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Citation: Grisales, Claudia, Wong-Villacr?s, Marisol, Serpa, Bibiana, Go?i, Julian I?aki, Lemus, Oscar A. et al. 2022. "Reviews Gone South: A Subversive Experiment on Participatory Design Canons."

As Published: https://doi.org/10.1145/3536169.3537794

Publisher: ACM|Participatory Design Conference 2022: Volume 1

Persistent URL: https://hdl.handle.net/1721.1/146388

Version: Final published version: final published article, as it appeared in a journal, conference

proceedings, or other formally published context

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Reviews Gone South: A Subversive Experiment on Participatory Design Canons

Dedicated to the Memory of Oscar A. Lemus

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ABSTRACT

In this paper, we present a performative exercise aimed at revisiting, from Latin American "Southern" perspectives, two seminal articles in Participatory Design (PD): "Co-creation and the new landscapes of design" by Sanders & Stappers, and "Participation in Design Things" by Ehn. The goal is to turn peer review into a critical tool to inform established knowledge in PD with Latin American perspectives, using five principles: citational justice, epistemic justice, emancipation, relationality and positionality. Through this exercise we offer reflections, experiences, and literature to critically expand PD's core as the field moves to global contexts. We discuss two tensions in this move: 1) design as socio-historical production, and 2) emancipatory commitments of participation when 'turning South'. We end with a critical reflection about the potential and limitations of our reformulation of peer review and its Southern politics. We offer these reflections to PD as a way to invite radical political solidarities across borders.

CCS CONCEPTS

• Human-centered computing \rightarrow HCI theory, concepts and models; Participatory design.

KEYWORDS

peer review, knowledge production, participatory design, epistemic justice, global south

ACM Reference Format:

Pedro Reynolds-Cuéllar, Bibiana Oliveira Serpa, Claudia Grisales, Julián "Iñaki" Goñi, Marisol Wong-Villacrés, and Oscar A. Lemus. 2022. Reviews Gone South: A Subversive Experiment on Participatory Design Canons:



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PDC 2022 Vol. 1, August 19-September 1, 2022, Newcastle upon Tyne, United Kingdom © 2022 Copyright held by the owner/author(s). ACM ISBN 978-1-4503-9388-1/22/08. https://doi.org/10.1145/3536169.3537794

Dedicated to the Memory of Oscar A. Lemus. In *Participatory Design Conference 2022: Volume 1 (PDC 2022 Vol. 1), August 19-September 1, 2022, Newcastle upon Tyne, United Kingdom.* ACM, New York, NY, USA, 12 pages. https://doi.org/10.1145/3536169.3537794

1 INTRODUCTION

How can we continue to weave the field of Participatory Design (PD) with knowledge produced beyond the regions where it started and developed? What began with this simple provocation, developed into the subversive project we unfold in this paper. In particular, we wanted to interrogate PD with the absences that haunted us as Latin American researchers. We, thus, crafted this research to critically explore unrealized intellectual dialogues between dominant forms of understanding PD and Latin American epistemic perspectives and cosmologies, and analyze the alternative trajectories they suggest for PD practice and knowledge-making. In doing so, we add to the recent movement in PD seeking to take Southern¹—and particularly, Latin American—epistemologies, ideas, and praxis seriously [2–4, 45], while recognizing the situatedness of all perspectives, along with their limitations.

As our field becomes increasingly aware of historical global knowledge-making inequities, the examination of how PD paths were and could have been shaped may help the community actualize its understanding of PD [9]. This is particularly relevant considering the geographical and cultural mobility of PD and the critical perspectives it demands [97]. In this paper we use a reformulated form of peer-revision to speak with canonical papers in PD and make alternatives visible.

While institutionalized knowledge production practices such as peer-revision, authorship, and evaluation are often assumed as ahistorical [17], they have a political dimension defining what is considered legitimate and relevant. Citations for example, have been identified as a technology that often reproduces unwanted, limited worlds for feminist, antiracist, and critical scholars in multiple fields

¹We think here of metaphorical rather than geographical Souths: "a metaphor for the human suffering caused by capitalism and colonialism in a global level, as well as for the resistance to overcoming or minimizing such suffering. It is, therefore, an anti-capitalist, anti-colonialist, anti-patriarchal, and anti-imperialist South. It is a South that also exists in the geographic North" [84, p.18].

[5, 58, 69]. Critiques of these traditional practices have invited us to rethink academic knowledge-making processes altogether [22, 23].

Our work responds to this need by enacting an alternative form of peer review. Its primary contribution is to present reflections, experiences, and literature from Latin America that can enter in dialogue with PD's core and critically expand it as the field moves to a global context. We further expand discussion on two main tensions hindering mutual learning between traditional PD knowledge and design and participation in Latin America: 1) the recognition of design as a socio-historical production permeated by contradictions, and 2) the emancipatory commitments of participation when seen though Latin American lenses. Finally, we contribute a critical discussion on the implications of our attempt to turn peer review into an emancipatory tool.

We offer these reflections to the field of PD as a way to invite radical political solidarities across borders. Our goal is not to speak of confrontation or replacement of a dominant paradigm by another, but to amplify our field's capacity for reflection and action in difference by inviting recognition of partial connections—a notion offered by Marilyn Strathern [91] and explained by Marisol de la Cadena: of those made by "our shared and dissimilar condition" when we bring together "worlds that are distinct and also the same" [27, 3-4].

2 BACKGROUND

Historically, the field of PD has shown willingness to engage in 'epistemological trouble' [52] challenging mainstream frameworks of what counts as knowledge. When moving from Scandinavian work environments to broader community contexts, PD embraced examination into its views of design, shifting from design-foruse to design-for-future-use, aiming at informing socio-technical processes for empowering "sustainable community capacities beyond the development and deployment of any one specific artifact" [11, 25, 29, 60]. Despite such openness to change, ensuring that the field's mainstream concepts and methods inform and learn from global contexts—where political, cultural, and socio-economic conditions are highly heterogeneous—is an ongoing challenge for the PD community [20, 21, 47, 51, 66, 97].

A critical barrier hindering the epistemological trouble that allows for PD to connect with other ways of knowing and being is the restrictive nature of the structure that frames all fields' knowledge production processes [12, 58, 70]. By gate-keeping the voices that can engage in discussions with PD's core, such structure runs at risk of disregarding—and often depoliticizing—knowledge produced by groups outside of a dominant knowledge system [89]. For example, critical analysis of PD's subareas including sustainability, evaluation, and development rarely discuss work from Southern provenance [16, 59, 77] or tend to aggregate those efforts under one label, dismissing particularities that include theoretical approaches and political commitments [48] among other factors. Analysis of PD's history presents a similar problem: it centers those coining key terms and driving the field while disregarding the diverse sources of inspiration from actors in the South [10].

Another barrier is the field's struggle to grapple with and learn from multiple differences across contexts. Work across the globe has highlighted the need for PD to consider various definitions of participation [48]. Winschier-Theophilus et al., for example, argued that in a cross-cultural context participation needs to "include an appropriation of the design process itself" [96]. For Gautam et al., when working with vulnerable groups, participation cannot be treated as exclusively related to the design process; rather, it needs to be seen as path for enabling "participants to realize their agency in day-to-day interactions" [20]. A common critique of how PD grapples with different contexts, however, is that the field still tends to see these contexts and the diversity they represent as "the other", always "captured continentally in simple opposition" to mainstream concepts and practices in the field [47, 66] and thus, never able to inform them.

The latest PDC biennial—the field's main venue for knowledge dissemination—in 2020 shed light on how PD can move away from such a binary perspective towards engagement with differences across contexts. By taking place "in" Colombia, the conference allowed for various languages, cultures, epistemologies, and methodologies to co-exist while challenging and informing one another. Different papers explored how Southern approaches—such as Participatory Action Research (PAR) and Popular Education [20, 54, 86, 87]—and cultural and political contexts in Latin American countries [38, 44, 65, 71, 80, 85], Nepal [39] and South Africa [21], to name a few, can enrich PD's understanding of participation and design.

Others called the field to further revise how it addresses the political dimension of participation, especially given the Marxist-inspired origins of PD as political decision-making [72], suggesting to "add layers of social and political reflection to discussions about democratic design" [87], "focus on personal politics rather than institutional Politics" only [39], and seeing the political nature of participation through a lens of pluriversal politics that makes the emergence of other ways of making worlds possible [20].

