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What Got Us Here, Won't Get Us There

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From Social Impact to Collective Knowledge and Skill Building: Committing and Valuing in Design Research that Makes a Difference

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Abstract: This paper discusses the challenges of measuring the impact of design research, particularly in the context of emerging design practices that aim to address social change beyond functionalist, rationalist and industrial traditions. We argue for the need to capture the intangible and beyond-than-academic consequences of design interventions and for foregrounding the perspectives and experiences of marginalised communities. We briefly introduce three cases we are currently involved with that have led to the identification of four interrelated commitments: visibility, sustainment, tensions and collectivity. We propose using these commitments as lenses for rethinking and expanding the way in which impact and impact assessment are shaped and understood. We conclude that framing this alternative approach can create spaces in and for design projects to commit and value in design research that makes a difference.

Keywords: Design impact, design commitments, alternative impact assessment

1. Introduction

There has been an increasing interest in developing quantifiable and qualifiable measures for design practice and results that can elucidate things such as its return on investment or the value added by design (see e.g. Björklund et al. 2018, Na et al. 2017, Pitkänen 2012). Such developments, which are built on functionalist, rationalist, and industrial traditions, emerged where there is a need for clear comparisons and measurements as well as for finding ways to better communicate how design participates in the circulation and appropriation of consumable designed objects and services. These are important advancements and useful criteria in dominant forms of design but do not always extend well when applied to interventions at the intersection and emergence of “other types of design”, “new ways of designing”, “expanded design”, and “designing otherwise”. In that regard, there is also an emerging interest in searching for ways to account also for cultural and social ambitions and thus include in the reflection and tracking varied things like the role of design in achieving social cohesion and/or socio-ecological justice, its contributions to regenerating value(s) of sustainability, how it can engage with resistance processes or supporting social reproduction in critical, respectful and committed ways. With these types of emerging reflection and evaluation

modes (intended), impacts (as such) might look very different and necessarily need to be reported and followed differently (Creatures 2023, Yee, White, & Lennon 2015). Assessment processes and strategies appear much more multiple, unstable, emergent and contingent (Julier & Hodson 2021). Thinking that impact can be understood as both the tangible and intangible effects that design interventions have on people's everyday lives, it might also reflect not only on the most visible, material and intended outcomes but also on the invisible, immaterial and more complex unintended consequences of those interventions (Simone, 2004). It is essential to recognise that impact and the ways and methods for measuring it are shaped and defined by larger structures of power. These structures may prioritise certain impacts or interests over others, thereby influencing the scope and significance of the impact itself. Meanwhile, sustainment of heterogeneity in marginalised communities can potentially articulate particular interests in historical and systemic resistance to dominant structures and processes, offering opportunities for self-reflection and struggle in the interest of social change under such communities' own terms (Echeverría, 2010; Giroux et al., 2011). In that sense, questions related to power are important also in the sense that there is a tendency to look at what we consider measurable impacts from the perspectives of those in power only and not from poor, marginalised and oppressed communities—such as indigenous peoples, women and the popular classes—. These communities' activities, perspectives and experiences are often excluded from impact considerations unless they can be captured by hegemonic and traditional methods for measuring impact, which serve specific political and economic projects (Simone, 2021). The crucial point here is to broaden design's perspective of how 'impact' could be understood, as well as how it can be measured, not only in quantifiable terms but also in terms of its potential to, for example, generate collective knowledge and skills, contribute to social reproduction and regenerate value(s) of sustainability. Designers can gain a better understanding of the complexities of impact by considering the diverse experiences and needs of communities as well as considering the broader political, economic, social and cultural contexts within which impact is defined and measured. Doing so can help them grasp the limitations of relying solely on narrow measurable outcomes.

In recent years design research has focused on more expansive design orientations that articulate practices preoccupied with the complexity of representation, sustainment of life, and complex social change processes, responding to necessities and realities beyond those of the global north and capitalist economy (Pinto et al., 2022; Garduño, 2017; Schultz et al., 2018; Van Amstel et al., 2021; Batista e Silva; 2023). Moving away from the mere collection of data on unique perspectives, experiences, and knowledge from historically excluded communities and territories to diversify academic inputs, it is encouraging to note that design research from the peripheries has been positioning design research and practice to play a critical role in supporting these communities' local, grounded practices and necessities. This shift is significant because it acknowledges the importance of valuing different epistemologies and methodologies in design research, recognizing the need for profound, more-than-academic encounters with communities, that can facilitate the collective creation of knowledge and resources to resist and sustain social change. As women and Latin American design researchers problematically located in between the Global North and Global South, we are accurately aware of our responsibility to challenge and transform traditional notions of design and research, promoting more inclusive, equitable, and sustainable practices that respond to the diverse realities of our —interconnected—planet and the societies.

