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Decolonial Pathways: Our Manifesto for a Decolonizing Agenda in HCI Research and Design

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ABSTRACT

As the push for intersection between decolonial and post-colonial perspectives and technology design and HCI continues to grow, the natural challenge of embracing different ways of approaching knowledge production without 'othering' begins to emerge. In this paper, we offer what we call 'decolonial paths', possible portals to navigate through this challenge. This collective exploration inspires five pathways for approaching decoloniality within HCI: understanding, reconsidering, changing, expanding, and reflecting. Non-prescriptive and non-definitive, these pathways offer HCI researchers a framework to investigate their own practice and the spaces of sociotechnical research and learning they inhabit.

CCS CONCEPTS

• **Human-centered computing** → **Human computer interaction (HCI)**.

*All authors provided equally valuable contributions to this article.

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KEYWORDS

Decoloniality, HCI, design, research, manifesto, pluriversality, pathways

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1 INTRODUCTION

The issue of decolonization—and related issues such as the post-colonial and the decolonial—have become increasingly important to Human-Computer Interaction (HCI) as a field over the last ten or so years. This new focus in our discipline emerged out of an increased receptivity to the different ways in which populations in the Global South are being impacted differently by computing technologies than populations in the Global North [32]. There was also a growing sense in the discipline that, while Participatory Design approaches addressed power relationships, they did not necessarily adequately address different cultural power relationships [14, 56]. There was also a need to engage with the cultural hybridity that occurred as computing technologies were deployed differently across cultural spaces [37]. At the time, there was a growing sense that current HCI methods, techniques, and approaches were not attuned to the

sense of ‘between-ness’ required for the development of appropriate computing technologies across cultural spaces [6].

These calls have become more pronounced in recent years as more voices have called for decolonising computing [11], decolonizing design [9], and utilizing a decolonial approach in computing [7]. This increased focus on decolonization is aligned with similar recent calls for other voices to be heard in HCI including feminist approaches [28] and critical race theory [41]. Inspired by this work, we proposed, co-organized and participated in the ‘Decolonizing Learning Spaces for Sociotechnical Research and Design’ workshop at the Computer-Supported Collaborative Work (CSCW) 2020 conference [57].

In this paper we seek to build on all these earlier efforts—including our workshop—and strive to extend it into a concrete set of practices moving forward. We present this in the shape of *decolonial pathways* and in the spirit of a *manifesto*. The intent behind is to provide possible options for pathways forward as we navigate the terrain of HCI.

In doing this, we first set out the underlying ideas which led to the creation of the CSCW workshop that first brought us as co-authors together. We also describe the participatory and interactive process that followed as we began to explore the implications of decolonizing computing on our own teaching, research, and practice. The following section outlines *five key pathways* that we settled on in our own work, and that we believe can help us better navigate the plurality of worlds within which we found ourselves embedded. These pathways are: Understanding *The Why*; Reconsidering *The How*; Changing *The For Whom*; Expanding *The What*; and Reflecting on *The What For*. We then conclude the text with a discussion of how these five pathways can be viewed as types of landmarks helping us better navigate the worlds in which we operate as members of the broader HCI field.

In drafting this manifesto, we came together as a group of HCI practitioners, educators, and researchers from a broad range of backgrounds and histories, and from many different parts of the world, too. One of the aims with drafting the manifesto is to provide a set of reflections and prompts to help our discipline of HCI become a ‘world of many worlds’ [20] with the linked understanding that there are many different ways of being in the world with many attendant voices. And so, in wanting to ensure that this practice was present in our paper—and that our various voices as participants from many worlds shone through—we chose to draft the paper in a pluralistic and constructive way without needing a single voice to act as the master voice bringing the other voices or worlds in line through a process of homogenization. What follows then is a mosaic of voices emerging in unison and guided by a shared semantics that provides the structure to the story this group is going to tell.