In this paper, we build on the epistemological trouble taken up by PDC 2020, further animating the field to embrace a pluriversal perspective of knowledge and practice. As Latin Americans, we bring epistemologies and problems from particular Souths to PD, presenting them not as opposite to mainstream PD but as important visions that can enrich the field. We speak from our individual positionalities as design, Human-Computer Interaction (HCI) and Science, Technology and Society (STS) researchers from Latin American countries; we do not attempt to speak for an all-encompassing South, nor for Latin America as a whole. While limited, we suggest that our positionalities and perspectives offer valuable pathways for PD's traditional theory and practice to realize and explore partial connections with Latin American experiences and knowledges, remembering that "we do not need a totality in order to work well" [50, 173]. We use peer review, one of the most critical knowledge production instruments within western academia [19], as a tool for communicating these perspectives. Specifically, we peer reviewed two seminal articles in the field from perspectives grounded in the production of Latin American knowledge.

Peer review is a knowledge production instrument that uses the judgment of selected experts to both control the quality of academic work [19] and provide feedback to ensure its continuous improvement [1]. It is understood as a system of certification or approval for both research and researchers [88]. Simultaneously, when working within universalist, western knowledge structures, peer review serves as an instrument for perpetuating those structures'

understanding of rigor and legitimacy of research [64], allowing for multiple biases to work against non-dominant views within academic communities [61, 68], all while concealing peer review's functioning as a "form of labor under very specific conditions that are also shaped by material struggles" [68]. Given its critical role as a political process gate-keeping marginalized voices, we choose to explore how peer review could operate otherwise, contesting the center-margin binary using our positionality as people located at many borders [6]. As we recognize peer review as a political process of knowledge production and an artifact to determine which voices are amplified, silenced or disciplined, we appropriate it as a tool for analyzing alternative trajectories that can support the field of PD in connecting and learning from traditionally non-dominant knowledge.

3 METHODOLOGY

We present a performative practice [41] aimed at revisiting two seminal articles in PD departing from Southern perspectives [36]. In doing so, we acknowledge that Souths are always multiple and do not attempt to speak for all of them. Our methodology draws from Standpoint Theory's thinking from the "outside-in" [53], seeing-double from within and outside [7], and partial connections [27, 50, 91] to shed light over typically under-recognized concerns and literature. To achieve this, we performed a mock scenario in which two seminal papers in PD were submitted to a fictional conference attentive to intellectual production in Latin America for peer review. Our methodological approach sought to reflectively invert power dynamics embedded in the field's epistemic practices and to playfully ask: what would a Southern review have to say about these influential papers?

Peer review in major conferences relies on collective knowledge embodied in reviewers and Area Chairs (ACs). These members of academic communities provide a service to their fields by working together in ensuring quality knowledge production. After submission of contributions, authors receive feedback which, in the fields of computing and design, for example, is traditionally comprised of reviews and meta-reviews. The concept of the inverted peer review exercise emerged from our experiences within this knowledge infrastructure, and submitting to PDC in particular. While we recognize the efforts to increase diversity in academic venues traditionally hosted in English and in the North, we perceive a qualitative difference between how works in English and works in other languages are reviewed and received. These experiences foreground tensions between already consolidated theoretical and methodological structures and initiatives to open traditional venues to new languages, formats and theories. We are inspired by this

For our performative exercise, we first selected the papers in the PD literature that would be reviewed. Next, we agreed on guidelines for the peer review process. Individual reviews of each of the articles were then submitted by four authors and compiled in a meta-review by a fifth author acting as AC. The meta-review was discussed by all authors and common themes were selected to be included in the analysis and final write up.

We began the exercise with four papers proposed by the AC according to three criteria: 1) the work established an important

direction in PD or proposed a fundamental methodological or conceptual approach shaping PD research or practice—it sets an agenda, 2) the work is written from a Global North perspective but addresses global/globalized concerns, 3) the work is largely cited across academic disciplines (e.g. design, education, health, technology development) and geographical contexts, which suggests the knowledge it presents has been widely accepted as normative of how PD is to be practiced, globally. The papers proposed were Co-creation and the new landscapes of design [83], The methodology of participatory design [90], Participatory design: Issues and concerns [56], and Participation in Design Things [29]. All authors performed a general reading of the four papers and met to discuss their two preferred choices. The papers selected were "Co-creation and the new landscapes of design" [83] and "Participation in design things" [29]. The authors agreed to chose these articles based on the different areas of practice they each seemed to inform—social impact and innovation—and their ability to speak to design beyond the design of digital technologies, which enables them to speak to diverse PD application contexts.

Next, we decided on guidelines for reviews, agreeing to emphasize the role of consultant over that of gatekeeper. The goal was to review the articles to uncover different possibilities for knowledge-making about matters of care [26] for both authors and reviewers. With that idea, we proposed five principles for reviewers, aimed at elevating experiences, epistemologies, and practices of the Souths we speak from.

3.1 Guidelines for Reviewing

- (1) Citational justice: We recognize the politics of knowledge production and the influential role of reviewing in research. We understand citing as a social relation that may reinforce epistemic authorities over time as well as the invisibilization of certain research. Citational justice invites us to work collectively to improve citational practices towards more responsible knowledge production, fostering safe mechanisms to make lack of recognition and biases visible, and to take responsibility for them [58].
- (2) Epistemic Justice: Drawing from Santos [85], we recognize that: 1) knowledge exceeds the western understanding of the world, 2) the character of the world is fundamentally diverse and it has fostered myriad ways of thinking, feeling, acting and relating that have been made invisible by dominant narratives, and 3) there is not one general theory of everything that can claim full understanding over the world and its problems—a plurality of knowledges is needed. These premises invite recognition of the multiple ways of knowing that exist within and outside academia. They represent a call to cultivate awareness of the places and social relationships from which knowledge is produced and the propositions that a particular form of knowledge gets to make about the world [23, 45].
- (3) Emancipation: We take up the calls to emancipation that emerge from the multiple Souths over time, to act, on behalf of all who have been oppressed and continue to be, questioning what our knowledge and practices do for the liberation of

communities and the overcoming of all logics of oppression [33].

- (4) Relationality: We conceive of peer review as a relational process, across time, space and difference. Our colleagues' time, generosity and care are offered to contribute to a common purpose. In turn, we commit to listen generously to contributions, to honor authors' time and dedication, and to provide spaces for meaningful and respectful interaction. We acknowledge the relationship that we hold with the authors of the papers we will review, and their invaluable contributions to PD. In this sense, all critique is offered with humility and respect.
- (5) **Positionality:** We recognize that "we always speak from a particular location in the power structures" [45, 4] and that our knowledges are always situated [49]. In that sense we will strive to remain aware of the loci from which the original papers were generated, as well as the particular positions from which we will review them. In this process, we seek to remain attentive to borderlands [6] in identities and locations.

After deciding on the guidelines, we individually reviewed each article. Four individual reviews were submitted to the AC, who compiled them into a meta-review by arranging comments for each article across our five guidelines. The AC also identified common themes in the reviews, which were later discussed with the rest of the authors. We gathered discussion notes from our meetings in order to add to the analysis. Finally, we contributed to the write-up of the article, continuing discussions as we reviewed and built on each other's contributions.

4 REVIEWING FROM THE SOUTH

In imagining peer review as relational and dialogical processes in knowledge production, we center this section around the reviews offered and their distinct positionalities. To approach the foundational pieces selected for our exercise, we make use of the meta-reviewing mechanism, which allows us to synthesize individual reviews. Given the richness of the feedback offered by reviewers, we chose to place the meta-reviewer's role in the background, synthesizing and foregrounding points of encounter. In doing so, we give prominence and focus to the message reviewers were attempting to get across. This is in contrast with traditional review cycles where reviewers' contexts might be erased, we also highlight different aspects surrounding reviewers' positions including what experiences inform the feedback they offer. In what follows, we present this meta-review in the voice of the AC.

4.1 Meta-Reviews

I thank the authors for the evident care and effort put into articulating work that has undoubtedly transformed the outlook of PD. First, "Participation in design things" asserts that design continues after design, extending to future uses of what is designed. It uses the 'participatory design' and 'meta-design' dyad to create a generative space for design practice. Second, "Co-Creation and the new land-scapes of design", contributes an in-depth analysis of the tensions the practice of co-design might represent for academics, practitioners and members of industry. It does this by considering the numerous

ramifications of moving from user-centered design to co-design. In what follows, I present a meta-review of the responses of four reviewers to these contributions, following the guiding principles of citational justice, epistemic justice, emancipation, relationality and positionality.