In the next section, we first briefly introduce three cases we are involved with; secondly, we reflect on a series of commitments for practice we have begun articulating and use them as lenses to think with expansive forms of assessment of what we are doing. We close by framing how some of those alternatives create spaces for our projects to make a difference.

2. Cases

Case 1: Emergencia de Educación en la Amazonía: Designing Visual Devices to Support Political-educational Spaces

Emergencia de Educación en la Amazonía-EEA (Education Emergency in the Amazon) is an ongoing participatory design project that started in 2020 (Figure 1). EEA aims to collaboratively design a system of pictograms and infographics for popular education processes that support strengthening identity and building politicised spaces for education and action *with* and *for* the youth of indigenous nationalities and their communities in the Ecuadorian Amazon (Pinto & Botero, 2021; Pinto et al., 2021). The project is a collective intervention that involves university students from different indigenous nationalities and representatives from CONFENIAE, the mother organisation for indigenous peoples in the region. The intervention comprises joint workshops and situated design developed in each nationality's territory for over 24 months, during which young indigenous co-researchers located throughout the Amazon region collected stories and testimonies that explain languages, history, knowledge, and practices in relation to their territories. The resulting pictograms of indigenous nationalities in the Amazon, data visualisations, and infographics *otherwise* have already supported different political-communicational practices and are expected to be used for larger advocacy actions (see e.g.: Pinto et al., 2022). The pictograms have been activated to support strengthening identity and building politicised spaces for education, intercultural communication, and action for indigenous youth and their communities. The project focuses on how by using pictograms as design devices and processes to resist, research can potentially materialise ideas and political action, sustaining different communities' local practices and communicating their universal interests.



Figure 1 a) Left: Young indigenous co-researchers reviewing and contributing to the pictogram designing process with members of their nationalities in their territories (March–April 2022) b) Centre: Pictograms of indigenous Amazonian nationalities of Ecuador, final validated version (version 6.0) c) right: Pictograms as part of pedagogical material, activated in non-formal education and action spaces. Image source: Archive of the project.

Case 2: Peatoniñas: Liberating the Streets for Children and Play

Peatoniñas: Liberating the streets for children and play is an ongoing participatory design project which started in 2016 (Figure 2). Peatoniñas is wordplay in Spanish that combines the terms *peatón* (pedestrian) with *niña* or *niño* (a boy or a girl) and stands for ‘the children that walk’ or ‘child pedestrians’ (Vertiz & Lozano, 2018; Vertiz, 2020). The project consists in creating a series of

temporary play streets in different *colonias populares* (working class and low-income neighbourhoods) of Mexico City. It mobilises the play's imaginative, participatory, unprofitable and transformative potential to reclaim the streets from cars and resist the neoliberal models of urban development. A play street is a low-traffic street temporarily closed to car traffic to create a safe and open public space for play in it. Play streets can be considered tactical interventions that help to address the lack or fill the need for open public spaces for play in areas where open space is scarce (Nacto, 2016, p.306). While Peatoniñas seeks to create open public spaces for play in those areas of Mexico City—a car-dominated city—where there are no or very few such spaces but prioritising the neighbourhoods with large numbers of children and high levels of marginalisation (Vertiz & Lozano, 2018; Vertiz, 2020), their emphasis is also on temporarily and playfully disrupting the street's established order to realise alternative urban imaginaries but furthermore, developing more just and sustained design practices for urban transformation.



Figure 2 Clockwise starting from the top left corner a) Peatoniños logo (with children portrayed as luchadores ('defenders' of their right to play) b) Neighbours participating in the co-design process for the play street c) Playstreet in Mexico's City's Iztapalapa borough d) Peatoniños map crossing the number of children, indexes of marginalisation and public open spaces available at the neighbourhood scale e) child holding a board that says "learning together that the city ours".

Case 3: Tšombiach Creation Spaces

Tšombiach Creation Spaces is a participatory project started around 2020 that explores the making, thinking, and feeling processes that cohere around the tšombiach, a traditional woven belt or sash of the Kamëntša people (Figure 3). Kamëntša inhabits Bëngbe Uáman Tabanoc, or the Sibundoy Valley, in the south of what is known today as Colombia. Colonisation over the last 500 years has brought various extractivist and capitalist processes into ways of living and knowing in complex ways (Bonilla, 1968). Their resilience and resistance to those processes (Hernández-Wolfe & Muchavisoy, 2021) are reflected in the practices surrounding the creation, weaving, and circulation of the tšombiach (Cuarán et al., 2021). Together with eight experts Kamëntša weavers, the project inquiries, through weaving, in the ways in which tšombiachs participate in forms of working collectively, summoning and sheltering, travelling, telling, and re-creating the territory. All practices care for what is vital. Together the project aims to reposition what these practices mean today for both Kamëntša and Colombians (Cuarán et al. Forthcoming) and what design research can learn from them.