2 LAND ACKNOWLEDGEMENT

The authors acknowledge Indigenous Peoples as the traditional stewards of the land, and the enduring relationship that exists between them and their traditional territories. The land on which we sit is the traditional unceded territory of the Wampanoag, Mvskoke (Muscogee/Creek), Myaamia, Kiikaapoi (Kickapoo), Duwamish, Mexihcah (Triple Alliance) and Ngi-iva (Popoloca), Wahkepute and Nacotchtank (Anacostan) nations and groups. We acknowledge

the painful history of genocide and forced occupation of their territory, and we honor and respect the many diverse indigenous people connected to this land on which we gather from time immemorial¹.

3 AUTHORSHIP AND CONTRIBUTION STATEMENT

Authorship was ordered alphabetically by the author’s first name. This paper is the outcome of a collective effort. All of the authors had the pleasure of sharing a digital community space via the initial workshop [57]. We shared ideas, experiences, feelings, and our visions of what CSCW and HCI spaces have the potential to be. Parallel efforts—with which we are interconnected via conversations and support—to strive for citational justice [34] inspire us to state that all of us contributed unequally—differently—to this manifesto, yet with equally essential value. Some of these ways in which each contributed includes but are not limited to: workshop organization, workshop facilitation, creation and administration of our digital space, asking reflective questions, voicing ideas and furthering discussion during the activities of the workshop, writing within writing groups, leaving comments on each other’s ideas, meeting asynchronously, writing and editing within the LaTeX file, and so on. What is important is that both our differences and similarities brought us together to share these pathways.

4 SCENE SETTING: IMAGINING DECOLONIAL PATHS

[On behalf of the workshop organizers]

Earlier this year, some of the authors of this paper, a collective of researchers from Mexico, Brazil, Colombia, Ecuador, and the United States (U.S.) submitted a workshop proposal to CSCW [57] to continue a conversation that began focusing on exploring ways to foster research in, by, and for Latin America [8], and reflecting on personal experiences some of us had as Latin American students seeking degrees in the U.S. [58]. From these explorations, new questions began to emerge, particularly around the interlocking systems for sociotechnical research that we were encountering and how some of them were configured in a way that “othered” distinct forms of knowledge production. We asked ourselves how these systems were expanding and connecting with our cultural histories and how they were creating friction. To make sense of our experiences, we turned again to postcolonial and decolonial writers and scholars to investigate the underpinnings of established concepts, methodologies, practices, and frameworks within HCI in relation to our identities.

As we fleshed out these experiences, we found ourselves echoing what this decolonial thinking was pointing at: a disconnect between knowledge and methods historically defined by ontological and epistemological Western paradigms, primarily from the Global North [54, 58] and life experiences in the other parts of the world. Engagement with these issues is not new within HCI, and CSCW

¹Adapted from MIT’s land acknowledgment, developed by the MIT Indigenous Peoples Advocacy Committee (IPAC) in part with MIT’s American Indian Science and Engineering Society (AISES), Native American Student Association (NASA) and other Indigenous MIT students/alumni. Available at <https://diversity.mit.edu/resources/land-acknowledgement-statement>

[11, 21–23, 30, 54], and we were energized by the possibility to expand on these conversations, particularly in moving away from the *us-vs-them*, the “othering” narrative that we saw as preventing HCI from emerging as a discipline that grows from the relationality of diverse philosophies, experiences, knowledges, and goals [57].

The workshop was an effort to reach out, to build community, to find each other, discuss these tensions, and continue making sense of these questions. We found voices from various corners of the world, raised under a multiplicity of ontologies, came together to meet us and our inquiries. This plurality made us feel at home and renewed our inspiration in the collectives, communities, and individuals around the world resisting ideas and actions that impose a ‘right’ and only way to move forward. It reminded us of the importance of building spaces for dialogue where interconnections can be visible and practicable: pluriversal spaces [12, 26, 39, 40]. This paper tells the story of one such space, but more importantly, the paths we begin to envision together. A story better told when together with those who, through the workshop, met us along the way.

[On behalf of the participants group]

Here we are with a group of HCI researchers, educators and practitioners belonging to more than one geographical territory, cultural identity, and linguistic community. The workshop starts and we are touched by the organizers’ initiative to invite submissions in different languages and offer simultaneous interpretation for participating in a panel bringing together a diverse group of experts in decoloniality, design, and education². The panel encompasses various views of decolonial studies in relation to design, entrepreneurship, critical cultural studies, philosophy and history of technology, media, and digital culture. It also shares concrete examples and reasons to believe that relational modes of thinking and being are sensible tools to deal with contradictions in HCI practices and education.