As these papers have long passed their publishing cycle, reviewers focused on highlighting matters pertaining their key contributions in the light of theory and practice emanating from different *Souths*, particularly in Latin America. In doing so, they acknowledge the privilege of hindsight provided to them in looking back at these contributions. Authors also recognize that these papers are not set in stone. They remain, however, dominant pieces in the PD literature. I hope these reviews provide authors and readers with inspiration to consider what is to come, and the meta-design embedded in these important contributions.

4.2 Participation in Design Things

This paper discusses the need for participation in design to consider the relationships between designing for future use and designing for actual use. It calls designers to consider the implications and challenges of envisioning people's interactions with what is designed beyond "project time". The paper explores how participatory design, unfolded during the design process, and metadesign, occupied with considering uses beyond design time, can provide avenues for participation in "design-after-design".

- 4.2.1 Citational Justice. As R2 notes, this article commits to the notion that knowledge is both situated and political [49]; that designers should refrain from "design from nowhere". In establishing the "somewheres" of PD, however, R2 highlights that the article misses references to key proponents of PAR such as Orlando Fals Borda [31] and Joao Bosco Pinto [76], who also advanced similar notions both in theory and practice. These missing references are, by no means comprehensive, but as R4 notices they can help to highlight the political and situated dimensions of knowledge within design, thus enriching and complicating the author's perspectives. R3 suggests the authors also consider the work of Renato Dagnino [24] whose work highlights the roles that context, politics and reflection play in the evolution of STS in Latin America. This will further inform how the author's argument can relate to Latin America specifically.
- 4.2.2 Epistemic Justice. R3 appreciates the use of Latour and Leigh Star's work on publics and assemblages and boundary objects respectively. They suggest work from Pablo Kreimer and Hebe Vessuri [57] to complement this discussion with a keen consideration to how center-periphery relations—deeply tied to regions like Latin America—can shape the object of design at project time. Centerperiphery is an important optic for analysis in STS studies as well as for matters of epistemic justice as it sets out to understand the synthetic division between privileged centers and marginalized peripheries. The references offered by R3 can provide an enriched perspective of the ramifications of the core-periphery model for knowledge production, including within the field of design. R4 remarks the importance of recognizing that publics are not homogeneous, which aligns with "a pluriversal perspective of the world as one constituted by many ways of being and knowing"

[30]. Reviewers agree that highlighting this heterogeneity can help the author address historical movements and struggles counteracting center-periphery narratives in Southern regions such as Latin America.

Both R2 and R4 acknowledge the value of several conceptions within PD, some of them advanced by the author of this paper, while remarking their limits as framed within the field. For example, R2 highlights how the notion of "tacit knowledge" in this contribution obscures the fact that this "tacitification" can be the result of oppressive and exclusionary dynamics leading to internalization of epistemic disbelief. R3 follows by contributing that a Southerninspired vision could "emphasize that participatory experiences should not only recognize people as knowledgeable but empower them to break with epistemic practices that keep knowledge tacit or obscured". PAR, for example, stresses how PD could represent a commitment "to not only augment the power of regular people and properly educated subordinate classes but also, their control over knowledge process, its storage and uses" [13, p.213-214] (own translation). Similarly, R4 further problematizes the sole focus on western notions and exemplifies this phenomenon through PD's historic understanding of change as a linear function, traveling from a moment of envisioning to a moment of use. This is in contrast to how change is conceptualized in, for example, some Indigenous ontologies in Latin America, where it is seen as a "plurality of stories happening alongside each other, with no single totalizing narrative of change [79]." Reviewers suggest that these notions remain open to revision as we discover, together, different ways of enacting PD.

4.2.3 Emancipation. In considering the idea of 'design-after-design' in the context of (public) "controversial things", R4 notes the importance of placing the notion under an emancipatory light, especially when the concept is used in relationship to change. In the "design of things", a vision of change and its ontologies is negotiated and likely reproduced by focusing on change through the logics of modernity (e.g. growth, capital) or through re-designing and re-purposing pre-existing artifacts. Inspired by emancipatory notions from the South, R4 speaks, all 'design-after-design' should also consider how to escape oppressive systems and narratives. R4 congratulates the author for offering ramifications of this approach to change and recommends revising the work of Walter Mignolo [67]. One of the dimensions covered by Mignolo's work, 'delinking', focuses on how to break away from knowledge structures imposed by modernity. R1 echoes this call by invoking Black feminisms and recommending Audre Lorde's antiracist and emancipatory work as another call to revise how change can operate outside of oppressive frames, "for the master's tools will never dismantle the master's house" [63].

R4 remarks that the paper leverages democracy as a core value for PD with the potential of leading to the "design of controversial things free of coercion at use time that helps communities resist and contest" but fails to consider the numerous forms democracy can take. Views from diverse Latin American Souths will reveal that "democratic regimes can take diverse forms, including authoritarian ones. The feasibility for collectives to emerge and participate in change does not depend only on the existence of democracy." R4 suggests reviewing work that might help recognize some of the factors shaping the quality of democracy across Latin America [30].

Lastly, R1 and R2 remark how some problematic dichotomies associated with western thinking are, perhaps unwillingly, reproduced in this contribution. Mention to "ecologies of devices" removed from the ecologies of "plants and animals" on the section on 'infrastructuring', reveals a nature/culture divide along with a user/designer framework, both of which emancipatory epistemologies of the South seek to dismantle.

4.2.4 Relationality & Positionality. As a practitioner in social studies of technology in South America, R2 appreciates "the importance of this seminal work in broadening interest for more participatory approaches to design, as well as asserting the limitations of usercentered design in most academic and design circles." R1 and R4, as PD theorists and practitioners from South America, recognize that this paper represents a substantial contribution to readers from all corners of the world interested in the discipline. R3 relates to the paper's contributions from their experience working with informal vendors in Central America, in particular regarding the notion of design at project time and its objective in producing "a public thing open for controversies from which new objects of design can emerge in use." R3 shares: "I now realize that at project time when attempting to enter into discussions about the design of things, [vendors] preferred to share their testimony, thus shedding light on a public controversy that is of interest to them and their lived experience." R3 invites the author to consider how we can open dialogue rather than produce a public thing during design projects, and how might Latin American STS and Participatory Design come together to design a space of dialogue in public controversies of Design.

4.3 Co-Creation and the New Landscapes of Design

This paper presents an analysis into the implications for those involved in the design process as a transition from user-centered design to co-design takes place. The paper foregrounds tensions emerging for different stakeholders during this transition, identifying that each of them can project contrasting perspectives and interests throughout as a result of this progression. While participation can be an empowerment tool towards resisting the status quo, this meaning is not necessarily shared across stakeholders.

4.3.1 Citational Justice. As the reviewed paper foregrounds design practices within North America and Europe primarily, R3 encourages the authors to examine lived experiences with design and use of technologies by the working poor in Latin America & the Caribbean through Enrique Dussel's work on philosophy of liberation [28]. This work offers an expanded view of practices that feature the inventiveness, creativity and ultimately design skills, required by historically marginalized groups in this region to act upon their daily lives, often in response to systemic oppression. All reviewers agree that as PD concepts travel across borders and are principally focused on social change, it is important to expand these notions.

R2 extends this rationale by raising concerns about what literature is left behind when building the history of PD, and encourages the author to consider fundamental contributions such as classic Latin American authors including Orlando Fals Borda [62], Joao

Bosco Pinto [76] and Juan Díaz Bordenave [14]. In particular, R4 notes how Fals Borda's work on PAR sheds light on pathways for removing "the distinction between researchers and those part of the researched," and argues recognizing such a contribution is critical when re-constructing a more complete historical picture of participatory approaches beyond the European and North American canon. R4 warns that the author misses the opportunity to offer a more holistic idea of PD's origins both in theory and practice and invites the author to also bring into consideration other works including Paulo Freire and his "pedagogy of the oppressed" [33] and the philosophy and practice of "Buen Vivir". Freire's critical understanding and "reading" of the world through the eyes of the conundrum oppressor/oppressed is essential, particularly when considering the political dimensions of design [87]. Furthermore, the conceptualization of collective empowerment and the act of designing on the basis of environmental and societal well-being enacted by the 'Buen Vivir' philosophy of practice in various Latin American territories [42], offers a crucial alternative to the established connection between design and capitalistic dynamics.