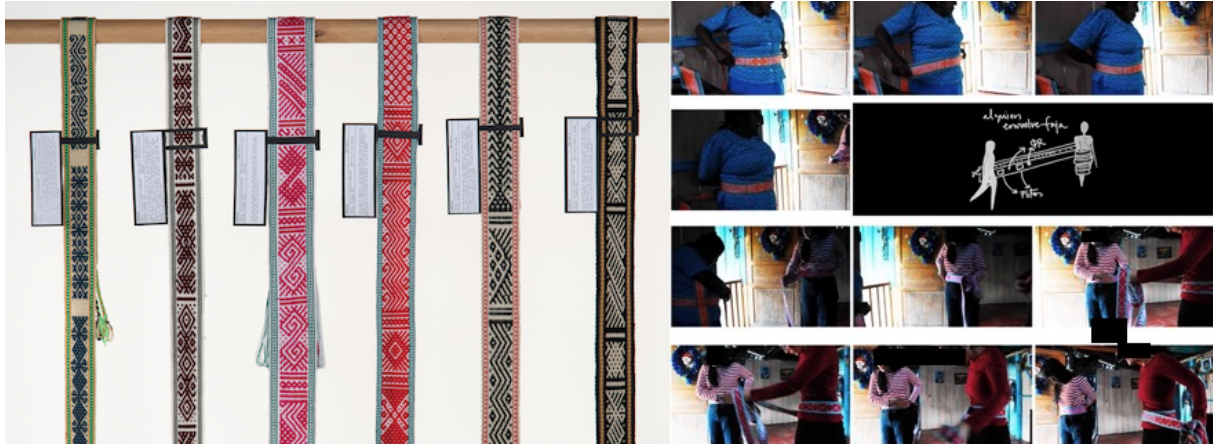


Figure 3 a) left: Tšombiach (woven patterned sachis) collection made as part of the project b) right: learning to wrap and wearing a tšombiach- Image source: Archive of the project.

3. Discussion

The experiences of the three cases make evident our complex North/South positionality. The three of us work within an established institution far from our homes and with good access to resources and networks. We are inquiring in territories close to our places of origin, however, none of us is directly from there, so we need to build alliances and collaborations that try to be horizontal and reciprocal with those living in those territories. All the projects feature more-than-academic encounters with communities that demand reflexivity and the need to seek alternative approaches for assessing their “social impact” to frame our design research and practice. Thus, the process cannot start without a critical look at our own role and influence —an acknowledgement of our intervention as a flawless or impeccable act—, that involves mobilizing the university as a platform, sustaining certain processes with funding from research institutions with specific demands, and utilizing our own skills and resources mediated by dominant academia. This acknowledgement allows us to constantly reconsider our own position within the intervention and point out the need to be willing to adjust and respond to the changing conditions and responses that may arise throughout the design process, rather than adhering strictly to a fixed set of traditional or standard procedures. Also, to question who benefits from assessments, as we (and our collaborators) intend to address larger societal issues and impact underrepresented communities beyond academia. This means—for us—moving beyond treating diversity as an asset and, instead, prioritizing the needs and perspectives of the underrepresented communities we work with.

Moreover, it is necessary for us to constantly reconsider who benefits from such assessments, as we (and our collaborators) intend to address larger societal issues and impact underrepresented communities beyond academia. This means—for us—moving beyond treating diversity as an asset and, instead, prioritizing the needs and perspectives of the underrepresented communities we work with. Exploring the social impact of design then highlights the need for articulating other sets of criteria that can be applied to interventions beyond specific industries and sectors. In the following section, we will briefly introduce a series of interrelated commitments for our work that we have previously attempted to articulate (for a full treatment of the origins of these commitments see: (Pinto et al.2022) and start to tease out aspects of these commitments relevant to assess, reflect, and evaluate our work.