After the panel, the workshop organizers provided us with important facilitation strategies for reflecting on our thoughts of the panel and beyond. The organizers offered a shared drawing space and various communication channels to configure and shape a common workplace. Via posts, papers, photos, and more, we build connections across visions of what colonial and decolonized spaces can entail in HCI. Sometimes we did not know if we were in an HCI workshop or somewhere else as speaking about sociotechnical issues got inevitably enmeshed with personal life stories. Contradictions emerged, and questions about us, ways of being in the world, ways to relate to the other, and ways to relate to the “otherness” we have encountered became tangible. This was exciting and uncomfortable at the same time because we are in a contradictory space, and are personifying a pluriversal space.

Discussing how universal ways of thinking impact visions and practices in HCI and what a decolonizing perspective can change, prompted us to articulate critical issues about the topic. By engaging with such issues we thought about “discovering what is productive in these contradictions” and finding ways to “think things together that appear to be separate, and to desegregate things that appear to naturally belong together” —Angela Davis (quoted in [4]).

²Panel available at <https://www.youtube.com/watch?v=vCtqxCGuQpw>

The discussions become richer and find echo on each other, and with them, the realization that we, as a group, also need to be more self-reflexive in the design approaches we learn, teach, and practice. We need to go beyond binaries, categories of Global North and Global South, we need instead to unpack the continuum that these binaries propose so that we can start embracing it with empathy, sensitivity, and hope. The discussions led us to imagine what we denominate ‘decolonial paths’, ways of existing within these sociotechnical research spaces that are able to inform radical pathways—including actions and resources, for academia and industry to support HCI in becoming a ‘world of many worlds’ [27]. *What do these pathways look like? What would entail making them happen? In what follows, we share our explorations in answering these questions together.*

5 OUR DECOLONIAL PATHWAYS

“Caminante, son tus huellas el camino y nada más; Caminante, no hay camino, se hace camino al andar. Al andar se hace el camino, y al volver la vista atrás se ve la senda que nunca se ha de volver a pisar. Caminante, no hay camino sino estelas en la mar.”

“Traveler, your footprints are the only road, nothing else. Traveler, there is no road; you make your own path as you walk. As you walk, you make your own road, and when you look back you see the path you will never travel again. Traveler, there is no road; only a ship’s wake on the sea.”

—Antonio Machado (1875-1939). Translated by Mary G. Berg and Dennis Maloney

[On behalf of all of us]

To engage in a collective envisioning of decolonial paths, we shared personal experiences connected to (de)coloniality and reflected on pressing questions related to breaking away from coloniality. This allowed us to co-construct a shared positionality in terms of decoloniality in HCI. From there, we worked on the construction of a manifesto as an artifact representing actionable pathways for us to explore the questions of *the why, the what, the how, the with whom, and the what for* when practicing decoloniality. We now present *our positionality and decolonial pathways*. As we work as a community, building and walking through these paths, our commitment is to continuously revisit both, redefining everything when necessary. As part of our goal to embrace an epistemological pluriverse, we purposely avoid to frame our positionality and our pathways as prescriptive. Instead, we want to encourage others to reflect on their positionality and engage with the decolonial pathways that respond to their diverse contexts. Table 1 provides a summary of the decolonial pathways discussed in more detail in the following paragraphs.