4.3.2 Epistemic Justice. As mentioned by R4 in the previous section underlining citational justice issues, it is important to "consider epistemological projects from the South when describing possible paths for researchers and designers involved in co-design endeavors." Doing so, as R3 reflects, can shed light over what worlds are considered when practicing co-design, especially in light of "co-design's overdue impact on the [...] man-made world.." (pg. 9). In relating to the author's important contribution, R3 writes: "I'd like to co-think the term world, notions of what constitutes participation; co-design; and participatory thinking as a threat to the status quo with the authors. To the authors, I ask ¿el mundo de quien? Whose world are we referring to when we speak of the impact of co-design?"

R2 and R4 agree that framing users as objects of knowledge or as sole partners during the co-design process can produce problematic notions within PD. Thinking with the author around these tensions, R2 offers the construct of "epistemic injustice" [35] as a path towards a deeper analysis "beyond epistemic objectification (in which users are treated as objects of knowledge)" and into a "full acknowledgment of people as true epistemic agents." R4 suggests further reflection into how a shifted view of users such as the one R2 proposes, may bring to the front the fact that users can "motivate, question, control or lead design endeavors."

In addition, R2 remarks the importance of expanding the scope of what "users" offer in co-design work in order to prevent practitioners from reproducing "epistemic labor invalidation" [78]. Careful consideration of other epistemological projects, other ways of being, including those from ordinary people, relates to Paulo Freire's idea of "humility" in which "all people are seen as knowledgeable in an authentic sense" [33]. Approaching co-design this way re-signifies the roles of design facilitators "to empower people to speak for themselves and to transform epistemic and political practices in their communities so that all forms of knowledge and subjectivities are seen;" as agents to give way to what Freire refers to as "palavra autêntica" [33].

Furthermore, R1 invites consideration on whether framing the co-creative paradigm as a way to move from "an unsustainable way

of life to [...] a healthy and sustainable ecosphere" may obscure the fact that sustainable ways of living have been enacted for centuries in many geographies around the world. R1 warns that leaving this important consideration outside of this analysis can conceal "power relationships and consolidated hierarchies at multiple scales". In the current version of the paper these relationships are limited to the relinquishing of control over the design process from the designer to the potential customer/user. In reflecting upon the idea that offering users something granted to them by virtue of themselves, the right to participate, R1 suggests to the author that these dynamics can be a manifestation of palliative measures rather than meaningful change. In other words, that this 'handing-over' of the right to participate can be "intended to allow business-as-usual, to continue with minor changes, while creating an illusion of radical transformation."

4.3.3 Emancipation. R1 invites the author to reflect on how the paper's language such as "people have been given more influence and room for initiative in roles where they provide expertise and participate in the informing, ideating, and conceptualizing activities" (p. 5, emphasis added) can be read as an "oversight of people's struggles for participation and emancipation." This can be particularly acute when reading how the paper frames the relationship between users and designers, signaling that users need to be "given appropriate tools for expressing themselves" in order to assume the role of "expert of their experiences" (p. 11).

In suggesting potential directions for the author's contribution, R2 encourages consideration over its "emancipatory potential." For example, using the paper's proposed criteria for determining the transition from users to co-designers on the basis of "passion and knowledge in a certain domain," R2 urges the author to consider how this perspective can individualize and reify participants' cognitive and affective traits. Instead, R2 suggests, the author might consider how the power dynamics embedded in knowledge production affect such transition. This can lead to further analysis of who is invited to co-design and who is not. Invoking Juan Díaz Bordenave, R3 remarks how "participation is not a means to an end, but rather a human right. In other words, the purpose of participation is a participatory society" [14].

Similarly, R4 further emphasizes the ongoing struggle for protecting collective values as an act of emancipation and encourages the author to revise the individualistic approach to participation they convey in the paper. In exchange, R4 suggests considering a viewpoint that explicitly counterpoints neoliberal paradigms prioritizing individual over collective freedom [55]. R4 offers the author the concept of 'Buen Vivir', emerging from Indigenous forms of knowing and being in Latin America, as a perspective for prioritizing "collectivism, environmental justice, and reciprocity" [42].

Considering the connections between emancipatory projects happening in the periphery of the position from where the arguments made by this paper seem to emanate, R3 offers the authors the following questions: "How may co-design construct dialogues across the many worlds that people in the periphery inhabit? How may designers take stock in multiple modes of existing outside of the center (U.S.A. and Europe), specifically those in the periphery? How can co-design consider the realities and ways of being of individuals who live in a world that does not seek an innovative

business product? But rather who often travel between the boundaries of economic and home life, situated in a world constantly threatening their existence and their livelihood?".

4.3.4 Relationality & Positionality. In highlighting the importance of positioning where one speaks from, R1 suggests clarification over what landscape of human-centered design is being depicted by the author. Is it a global landscape? Or just a narrowed scoping of certain places in North America and Europe? As mentioned before, the increasing presence of PD notions worldwide, makes it important to recognize a growing diversity in design practices. In the same way, R1 invites the author to reflect what is implied when this landscape is narrowed to "the design and development of products and services" leaving aside many other sites for the practice of design. R1 warns that this commitment to position design in the sphere of business and industry "render other practices of sociomaterial transformation and shaping invisible" [46] in exchange for privileging the "entrenched relationship between modern industrial design, consumerism, environmental degradation, and global order" [74]. As an alternative to these universalizing ideas, and based on personal encounters and observations as a researcher in a Latin American country, R3 offers the author a radical possibility when positioning design and design research within a given geography. Building on work from Van Amstel and Gonzatto, R3 suggests to the author considering how these globalized notions are locally appropriated, sometimes cannibalized, digested and catalyzed into new categories of knowledge [92].

Following this, R2 appreciates the importance of this seminal work, particularly when it comes to contend what the limits of user-centered design in academic and design spaces, as well as to extend interest in participatory approaches within design. R3 highlights the relevance of this paper in considering the ways in which we as a community can change "design and the world" as the author writes. R3 offers insights from their practice observing how design, politics and urban planning are leveraged by government authorities in order to privilege the use of space by some at expense of others. In sharing this experience, R3 seeks to "write in dialogue with the points raised by the author" while offering a source of inspiration and reflection.

5 DISCUSSION

The meta-review and the reviews animating it, reveal two themes that stand out as central for dialogue within PD. The *first*, relates to how design understands and mobilizes knowledge in order to formulate generalizations regarding processes and products connected to its participatory practices. The *second*, concerns the understanding of participation in relation to design and what that stands for. After deepening these discussions, we end this section reflecting on our subversive peer review experiment and its implications for future work on knowledge-making in PD.

5.1 Design as a socio-historical production

The reviews presented in this exercise reveal that the authors of the articles speak from a situated place, a position and standpoint influenced by political-economic systems that regulate social organization and reflect on these authors' understanding of what design is, what and whom it serves. Our "Southern" analysis suggests that in "Participation in design things", the author reflects on practices of creative engagements between people who do not face extreme inequality and can access mainstream technology and design-after-design in interacting with it. In "Co-Creation and the new landscapes of design", the authors recognize the evolution in design research from a user-centered approach to co-designing as a changing land-scape of design practice but fail to question who is enriched by the production of goods and services based on collective creativity.

As the articles demonstrate, mainstream PD work has given primacy to human action and people's right to participate in the shaping of the worlds in which they act [81]. However, our reviews which are written from our connection with experiences and knowledges from the South-suggest the need to pursuit the radicality of what design and participation can entail. Moving to such radicality of "diseños otros" [46] implies "considering who publishes, who reads, who and for whom designs, in addition to how and what designs (ontologically) what is designed by each individual." Further, as our reviews highlight, it also entails reflecting on whose worlds are transformed by PD and in which terms such transformation occurs, with the particular goal of foregrounding the heterogeneity of living experiences that are currently excluded from PD's hegemonic thought and practice. A critical Latin American notion that can help PD move towards this needed radicality is that of 'produção de existência'. The concept, advanced by Brazilian philosopher Álvaro Vieira Pinto [94], indicates that people should be able to develop themselves, in the processes of interaction with their realities, through mediation with the artifacts they produce and with society.

