the workshops' group work in Miro.

## 4 WORKSHOP STRUCTURE

The workshop is organized to be fully on-line, with parallel group facilitation by the organisers. Building on the above arguments and directions for decolonization, this 5-hour workshop has four phases.

*Phase 1:* We rely on a method we successfully deployed in an on-line workshop at the 2020 PD conference [29], namely a joint conceptualization of a social robot [1 hour]: Participants are grouped in smaller online groups and immediately engaged in the codesign of a social robot for defined diverse contexts (be it organizational, community, private or public spaces). The groups will work on Miro based on design techniques and probes from the authors' suggested methods in the position papers and prescribed by the organizers such as using "consensus method" in one group, but also allowing the participants to negotiate design methods. The groups then share their design outputs with the rest of the group revealing their values, views and challenges in relation to the social robot.

*Phase 2:* Embracing epistemologies dialogue [1 hour]: The plurality of epistemologies in the hybrid room are now made explicit triggered by the created artefacts and attached values. Each participant will position themselves, map out their methods or concepts, and discuss how they relate to Phase 1 and the core workshop questions, in a research through design approach. Possible decolonization of PD practices are presented in form of an engaged Bohm dialogue.

*Phase 3:* Exploring expressions of decolonization [45 min]: Participants visit a virtual reality exhibition on decolonizing design (also submitted to CHI2021 Interactivity). The different VR rooms are developed by 6 different collaborators from around the world with the purpose of creating experiences and dialogues on decoloniality. The exhibition is used to engage in different forms of expression and initiate and inspire the process of prototyping for Phase 4.

*Phase 4:* Prototype decolonizing toolkit [1,5 hours]: In online groups the participants prototype a toolkit of methods, techniques,

concepts and principles of a decolonized HCI. Participants work across their common practices, methods and probes, as well as the themes and discussions that have emerged during the workshop phases. The toolkit will be showcased to a wider CHI audience in an exchange event with other workshop participants.

**Table 1: Workshop schedule**

Workshop Activity	Time
Introduction of workshop format and content by organizers	15 min
PD of a social robot and introduction of participants	45 min
Embracing epistemologies dialogue	60 min
Exploring expressions of decolonisation	45 min
Prototype decolonizing toolkit of methods	90 min
Summary conclusion and way forward	30 min

## 5 POST-WORKSHOP PLAN

The workshop will produce a collection of decolonizing approaches and methods from a diverse HCI global community. A journal special issue, will be proposed after the workshop that discuss and reflect upon the collection of approaches and the collaborative decolonizing toolkit.

## 6 CALL FOR PARTICIPATION

The workshop aims to invigorate the gap in HCI debates of decolonization by bringing together and demonstrating how participatory designers and inclusive researchers in diverse global contexts are working with and adapting modes, concepts, methodologies and sensibilities into decolonizing design practices. It will provide new ways of thinking in HCI but also fuse theories and practices to develop truly transcultural approaches to HCI.

To apply, participants should send a 2-4 page position paper describing state-of-the-art examples of rich on-the-ground research cases that demonstrate decolonising approaches and practices to design and technology. The position paper should be submitted to the organizing committee via email: [decolonisingCHI2021@gmail.com](mailto:decolonisingCHI2021@gmail.com) as a PDF following ACM standards. We also welcome additional submission files, such as videos, photos, or audios. The organisers will evaluate the position papers and decide on a consensus basis the acceptance of participants. Participants will be notified of acceptance before closing of early bird registration.

The workshop will take place as part of the ACM CHI Conference on Human Factors in Computing Systems in Yokohama, Japan in May 2021. At least one author of each accepted workshop paper will be required to register for the workshop and at least one day of the conference. The aim is to attract diverse participants from different continents, that represent a global community of design researchers working in different contexts and domains. For more information, visit: <https://decolonizingworkshop.wordpress.com>, email at: [decolonizingCHI2021@gmail.com](mailto:decolonizingCHI2021@gmail.com).

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