| Decolonial Pathways | Path | How to |
|--|---|---|
| <p>Understanding The Why Because research communities such as HCI need to reflect on the geopolitics of knowledge of the European legacy</p> | <p>Understanding how the paradigm where we stand and the forms of engagement with communities we follow are shaped by institutional, disciplinary, and cultural boundaries that might be rooted in colonial histories.</p> | <p>Reflecting and documenting the set of tenets, practices, and protocols that constrain our production of knowledge, to be able to trace them back and consider how things took place/came to be.</p> |
| <p>Reconsidering The How Because our methodological decisions need to be driven by what brings value to the populations, we aim to serve.</p> | <p>Reconsidering the origin/genealogy of our knowledge practices and acknowledge the colonial legacies of our tools, methods, and approaches.</p> | <p>Drawing connections between design methods/approaches and their colonial past, for example, design research mirroring colonial practices of extraction (materials, knowledge) and then using it for self-serving ends. By the members or representatives of the Western canon.</p> |
| <p>Changing The For Whom Because our research should be done with participants and ultimately, the outcomes should be FOR participants, from participants' systems of knowledge and values</p> | <p>Re-examining and changing the values of scale, productivity, and impact driving the HCI community's assessment of good research.</p> | <p>Make research outcomes relevant and valid more to the participants rather than to the academics/reviewers. Developing mechanisms for establishing ethical and community-based accountability on behalf of researchers.</p> |
| <p>Expanding The What Because design implications are rather a reflection of designers' ideological commitment towards a universal truth.</p> | <p>Expanding the space for understanding and appreciating multiple frames of references while also challenging existing notions, conventions of what is right. Being more embracing of multiple cultures and supportive of diverse perspectives.</p> | <p>Explicitly examine where we stand in relation to the partial knowledges, errors, and ideological blind spots of our research.</p> |
| <p>Reflecting on The What For Because our relationship with HCI is not just professional, but personal as well as political in the way we make sense of ourselves in the worlds we inhabit.</p> | <p>Reflecting on issues of power, we will create spaces for other voices to be heard. We need to question the ways in which certain knowledges are prioritized over others and the ways in which existing power bases are used to legitimate or delegitimate different ways of being in the world in HCI.</p> | <p>Acknowledge the role of 'dominant' knowledge systems and their role in shaping the way we think and carry out HCI research.</p> |

Table 1: Summary of Decolonial Pathways

5.1 Our Position: All about the Land

We want to acknowledge first and foremost the goal of decoloniality, indigenous sovereignty and autonomy over land unrightfully stolen, not discovered. As designers, researchers, and individuals of multiple communities (immigrants, emigrants, displaced, etc.) we are connected to and in relationship with issues of land in our

everyday life. This connection shapes our way of making sense of and being in multiple world(s), as we are walking contradictions. For us, our connection to land materializes itself in our everyday life experiences, expressing itself in ever-changing questions of belonging and identity. It also materializes in our choices in the areas of theory, research, and practice. We are aware of our complicity over

land and in the theft of natural resources: extractivism of materials in local and international lands to design and develop technological artefacts and systems. On the other hand, we are also complicit in reproducing labor inequalities through the design and study of gig-work systems; which global companies may come to use in their commercial projects. As educators and researchers of design we also reproduce this in the knowledge systems we uphold and create, which may come to shape how land and resources are repurposed for the design and use of technological systems and artefacts. In the realm of practice we unknowingly reproduce standards and processes that follow a capitalist logic (problem solving, evangelizing UX, designing for universalism, etc) even when we aim to teach students the importance of self-reflection and designing for 'good'.

5.2 Path 1: Understanding The Why

The histories of disciplines are constrained by social and intellectual contexts, impacting the continuing structure of the areas of knowledge, the communities that produce that knowledge, and their purpose of work. Furthermore, the character of disciplines is defined by the paradigms their communities decide to follow. In his seminal work *The Structure of Scientific Revolutions*, Thomas Kuhn defines paradigm as a set of assumptions that define tenets, practices, and protocols of a scientific community [33]. Paradigms contribute to establishing the boundaries of the community's beliefs, interests, and practices. Thus, shaping the development of a scientific community and invoking a deep commitment to a particular way of inquiry. Kuhn argues that scientific communities tend to abide by one particular notion of truth at a time constraining the type of questions that scientists want to ask and the results they want to obtain [33]. In consequence, it becomes harder for communities to consider new scientific truths. In HCI such a fixed view of truth and knowledge, shapes every aspect of our knowledge production practice, from over-trusting the capabilities of digital technologies, to dismissing diverse perspectives for informing their design.