We contend that the notion of 'produção de existência' is at the core of participation when seen from a Southern perspective. It reformulates participation as a human right by focusing on the creation of new forms of conviviality enacted by collective work in the making of the material world. These forms are by no means limited to the information and communication technologies that some mainstream PD literature prioritizes [81], but rather to all forms of technology that tend to alienate marginalized groups in diverse ways. The 'produção de existência' framing, thus, allows us to broaden the notion of design beyond industry, business, or government-related spheres to include possibilities for socio-material transformation in various conditions. We see 'produção de existência' as specifically highlighting design processes and technical developments in, for example, Latin American contexts, where often technologies are subversively re-appropriated from the bottom-up by need, due to technical impositions, social exclusions and oppressions of many kinds. Gonzatto, based on Vieira Pinto, understands this phenomenon of appropriation and reformulation not as a purely instrumental act, but as a human concern in their existential dimensions, their culture, ideology and social relations [43].

The design space is then re-imagined as socially constructed and permeated by political, economic, social, and cultural contradictions [93]. These conditions are not to be understood as internal or external to the design activity, but as the material basis for design to take place. When we think of Latin America, these conditions are determined by the daily life confrontations across different populations and territories and in varying degrees. Territorial claims by Indigenous peoples, the struggle waged by LGBTQ+ people against

violence, the struggle for housing in urban centers, the demand for autonomy of bodies and reproductive rights of women and people with uteruses, the fight against structural racism—evident in the high number of deaths of Black and Indigenous population—the struggle for agrarian reform and food sovereignty, exclusion and technological dependency, are among many issues that structurally affect the political, economic, and social organization of the region. These forces are not necessarily design-related, but directly impact participatory design efforts in Latin America, if not directly, certainly by organizing the material and cultural life of peoples and ecosystems. It is the interplay of all these forces and within theses struggles that design as a socio-historical production of materialities may also happen in Latin America.

5.2 Participation as emancipation

Participation and the many challenges that emerge from engaging with participatory practices [8, 16] are central to PD. Unsurprisingly, the PD community has relied on different approaches to participation [48] including ways in which participation is practiced, degrees of participation, who is allowed in participation and in which points participation does occur [15]. But as our reviews highlight, participation can—and probably should—be more than that.

Not just any kind of participation lends itself to the liberation of oppressed people for example [33], especially in a context of great vulnerability and inequality as is the case in Latin America. Participation can be a term used demagogically, a performance failing to include people in decision-making processes, and to promote collective accountability over these decisions [73]. In more extreme cases, pseudo-participation can serve as a mask to validate violent processes that do not promote substantive participation, and perpetuate domination and exploitation of relationships between people and culture. We recognize this dynamic and argue that participation can manifest as a palliative measure, permitting business-as-usual to continue with minor change, while creating an illusion of radical transformation.

Even in design processes where the participation of "users" is foreseen, the treatment that is given to these subjects can lead to dehumanization, constraint their autonomy and tame the social production of their existences [43]. "Users" need to be understood beyond epistemic objectification, relationships between trained and non-trained designers should recognize users as subjects of their own epistemological capability and honor designers' accountability as an engaged subject in collaborative processes.

In assuming the conditions necessary for participation to occur, there is a need to face its intrinsically political dimensions [18, 82]. Who is allowed to participate and under which conditions is essentially a political matter. Our reviews reflect that participation is not something designers or "people in charge" can give someone else in order for them to express themselves. We acknowledge that we live in a world pervaded by multiple oppressions; reinstating participation in the way some PD work does produce a positive outcome. However, focusing design (and therefore designers) as key in this restoring process, runs at risk of reproducing similar oppressive dynamics over peoples' social existences. In this sense, democracy appears as a theme to be discussed, but cannot only be

considered in an hermetic design space. Democracy, as known in most western contexts, is founded on liberal and bourgeois principles. Its structure maintains elites in spaces of power, and there is no prerogative of equal participation, even though there is a discursive intention. As the reviews stress, there is much for PD to learn about participation and democracy in Southern contexts such as Latin America. Participation, in Latin America in particular, is not a methodological choice or a means to mitigate the problems of capitalism, as it can be in Scandinavia and other parts of the Global North. The existence of democracy is an achievement of social movements that fought for social groups historically dehumanized by elites. These systematic oppressions are not to be overlooked in design, on the contrary, they are transversal to its activities. It is not enough to promote democratic ideals in PD without seriously tackling the inequalities that historically affect the people engaged in it.

The Souths' experiences politicizing participation can illustrate alternative pathways for PD to challenge views of design that reduce it to a capitalist "product" as is the case with limiting participation to the creation of commodities adjusted to market demands. Furthermore, Southern examples of participation understood as cooperative work in the production of socio-materialities can show how participation can and should be approached as work of the class of producers for themselves, for their own benefit, aiming at the (re)production of their own existence [94]. In this sense, we defend participation as a possibility of humanization and as a political exercise of individual and collective conscientização [34]. Conscientização does not operate in a vacuum, it occurs in stages, in interaction processes of the individual in collectives; it is a political act and cannot be decontextualized from the social relations and the context of participation within a broader scenarios and objectives. Participation can lead to emancipation through conscientização if proposed by the lens of produção de existência, it can be oriented towards the socio-political change of a given social reality.

5.3 Reviewing as knowledge-crafting

The purpose of our performative experiment was to shed light over the power dynamics embedded in PD's epistemic practices as a disciplinary field in order to invite radical political solidarities across borders. As an academic performance, this exercise attempted to re-appropriate the peer review process both as a means to give prominence to some Latin American perspectives as well as to put forward a more relational practice of peer review. In it, reviewing is seen as a collaborative conversation with authors across difference and from specific geographic, disciplinary, epistemic and ontological locations. We ultimately believe that these goals were only partially achieved.

Our acting as reviewers challenged the geography of intellectual references for PD, rendering visible the critical contributions that Latin American intellectual production and experiences made to the field. It allowed us to set the terms of a conversation that centers more familiar concerns for authors working/thinking from Latin American Souths. Further, it highlighted frictions between these concerns and traditional PD concepts and practice, which we think are relevant for its now globalized presence. However, beyond the acknowledgment of (some) Southern ways of knowing, we find

the current version of this exercise to hold too much commitment to the traditional peer review process, thus limiting its subversive potential.

We believe that further critical inquiry is required to re-imagine peer review, and scholarly knowledge-making more broadly, as a relational process. For once, during this exercise we weren't able to critically address the question: who is a peer and why? The idea of epistemic peer-hood has been a central concern in the epistemology of disagreement [40] especially in addressing whether "deep disagreements" [32] between agents can be rationally resolved. In STS studies for example, the issue of defining expertise and its role in democratic societies has been a central consideration [98]. Further iterations of this exercise could expand the notion of "peers" in traditional peer review and consider other mechanisms for a more "popular" revision of knowledge. In this sense, there is a tension between our criticisms of the use of "participation" in these seminal articles and our own epistemic practices for review. Building on feminist understandings of knowledge-production as a form of labor [68], we should ask: what are the material relations that allow peer-revision to occur? How do those relations shape the possibilities to engage in certain intellectual dialogues?

Another issue concerns the language of peer review. Emancipation is about overcoming oppression [33], on the contrary, the language used in this exercise tended to reproduce the logic of marking errors and highlighting the "what's lacking" in others' work that is present in traditional peer review. It is still based on "deficit attributions" [37] as a means to address differences. Deliberate efforts were made to avoid this outcome, including the addition of a relational criteria of review. Another iteration of this experiment should seek to go beyond the language of deficit and into interactive and generative uses of our own knowledge to co-design manuscripts, perhaps adopting a commitment to "co-labor" [27, 12]. This could also mean dismantling the role of peer review in terms of accepting/rejecting proposals, or providing authoritative appraisals.

Our application of citational and epistemic justice principles further admits Rivera Cusicanqui's critique that selective incorporation of ideas from the South may depoliticize them and foreclose the sense of urgency with which intellectual pursuits are made in their context [23]. Attention to this concern requires consideration of what "deep engagement" [22] with intellectual production from the South might look like in PD and how to cultivate it. The point is not to make knowledges from the South universal by removing them from the intricate social relations and concerns from which they emerge, but rather, as the principles state, to build a plurality of knowledges that entangles us with the Souths we invoke and mobilizes us politically to maintain that plurality and to overcome oppression. Considering the multiple Latin American concerns referenced above, and the ones that remain unnamed, we ask: what are the specifics of politization of the subject from the Latin American Souths? The same questions may be repeated for other Souths, inviting PD to critically engage with those specifics, but also to construct solidarities across multiple borders.

Finally, our exercise reveals the need to remain responsible for the knowledge we make (in)visible through our practices. In this exercise, we were able to bring *certain* knowledge from Latin America in conversation with PD, however, the visibility of these specific authors for us is historically and socially constructed. That is to say that we too participate of certain "circuits of audibility, appropriation, decontextualization, gender, and coloniality" [75, 40] even within Latin America. This recognition emphasizes the value of reflexivity and dialogue for all positionalities, even those that appear non-hegemonic in a particular context.

6 CONCLUSION

In this paper, we demonstrated through the use of a fictional and performative method of peer review how, as researchers and practitioners from Latin America, we might engage with foundational literature within PD from other lenses. As we unfold our method, we center "Southern" perspectives in the peer review process, grounded in authors' experiences. As a ubiquitous mechanism within knowledge production, peer review reveals numerous tensions, complexities and paradoxes. PD is not exempt of these and our speculative exercise in revisiting pivotal work within PD reveals some of them.

In trying to engage these intricacies, we propose an alternative framework for peer review, sitting on top of five guiding principles: citational justice, epistemic justice, emancipation, relationality and positionality. Leveraging these principles, and leaning over Latin American thinkers, we peer reviewed two seminal papers in PD: "Participation in design" and "Co-Creation and the new landscapes of design". This proficient dialogue manifested the importance of understanding design as a socio-historic practice with all its political, economic, social and cultural dimensions. We also asserted the potential of extending the notion of participation as an emancipatory principle. Design, following Freire's terms, can serve as a tool to liberate oppressed people.

Through the reflections presented, reviewing principles emerged as ethical and political orientations, always complicated and in-the-making, rather than as stable guidelines to be applied mechanically. Despite the shortcomings of their application in our performative practice, they shed light over needed critical reflection in and about PD knowledge-making. At last, we recognize and act over the opportunity for peer review to be re-imagined as a relational process and note the limitations and possibilities of such a shift. Further work could extend our critical approach outside of peer review and into new forms of knowledge validation in academia.

Overall, the aim of this work is to examine hegemonic epistemic practices within PD with the purpose of highlighting a subset of 'Southern' perspectives and positionalities, specifically ours as Latin American authors from five South American countries. However, as any positionality, it leaves us and this work with some limitations. First, the potential contributions from Latin-American epistemologies to PD that we invoked, are not aimed at producing specific guidelines or "toolkits" for translating them into specific design tactics or materials. We focused our call to action on a first attempt at revisiting peer review practices in order to make them more self-aware and inclusive of others' epistemic practices. Although we assert that concepts ought to be considered practical tools in that they mediate behavior and social relations [95] we agree with Freire [33] in that emancipatory praxis involves both reflection and action. Further work could document specific cases in which ideas offered in this paper translate into community work.

Second, this work highlights differences between Latin American participatory traditions and hegemonic understandings of participation while treating differences as a dialectical process. The aim, thus, is to critique in order to expand and complement, not to replace one hegemonic positioning for the other. In other words, we simply assert the fact that there is much to learn from Latin American perspectives. It must be emphasized that in this article we do not cover the nuances across Latin America or other Southern traditions, and that the ideas and authors covered in this paper are not hegemonic in our own communities. Further work should advance more nuanced explorations of the differences and similarities of participation between PD 'classics' and Latin American contributions, as well as the nuances and differences across Global South perspectives.

7 AUTHORSHIP

The first author was responsible for the initial conception of the work and for bringing the group together across differing schedules in incredibly constructive synchronous and asynchronous discussion. He was the AC in our performative exercise. The next four authors contributed equally to the work from conception to revision. They acted as reviewers and they are listed alphabetically. Our last author worked with us in the same condition during the stages of conception and initial revisions. His spirit oversaw the rest of our work and we hope to have reflected part of it in this paper. All authors grew up in the part of the world known to some as South America—in Colombia, Brazil, Ecuador, Chile and Guatemala. Large part of their research, commitments and support networks are situated there as well, with partial but substantial connections to other communities in the North.

ACKNOWLEDGMENTS

We would like to honor Oscar A. Lemus, one of our co-authors, an esteemed collaborator, a beloved member of our community, and a dear friend. We thank him for his contributions to this paper, to the PD field, and more importantly, to all the lives he reached. We would also like to acknowledge Professors Ehn and Sanders for their valuable contributions to the field, including the papers reviewed here. We thank Frederick Van Amstel and Fabián Prieto-Nañez for their critical feedback and contributions. We thank our reviewers for their valuable criticism and encouragement and to all the 'maestros' y 'maestras' that have elevated our conscience. Finally, we are grateful to all the collectives, movements, communities, institutions, individuals and the spiritual, ancestral and earth beings that continue to make possible the struggle for justice in Latin America.

REFERENCES

- [1] 2016. Guidelines for reviewers. https://www.apa.org/pubs/journals/int/guidelines-for-reviewers
- [2] 2020. Festival Internacional de la Imagen 2020 & 16 Participatory Design Conference PDC 2020 (19. Jun. 15-19 de 2020, Manizales, Colombia); Participation(s) Otherwise (Vol 3) (Manizales, Colombia). Universidad de Caldas, Manizales.
- [3] 2020. PDC '20: Proceedings of the 16th Participatory Design Conference 2020 -Participation(s) Otherwise - Volume 1 (Manizales, Colombia). Association for Computing Machinery, New York, NY, USA.
- [4] 2020. PDC '20: Proceedings of the 16th Participatory Design Conference 2020 -Participation(s) Otherwise - Volume 2 (Manizales, Colombia). Association for Computing Machinery, New York, NY, USA.

- [5] Sarah Ahmed. 2014. Making feminist points. https://feministkilljoys.com/2013/ 09/11/making-feminist-points/
- [6] Gloria Anzaldúa. 2007. Borderlands: The new mestiza= La frontera.
- [7] Gloria Anzaldúa. 2015. 6. now let us shift... conocimiento... inner work, public acts. In Light in the Dark/Luz en lo Oscuro. Duke University Press, 117–160.
- [8] Liam J Bannon and Pelle Ehn. 2012. Design: design matters in Participatory Design. In Routledge international handbook of participatory design. Routledge, 57–83.
- [9] Ditte Amund Basballe, Kim Halskov, and Nicolai Brodersen Hansen. 2016. The Early Shaping of Participatory Design at PDC. In Proceedings of the 14th Participatory Design Conference: Short Papers, Interactive Exhibitions, Workshops -Volume 2 (Aarhus, Denmark) (PDC '16). Association for Computing Machinery, New York, NY, USA, 21–24. https://doi.org/10.1145/2948076.2948078
- [10] Ditte Amund Basballe, Kim Halskov, and Nicolai Brodersen Hansen. 2016. The early shaping of participatory design at PDC. In Proceedings of the 14th Participatory Design Conference: Short Papers, Interactive Exhibitions, Workshops-Volume 2. 21–24.
- [11] Erling Björgvinsson, Pelle Ehn, and Per-Anders Hillgren. 2010. Participatory design and" democratizing innovation". In Proceedings of the 11th Biennial participatory design conference. 41–50.
- [12] Sebastian K Boell and Dubravka Cecez-Kecmanovic. 2015. On being 'systematic'in literature reviews. Formulating research methods for information systems (2015), 48–78.
- [13] Orlando Fals Borda and Anisur Rahman. 1992. La situación actual y las perspectivas de la IAP en el mundo. In La investigación-acción participativa: Inicios y desarrollos. Editorial Popular, 205–230.
- [14] Juan Diaz Bordenave. 1976. Communication of agricultural innovations in Latin America: The need for new models. Communication research 3, 2 (1976), 135–154.
- [15] Claus Bossen, Christian Dindler, and Ole Sejer Iversen. 2010. User gains and PD aims: assessment from a participatory design project. In Proceedings of the 11th Biennial Participatory Design Conference. 141–150.
- [16] Claus Bossen, Christian Dindler, and Ole Sejer Iversen. 2016. Evaluation in participatory design: a literature survey. In Proceedings of the 14th Participatory Design Conference: Full papers-Volume 1. 151–160.
- [17] Geoffrey C Bowker and Susan Leigh Star. 2000. Sorting things out: Classification and its consequences. MIT press.
- [18] Tone Bratteteig and Ina Wagner. 2014. Disentangling participation: power and decision-making in participatory design. Springer.
- [19] Joe Cain. 1999. Why be my colleague's keeper? Moral justifications for peer review. Science and Engineering Ethics 5, 4 (1999), 531-540.
- [20] Pablo Calderon Salazar and Liesbeth Huybrechts. 2020. PD Otherwise Will Be Pluriversal (or It Won't Be). In Proceedings of the 16th Participatory Design Conference 2020 - Participation(s) Otherwise - Volume 1 (Manizales, Colombia) (PDC '20). Association for Computing Machinery, New York, NY, USA, 107–115. https://doi.org/10.1145/3385010.3385027
- [21] Rachel Charlotte Smith, Heike Winschiers-Theophilus, Asnath Paula Kambunga, and Sarala Krishnamurthy. 2020. Decolonizing participatory design: Memory making in Namibia. In Proceedings of the 16th Participatory Design Conference 2020-Participation (s) Otherwise-Volume 1. 96–106.
- [22] Shruthi Sai Chivukula and Colin M. Gray. 2020. Bardzell's "Feminist HCI" Legacy: Analyzing Citational Patterns. In Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems (Honolulu, HI, USA) (CHI EA '20). Association for Computing Machinery, New York, NY, USA, 1–8. https: //doi.org/10.1145/3334480.3382936
- [23] Silvia Rivera Cusicanqui. 2012. Ch'ixinakax utxiwa: A Reflection on the Practices and Discourses of Decolonization. South Atlantic Quarterly 111, 1 (2012), 95–109.
- [24] Renato Dagnino, Hernán Thomas, and Amílcar Davyt. 1996. El pensamiento en ciencia, tecnología y sociedad en Latinoamérica: una interpretación política de su trayectoria. Redes. Revista de Estudios Sociales de la Ciencia 3, 7 (1996), 13–51.
- [25] Christopher A Le Dantec and Carl DiSalvo. 2013. Infrastructuring and the formation of publics in participatory design. Social Studies of Science 43, 2 (2013), 241–264.
- [26] Maria Puig de La Bellacasa. 2017. Matters of care: Speculative ethics in more than human worlds. Vol. 41. U of Minnesota Press.
- [27] Marisol De la Cadena. 2015. Earth beings. Duke University Press.
- [28] Enrique Dussel. 2003. *Philosophy of liberation*. Wipf and Stock Publishers
- [29] Pelle Ehn. 2008. Participation in design things. In Participatory Design Conference (PDC), Bloomington, Indiana, USA (2008). ACM Digital Library, 92–101.
- [30] Arturo Escobar and Sonia E Alvarez. 2018. Introduction: theory and protest in Latin America today. In *The making of social movements in Latin America*. Routledge, 1–16.
- [31] Orlando Fals-Borda. 1987. The application of participatory action-research in Latin America. *International sociology* 2, 4 (1987), 329–347.
- [32] R. Fogelin. 1985. The logic of deep disagreements. Informal Logic 7 (1985), 1–8.
- [33] Paulo Freire. 2014. Pedagogia da esperança: um reencontro com a pedagogia do oprimido. Editora Paz e Terra.
- 34] Paulo Freire. 2018. Conscientização. Cortez Editora.