We consider that regardless of the discipline, communities need to reflect on the geopolitics of knowledge of the European legacy, as proposed by Mignolo with the concept of *colonial difference*. This concept refers to "the limits of thinking unless modern epistemology was exported/imported to those places where thinking was impossible because it was folklore, magic, or wisdom" [38]. Thus, inspired by our discussions and Mignolo's proposition, we encourage members of the HCI communities to first reflect and identify the colonial difference within their communities to then inform and work towards establishing conditions of diversity that embrace a more pluriversal approach on knowledge production.

Path: Acknowledge how the paradigm where we stand and the forms of engagement with communities we follow are shaped by institutional, disciplinary, and cultural boundaries that might be rooted in colonial histories.

How to: Reflecting and documenting the set of tenets, practices, and protocols that constrain our production of knowledge, to be able to trace them back and consider how things took place/came to be.

5.3 Path 2: Reconsidering The How

Community's way of knowing dictates their ways of doing and being. The establishment and adoption of methods usually reflect a set of commitments to an observational orientation and to a specific paradigm, which encompasses a set of assumptions about knowledge of the physical and social world and how to acquire it. In this context, we refer to methods as the "techniques and procedures used to gather and analyze data related to some research questions or hypothesis" (pg. 11), as defined by Michael Crotty. Research methods, whether qualitative or quantitative, are linked to a strategy or plan of action informed by the methodology [19]. Increasingly, the field of HCI has explored the relevance for researchers and designers to reconsider a use of universal HCI methods across contexts [11, 14, 32, 35, 49]. However, based on the discussions during our workshop, we consider that those calls for change have not been enough. Across HCI academic and design spaces in the industry and beyond, there is a disconnect between the discourses we promote and the methods that we use in regards to the contexts we serve. There is a clear tension between what the HCI structure considers optimal and impactful in terms of knowledge production and design, and a decolonial resistance towards universal methods for design and research. We, the workshop organizers and participants, believe that it is key to grapple with that tension and actively let our methodological decisions be driven by what brings value to the populations we aim to serve. Specifically we suggest to consider connecting with the community, understanding them, their wants and needs, allowing participants to engage in the participatory and action research practices, making them feel comfortable to ask questions as well, and if possible customizing the tools used to fully capture the way they understand and produce knowledge with regards to a specific phenomenon. Finally, we suggest that the field should work on creating research guidelines for ethical considerations when working with marginalized populations.

Path: Understanding the origin/genealogy of our knowledge practices and acknowledge the colonial legacies of our tools, methods, and approaches.

How-tos:

- By drawing connections between design methods/approaches and their colonial past, for example, design research mirroring colonial practices of extraction (materials, knowledge) and then using it for self-serving ends.
- Creating a collective archive to document and share moments of colonial encounters in CSCW/CHI, as well as successful stories of decolonization (e.g. role model, career paths).
- Making space, in our practice, for other ways of knowing, and acknowledging them as legitimate and not only when they have been acknowledged, established or institutionalised by the members or representatives of Western canon.

5.4 Path 3: Changing the For Whom

There is a tendency voiced by the workshop participants who are also researchers themselves to structure and orient their research procedures and writing so that they will be acceptable for fellow researchers in the field. Such efforts, even when operating under Participatory Design principles, can lead to extractivist forms of

knowledge production: we are taking the knowledge and experiences of participants, and translating them to a different value and knowledge system to craft contributions for our research communities [15, 18], which are often totally disconnected from what participants care about. In doing so, we are objectifying participants and communities, extracting from them rather than working with them. We argue for a radical change of perspective in this matter. Our research should be done with participants and ultimately the outcomes should be FOR participants, from participants' systems of knowledge and values. This is the case in particular of research that is intended to help marginalized groups. Shouldn't the ultimate evaluation of whether this research is relevant or valid enough be whether the results and findings are actually helping the participants?

In other words, researchers and the reviewer community in mainstream HCI may be giving more priority to the contributions or research work to academia rather than to the welfare or wellbeing of their study participants. Pal's discussion on CHI4Good or Good4CHI has already mentioned how research with marginalized populations often is done for the benefit of researchers' agendas rather than to the participants' welfare [42]. And so, as an increasing number of views in HCI suggest [24, 35, 47, 55], it is of utmost importance to devote more time and effort in supporting researchers to unlearn existing knowledge paradigms and instead develop methods for working with communities on the forms of knowledge production that they find valuable and that stem from their various everyday practices and capacities.