- [35] Miranda Fricker. 2007. Epistemic injustice: Power and the ethics of knowing. Oxford University Press.
- [36] Tony Fry. 2017. Design for/by "The Global South". Design Philosophy Papers 15, 1 (jan 2017), 3–37. https://doi.org/10.1080/14487136.2017.1303242
- [37] Claudio Fuentes, Julian "Iñaki" Goñi, and Constanza Miranda. 2021. Analytical categories to describe deficit attributions in deep disagreements between citizens and experts. *Public Understanding of Science* (jun 2021), 096366252110204. https://doi.org/10.1177/09636625211020474
- [38] A Garces. 2020. Revitalización de saberes ancestrales y diseño participativo. Co-diseño de un juego comunitario.
- [39] Aakash Gautam and Deborah Tatar. 2020. p for political: Participation Without Agency Is Not Enough. In Proceedings of the 16th Participatory Design Conference 2020-Participation (s) Otherwise-Volume 2. 45–49.
- [40] Axel Gelfert. 2011. Who is an Epistemic Peer? Logos & Episteme 2, 4 (2011), 507-514. https://doi.org/10.5840/logos-episteme2011242
- [41] Mary M Gergen and Kenneth J Gergen. 2016. Playing with Purpose: Adventures in Performative Social Science. Routledge, New York. https://doi.org/10.4324/ 9781315422459
- [42] Michela Giovannini. 2015. Indigenous community enterprises in Chiapas: a vehicle for buen vivir? Community development journal 50, 1 (2015), 71–87.
- [43] Rodrigo Freese Gonzatto et al. 2018. Usuários e produção da existência: contribuições de Álvaro Vieira Pinto e Paulo Freire à interação humano-computador. (2018).
- [44] Claudia Grisales, Laura Arosa, Fabio Fajardo, Farly León, Gustavo Ramírez, Laura Espitia, Cristian Ayala, Juan S Camacho, Laura Villamil, and Miguel Sánchez. [n. d.]. Taller de Diseño e Innovación Comunitaria-TaDIC: Reflexiones sobre una experiencia de diseño participativo en Colombia.
- [45] Ramón Grosfoguel. 2011. Decolonizing post-colonial studies and paradigms of political-economy: Transmodernity, decolonial thinking, and global coloniality. Transmodernity: journal of peripheral cultural production of the luso-hispanic world 1, 1 (2011). https://doi.org/10.5070/T411000004
- [46] Alfredo Gutiérrez Borrero. 2015. Resurgimientos: sures como diseños y diseños otros. Nómadas 43 (2015), 113–129.
- [47] David Hakken and Paula Maté. 2014. The culture question in participatory design. In Proceedings of the 13th Participatory Design Conference: Short Papers, Industry Cases, Workshop Descriptions, Doctoral Consortium papers, and Keynote abstracts-Volume 2. 87–91.
- [48] Kim Halskov and Nicolai Brodersen Hansen. 2015. The diversity of participatory design research practice at PDC 2002–2012. International Journal of Human-Computer Studies 74 (2015), 81–92.
- [49] Donna Haraway. 1988. Situated knowledges: The science question in feminism and the privilege of partial perspective. Feminist studies 14, 3 (1988), 575–599.
- [50] Donna Haraway. 1991. Simians, cyborgs, and women: The reinvention of nature. Routledge.
- [51] Christina Harrington, Sheena Erete, and Anne Marie Piper. 2019. Deconstructing community-based collaborative design: Towards more equitable participatory design engagements. Proceedings of the ACM on Human-Computer Interaction 3, CSCW (2019), 1–25.
- [52] Steve Harrison, Phoebe Sengers, and Deborah Tatar. 2011. Making epistemological trouble: Third-paradigm HCI as successor science. *Interacting with computers* 23, 5 (2011), 385–392.
- [53] Catherine Hundleby. 2020. Thinking Outside-In: Feminist Standpoint Theory as Epistemology, Methodology, and Philosophy of Scienc. In The Routledge Handbook of Feminist Philosophy of Science, Sharon Crasnow and Kristen Intemann (Eds.). Routledge, New York, 15. https://doi.org/10.4324/9780429507731
- [54] Maria Cristina Ibarra. 2020. Aproximaciones a un diseño participativo sentipensante: correspondencias con un colectivo de residentes en Rio de Janeiro. (2020).
- [55] Andrea Jimenez and Tony Roberts. 2019. Decolonising Neo-Liberal Innovation: Using the Andean Philosophy of 'Buen Vivir' to Reimagine Innovation Hubs. In International Conference on Social Implications of Computers in Developing Countries. Springer, 180–191.
- [56] Finn Kensing and Jeanette Blomberg. 1998. Participatory design: Issues and concerns. Computer supported cooperative work (CSCW) 7, 3 (1998), 167–185.
- [57] Pablo Kreimer and Hebe Vessuri. 2018. Latin American science, technology, and society: a historical and reflexive approach. Tapuya: Latin American Science, Technology and Society 1, 1 (2018), 17–37.
- [58] Neha Kumar and Naveena Karusala. 2021. Braving Citational Justice in Human-Computer Interaction. In Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing Systems. 1–9.
- [59] María Laura Ramírez Galleguillos and Aykut Coşkun. 2020. How Do I Matter? A Review of the Participatory Design Practice with Less Privileged Participants. In Proceedings of the 16th Participatory Design Conference 2020 - Participation(s) Otherwise - Volume 1 (Manizales, Colombia) (PDC '20). Association for Computing Machinery, New York, NY, USA, 137–147. https://doi.org/10.1145/3385010.3385018
- [60] Christopher A Le Dantec. 2016. Design through collective action/collective action through design. interactions 24, 1 (2016), 24–30.