Path: Reflecting and examining the values of scale, productivity, and impact driving HCI community's assessment of good research.

How-tos:

- Make research outcomes relevant and valid more to the participants rather than to the academics/reviewers.
- Develop mechanisms for establishing ethical and community-based accountability on behalf of researchers.

5.5 Path 4: Expanding The What

Design approaches in the field of HCI have grown from a desire to prioritize people's everyday realities (e.g. [10, 23, 46]). However, their origins in Western perspectives drive them to position marginalized realities as lagging behind from a universal understanding of being and knowing. By pursuing design as a task of problem-solving for helping communities to "catch up", these approaches end up disregarding the relevance and value of other epistemologies [47, 59]. The end result is palpable in the lack of sustainable impact of the many technology-based interventions still taking place in extremely underserved contexts across the Global South [13, 50, 52], where failure by no means can be deemed as a problem of unintended consequences in design.

Aligning with a constructivist epistemological position for the generation of knowledge [17], we argue that design consequences are rather a reflection of designers' ideological commitment towards a universal truth. For us, knowledge-construction ought to stem from connections with an epistemological and ontological pluriverse. This of course implies working with communities as experts of their problem domain and design space. This also means

grappling with experiencing the pluriverse at different levels, including frequently reflecting on our positionality, our beliefs, and our actions, asking ourselves what we might be imposing, who we might be leaving behind, and what that might mean for further community-based efforts. Furthermore, we need to construct more spaces for learning about other knowledge sources, forms of diverse knowledges, and translation practices that embrace mutual learning rather than imposing reductionism and erasure. As a whole, we must learn to work with participants as more than just passive agents or mere targets of observation, facilitating them to issue their voices and guiding the research agenda so that the outcomes can be more tangible and more beneficial to them. If researchers move to a research space or field with a non-expert attitude, they might be more willing to be open to learn and listen rather than to impose and extract.

We believe that being auspicious to unlearning also entails recognizing knowledge as a galaxy in constant movement rather than as a fixed box that only increases its content. In our experience, the ever-evolving research-participant relationship is critical for enabling all parties to craft new connections across the pluriverse, giving place to new ways of looking at the world and defining transformations. As members of the HCI discipline, we can work to create spaces for both researchers and participants to highlight how their thinking has changed, including their sentiments about their previous publications and their current views. This is particularly relevant in cases where new viewpoints or perspectives may have come in the way to make researchers and communities re-think the methods used, their general understanding of particular contexts and realities of problem spaces.

Path: Making the space for understanding and appreciating multiple frames of references, while also challenging existing notions, conventions of what is right. Being more embracing of multiple cultures and supportive of diverse perspectives.

How to: Explicitly examine where we stand in relation to the partial knowledges, errors and ideological blind spots of our research. HCI's growing practice of including statements of positionality in papers is a first step towards addressing this need. However, we encourage the HCI community to expand what we declare in our positionality, including the knowledge paradigms we are familiar with, the communities we serve, and how we embrace their forms of knowledge.

5.6 Path 5: Reflecting on The What For

The paths that we have unearthed so far propose key changes to how we engage, consume, produce, and perform the HCI discipline. However, our relationship with HCI is not just professional, but personal as well as political in the way we make sense of ourselves in the worlds we inhabit. In particular, we operate in contexts where power is consolidated, maintained and reproduced at multiple levels, solidifying itself through various system structures such as nation-states, institutions and schools of thought. Hence, acting to move across the paths proposed above requires us to continuously explore and unpack the complexities of how we are affected by, perpetuate, or resist forms of power in the field.

As designers and researchers, we are intimately familiar with the matters of power in our everyday life. From a decolonial perspective, the concept of *Coloniality of Power* helps us break down the systems of knowledge, hierarchies and cultures that our practices are embedded within. *Coloniality of Power* identifies and describes the living legacy of colonialism in contemporary societies in the form of social discrimination that outlived formal colonialism and became integrated into succeeding social orders [44]. Drawing on this concept, we identify three themes characterizing our observations, experiences, and understandings around issues of power and action in HCI: Knowledge Systems, The Genealogy of Fear and Existentialism.