- [61] Carole J Lee, Cassidy R Sugimoto, Guo Zhang, and Blaise Cronin. 2013. Bias in peer review. Journal of the American Society for Information Science and Technology 64, 1 (2013), 2–17.
- [62] Jafte Dilean Robles Lomeli and Joanne Rappaport. 2018. Imagining Latin American social science from the global south: Orlando Fals Borda and participatory action research. *Latin American Research Review* 53, 3 (2018).
- [63] Audre Lorde. 2003. The master's tools will never dismantle the master's house. Feminist postcolonial theory: A reader 25 (2003), 27.
- [64] LL Loseto, K Breton-Honeyman, DN Etiendem, N Johnson, T Pearce, J Allen, A Amos, J Arqviq, JE Baak, É Bélanger, et al. 2020. Indigenous participation in peer review publications and the editorial process: reflections from a workshop. Arctic Science 6, 3 (2020), 352–360.
- [65] Pamela Marques and M MASS. 2020. Design Espontâneo Periférico da América Latina: uma forma de participação alternativa e subversiva. PDC. Proceedings... Manizales: PDC (2020).
- [66] Samantha Merritt and Erik Stolterman. 2012. Cultural hybridity in participatory design. In Proceedings of the 12th Participatory Design Conference: Exploratory Papers, Workshop Descriptions, Industry Cases-Volume 2. 73–76.
- [67] Walter D Mignolo. 2007. Delinking: The rhetoric of modernity, the logic of coloniality and the grammar of de-coloniality. *Cultural studies* 21, 2-3 (2007), 449–514.
- [68] Relebohile Moletsane, Louise Haysom, and Vasu Reddy. 2015. Knowledge production, critique and peer review in feminist publishing: reflections from Agenda. Critical Arts 29, 6 (2015), 766–784.
- [69] Carrie Mott and Daniel Cockayne. 2017. Citation matters: mobilizing the politics of citation toward a practice of 'conscientious engagement'. Gender, Place & Culture 24, 7 (2017), 954–973.
- [70] Amasa Philip Ndofirepi and Ephraim Taurai Gwaravanda. 2019. Epistemic (in) justice in African universities: A perspective of the politics of knowledge. *Educational Review* 71, 5 (2019), 581–594.
- [71] Raquel Noronha, Camila Aboud, and Raiama Portela. 2020. Design by Means of Anthropology towards Participation Practices: Designers and Craftswomen Making Things in Maranhão (BR). In Proceedings of the 16th Participatory Design Conference 2020 Participation(s) Otherwise Volume 1 (Manizales, Colombia) (PDC '20). Association for Computing Machinery, New York, NY, USA, 203–211. https://doi.org/10.1145/3385010.3385015
- [72] Kristen Nygaard. 1987. Computers and democracy: A Scandinavian challenge. Aldershot [Hants, England]; Brookfield [Vt.], USA: Avebury.
- [73] Victoria Palacin, Matti Nelimarkka, Pedro Reynolds-Cuéllar, and Christoph Becker. 2020. The design of pseudo-participation. In Proceedings of the 16th Participatory Design Conference 2020-Participation (s) Otherwise-Volume 2. 40–44.
- [74] Victor Papanek and R Buckminster Fuller. 1972. Design for the real world. Thames and Hudson London.
- [75] Tania Pérez-Bustos. 2017. A Word of Caution toward Homogenous Appropriations of Decolonial Thinking In STS. Catalyst: Feminism, Theory, Technoscience 3, 1 (2017).
- [76] João Bosco Guedes Pinto. 1989. Pesquisa-Ação: Detalhamento de sua sequência metodológica. Recife: Sudene/Pnud (1989).
- [77] Giacomo Poderi and Yvonne Dittrich. 2018. Participatory design and sustainability: a literature review of PDC proceedings. In Proceedings of the 15th Participatory Design Conference: Short Papers, Situated Actions, Workshops and Tutorial-Volume 2.1–5.
- [78] Gaile Pohlhaus. 2017. Varieties of epistemic injustice 1. In The Routledge handbook of epistemic injustice. Routledge, 13–26.
- [79] Amaya Querejazu. 2016. Encountering the pluriverse: Looking for alternatives in other worlds. Revista Brasileira de Política Internacional 59 (2016).
- [80] Pedro Reynolds-Cuéllar and Daniela Delgado Ramos. 2020. Community-Based Technology Co-Design: Insights on Participation, and the Value of the "Co". In Proceedings of the 16th Participatory Design Conference 2020 - Participation(s) Otherwise - Volume 1 (Manizales, Colombia) (PDC '20). Association for Computing Machinery, New York, NY, USA, 75–84. https://doi.org/10.1145/3385010.3385030
- [81] Toni Robertson and Jesper Simonsen. 2012. Participatory Design: an introduction. In Routledge international handbook of participatory design. Routledge, 21–38.
- [82] Toni Robertson and Ina Wagner. 2012. Ethics: Engagement, representation and politics-in-action. In Routledge international handbook of participatory design. Routledge, 84–105.
- [83] Elizabeth B-N Sanders and Pieter Jan Stappers. 2008. Co-creation and the new landscapes of design. Co-design 4, 1 (2008), 5–18.
- [84] Boaventura de Sousa Santos. 2016. Epistemologies of the South and the future. From the European South: a transdisciplinary journal of postcolonial humanities 1 (2016), 17–29.
- [85] Boaventura de Sousa Santos. 2018. Introducción a las epistemologías del sur. Epistemologías del sur (2018), 25–61.
- [86] Ermelindo Schultz, Laura Sanchez Garcia, Laís Affornali Fernandes, Mateus Ribamar Paixão, Fernanda Kawasaki, and Roberto Pereira. 2020. Cultivating Creative Coexistence(s): Towards a Critical Education for Creativity Praxis to Construct Fairer Human Coexistences. In Proceedings of the 16th Participatory Design

- Conference 2020 Participation(s) Otherwise Volume 1 (Manizales, Colombia) (PDC '20). Association for Computing Machinery, New York, NY, USA, 33–43. https://doi.org/10.1145/3385010.3385019
- [87] Bibiana Serpa, Imaíra Portela, Mariana Costard, and Sâmia Silva. 2020. Political-pedagogical contributions to participatory design from Paulo Freire. In Proceedings of the 16th Participatory Design Conference 2020-Participation (s) Otherwise-Volume 2. 170–174.
- [88] David Shatz. 2004. Peer review: A critical inquiry. Rowman & Littlefield.
- [89] Leanne R Simpson. 2004. Anticolonial strategies for the recovery and maintenance of Indigenous knowledge. American Indian Quarterly (2004), 373–384.
- [90] Clay Spinuzzi. 2005. The methodology of participatory design. *Technical communication* 52, 2 (2005), 163–174.
- [91] Marilyn Strathern. 2005. Partial connections. Rowman Altamira.
- [92] Frederick MC van Amstel and Rodrigo Freese Gonzatto. 2020. The anthropophagic studio: towards a critical pedagogy for interaction design. *Digital Creativity* 31, 4 (2020), 259–283.

- [93] Frederick MC van Amstel, Timo Hartmann, Mascha C van der Voort, and Geert PMR Dewulf. 2016. The social production of design space. *Design studies* 46 (2016), 199–225.
- [94] Álvaro Vieira Pinto. 2005. O conceito de tecnologia. Rio de Janeiro: Contraponto 2 (2005), 794.
- [95] Lev Vigotsky. 1987. Thinking and Speech. In The collected works of L. S. Vygotsky (vol. 1 ed.), R. W. Rieber and A. S. Carton (Eds.). Plenum Press, New York, 39–285.
- [96] Heike Winschiers-Theophilus. 2009. Cultural appropriation of software design and evaluation. In Handbook of research on socio-technical design and social networking systems. IGI Global, 699–710.
- [97] Heike Winschiers-Theophilus, Shilumbe Chivuno-Kuria, Gereon Koch Kapuire, Nicola J Bidwell, and Edwin Blake. 2010. Being participated: a community approach. In Proceedings of the 11th Biennial Participatory Design Conference. 1–10
- [98] Brian Wynne and Michael Lynch. 2015. Science and Technology Studies: Experts and Expertise. In *International Encyclopedia of the Social & Behavioral Sciences*. Elsevier, 206–211. https://doi.org/10.1016/B978-0-08-097086-8.85023-0