5.6.1 Knowledge Systems. On a systematic and infrastructural level, we realized that knowledge systems shape the way we think and write. We are mired in contradictions as we are talking about dismantling the dominant knowledge system while living within it. However, we are optimistic because we recognize the multiplicities and plurality within our experiences and perspectives as a group.

When we look at the theoretical aspect of our disciplinary work, we question the pervasiveness of dominant knowledge systems. *How can we acknowledge and differentiate within theoretical models/frameworks that designers use to make sense of the world?* Within the context of research, we emphasize the need for elevating non-dominant modes of knowledge production within research practices, especially context-relevant knowledge systems, as they also influence learning models used by practitioners. For example, the universality of design principles—a long-standing educational tradition among design schools—might have led to the decision of not teaching *calado* textiles and weaving practices as a form of engineering design [43] but rather as an ‘othered’ knowledge practice. This is also reflected in the tools and methods we use to perform and do design practice, such as post-it notes which are not as ubiquitously accessible outside the west, but have become standard as a Post-Fordist tool for innovation [53]. Other familiar forms of epistemic colonialism can be seen in ‘design thinking’, a set of prescriptive and decontextualized principles. These ways of knowing and doing are often assumed to travel unchanged from the Global North to the Global South [36], which can be likened with missionary practices brought over for the purposes of order and civilization to non-Europeans.

5.6.2 Genealogy of Fear. The fear of being de-legitimized which stems from us as a community of researchers, educators, and practitioners standing at the edges and boundaries motivates us to trace the genealogy of fear. The fear describes our uncertainty and self-doubt around not being able to tell *what counts as real knowledge? what to consume and what to discard, when are we overthinking?* Within theoretical practices, we observed that researchers often feel the pressure to cite literary canons, which are mostly white, male, and Western. Resistance to that may bring with it the fear of having one’s work be de-legitimized. Design practitioners experience this in tools, methods and approaches used during their journey into design education. Having lived and studied in different parts of the world, the authors recount their experiences with the pressure to conform and perform design theatre which mirrors the Western/European aesthetics to legitimize it as high-value design work in both the market and academia.

For educators, we believe in the importance of normalising critique of canons and works by literary heavy weights which do not support a pluralistic view. Questioning the power for researchers from marginalised communities not only requires investing a lot of invisible labour and metaphorical jumping of hoops, but also reproduces fear of being de-legitimized. The additional work takes away from typical research timeline, which often leads to othering and decentering of self from the larger academic community and its accepted practices. The act of self-recognition and acknowledgment of invisible labour in others can then be seen as a form of resistance itself. As questioning power is not easy, *what are the practical ways to voicing such ‘controversial’ opinions given the current constraints of academia?* For practitioners it is important to not only foster spaces and environments to encourage such ‘doing’ but also be aware of who is able to access such spaces. Here the authors ask *‘how may this work resonate with students, when the realities they face in everyday life are not ideal? How do you inspire others to ‘do the work’ of challenging and unlearning fear?*

5.6.3 Existentialism. As design becomes integral to challenging and responding to complex problems of our time, the discipline itself is becoming open to questioning its role and responsibilities within society [24]. Zooming into the production and maintenance of the design discipline itself, we question the practice of gatekeeping HCI research and design. *We ask, who gets to define what HCI research and design is and should be?* This speaks to schools of thought and philosophies currently within HCI and design discourses pointing to the disciplines’ invisible but deep colonial roots.

Within the research context, this can be unpacked as outlining legacies from different disciplines such as information sciences, business management and anthropology, which themselves have histories of colonial orientations [25]. For practicing designers, this can be experienced within the performance of ‘design’ work which connects to their identity. Here more material based practices seem to command a superior perception as opposed to non-material work or conceptual and process-oriented design work. Conforming and leveraging these perceptions feels crucial to build identity and seem legitimate. However, these identity contradictions are also themselves a colonial form of maintaining supremacy. This is most acutely reflected in the United State’s response to increasing labour competition with Asia. The advent and production of ‘design thinking’ rebrand conceptual work as superior and as a way to delegitimize the intellectual merit of material based industrial design work coming out of Asia [31].

Path: Power is key to all that we discuss here. It is the exercise of power that sees modernity/coloniality imposed as the world view alongside all other worlds seen as being lesser than or as *undeveloped*. It is power that continues to shape and constrain our discipline of HCI. It is in addressing these issues of power that we will create spaces for other voices to be heard. We need to question the ways in which certain knowledges are prioritized over others and the ways in which existing power bases are used to legitimate or delegitimate different ways of being in the world in HCI. When putting plans into action, we need to be prepared not only for the challenges of constructive emergence, but also for building networks and infrastructures to be maintained and sustained in the long term.

How-tos:

- Acknowledge the role of ‘dominant’ knowledge systems and their role in shaping the way we think and carry out HCI research.
- Foster spaces and environments that are safe for researchers and practitioners to choose relevant ways of doing research that support pluralistic views and that depart from traditional ways of doing research.
- Include the local communities input and knowledge in their research design and classroom activities and goals.
- Cite indigenous, female, queer, Black, and people from marginalised communities (see [1–3, 5, 29]).
- After acknowledging and reflecting on the previous five points, transition to praxis and promote change. For example, Van Amstel and Gonzatto highlight an alternative way of working inspired by their local historical and cultural contexts. Following the *anthropophagy* tradition of hybridization, the foreign concepts were not rejected but devoured and digested together with Global South concepts, such as radical alterity, mediation, and oppression to form what they call the *anthropophagic studio*. [51].

6 NEXT STEPS: PATHWAYS MOVING FORWARD

To bring about the changes that we are suggesting in this paper we need to take action. It is through our actions, and the actions of others, that we will be able to open up the discipline of HCI to operate in a ‘*world of many worlds*’. In our practice, we then need to return to the five paths discussed above. It is through understanding our histories, the impacts of the methods we use, the communities with whom we work, the multiple voices present in our work, and the ways in which power courses through it all, that we will be able to enact the change that we desire. To enable the return of the voices of the multitude of worlds so long silenced by modernity/coloniality, to our discipline of HCI.

Having a set of decolonial pathways allow us to begin directly addressing the multiple layers of meaning entailed in wandering along these paths. Expanding on this analogy of a path—a path is always linked to the idea of motion—of moving through the world. This can be both physically—such as a path winding through a forest allowing us to transverse that space—as well as metaphorically—with many of the world’s various wisdom traditions talking of their work as a path for others to follow. In this respect then a path is both a way or track laid down for traversing space as well as a course of action or conduct. What is shared by both aspects is that they involve movement in a certain course or direction over a terrain which needs to be traversed.

As well as taking us places, paths also connect. A path is always therefore a path to somewhere. There is always a destination. The destination that we are concerned with in this paper in our discussion of “decolonial paths” is the plurality of worlds which surround and envelop us. The direction we move towards as a group is in supporting HCI to become a pluriverse connected and joined by multiple paths. In doing so, we are actively opposing the actions of modernity/coloniality which have delegitimized and ignored other possible worlds and the pathways which connect them.

In utilizing the concept of ‘decolonial paths’ we focus then on both the agential nature we all possess to move in a certain direction as well as the way in which our worlds are, at least partially, prefigured. There currently are definite paths to follow in pursuing research, teaching and practice in the field of HCI. Some of these paths are more well-worn than others but they all tend to lead to similar destinations—a certain view of what ‘correct’ HCI looks like.

But these are not the only paths available to us in HCI. There are a multitude of paths to many worlds which are open to us if we choose. Recent work in HCI has begun to open up some of these other paths (e.g., Critical race theory in HCI [41], Feminist HCI [28], Design Justice [16], Social Justice-Oriented Interaction Design [24] and other efforts [45, 48]). What we have done in this paper is to propose a few different possible paths which we believe could help support those of us wanting to navigate in different ways across the field of HCI as we move forward. They are by no means intended to be complete. They are unachieved, not finished, but there is an alignment of meaning across the five which helps bring into focus more clearly some of the actions required to support those of us committed to exploring decolonial paths as we traverse the terrain of a field of HCI which is open to the possibility of a plurality of worlds.

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