Assessment through commitments for collaborative design from the margins

COMMITMENT TO SUSTAINMENT

It focuses on the ways in which the everyday work of social reproduction (Fraser, 2017) involved in a design project is sustained over time. It points to the need to take care of the capacities, resources

and relations underpinning such work and that are developed by those involved in the design project. For example, a big part of what keeps Peatoniñas going is the care work provided to children by women, neighbours and public servants during the interventions. In the case of Emergencia de Educación en la Amazonía, the project relies on young student leadership skills, which are supported and constantly maintained by Indigenous nationalities practices that precede the project. In the case of tšombiach creation spaces, it is undoubtedly the centuries-old tradition and weaving knowledge that circulates around tšombiach that both take care of the women and the territory.

A commitment to sustainment could lead to an assessment of the social impact of design aspects that are not always considered in strict measurements of social impact and instead reflected in the relations of cooperation, everyday alliances, networks of solidarity and acts of care 'knitted' on a daily basis and that keep not only the project going, but people engaged, which happens beyond academic timelines or quantifiable and qualifiable measures. Beyond focusing on efficient ways to produce and reproduce diverse outcomes, sustaining design requires paying attention to all that is needed to provide constant care and maintenance at multiple levels (Katz, 2017). Infrastructuring (Karasti, 2014), a concept widely used in Participatory Design, also deals with concerns about sustainment. A Feminist Social reproduction approach, however, could provide a more critical view by which to bring key questions to evaluate the outcomes of the design research process, such as who's doing the sustainment work or how this work is organized, especially under conditions of inequality and marginalisation.

COMMITMENT TO VISIBILITY

It aims at making two aspects visible. The first one, is the persistent capitalist conditions of exclusion, inequality and injustice in which design develops, and that become evident as the work of social reproduction unfolds (Jarvis et al., 2009). For example, one of Peatoniñas' central tools is a map crossing the number of children, level of marginalization and open spaces in Mexico City, revealing the uneven provision of those open spaces. In the Emergencia de Educación en la Amazonía, a series of infographics are being designed to expose inequalities in access to education for students of Amazonian nationalities. Meanwhile, in tšombiach creation spaces, all outcomes of the project are thought of from the point of view of giving visibility to the practice both within the territory and outside it via exhibitions and other staging activities. The second aspect is about making visible the often considered 'hidden' work of caring and provisioning as well as who is doing it. This work, for instance, influences how the networks of multilevel dialogue between members of Amazonian nationalities are created and how the pictograms and infographics of each nationality are designed. In Peatoniñas, this would entail exposing how this work is mostly done by women, showing how this has affected the design strategies and the view of the project itself, or in the case of tšombiachs, it also means foregrounding (also in credits and authorship order) the intellectual and manual labour of Kämentsa researchers and expert weavers.

A commitment to sustainment could lead to an assessment of the social impact of design, focusing on enabling visibility of the everyday work of sustainment and the individuals responsible for carrying it out. This approach can be helpful in avoiding idealising repercussions of design interventions and instead recognising the challenges and inequalities that exist within the sustainment of work related to design research practice.

COMMITMENT TO COLLECTIVITY

It examines how to seriously engage with a community-based mode of production, seeking to redistribute participation in knowledge, production and burdens (Pinto et al., 2022; Echeverría, 2010). For example, in Peatoniñas, the collective work ties are sustained through phone calls that take place after the intervention, when neighbours share not only opinions about the play streets but also personal stories, creating a shared sense of trust. In Emergencia de Educación, when designing together, we activate multi-level dialogue among leaders, students, their communities, and designers, which helps us decentralise learning and caring while also connecting to each other's

experiences of a shared but different Amazonian reality. Similar dynamics exist in the case of Tšombiach creation spaces, which might appear as individual practices of each weaver, but instead are actualised as collective enactments of a practice, some which can be shared and others that can't.

Through a commitment to collectively, assessment could focus on addressing the degree to which design theory and practice prioritises collective knowledge and skill-building in research processes. This includes assessing how the project engages with communities, emphasising how skills, motivation and burdens were (or not) appropriated together—underlining that there is no separation of life and research for the people involved. This measure could evaluate the extent to which the practice creates participatory opportunities through the sustainment of the more-than-research network and how these opportunities can facilitate learning, connection, and resistance beyond the designer community and into the lives of those involved. Additionally, this criteria urges us to make collective decisions that consider the presence of other voices and ensure that each is heard while balancing the risks and benefits of making certain communities or topics visible. Altogether, this aspect could emphasise the importance of centring collectivity and community engagement in research practices as a means of acknowledging and redistributing privileges while maintaining ethical considerations and discretion in sharing academic output.

COMMITMENT TO TENSIONS

Is expressed in devising ways to avoid diluting contradiction as an action space in each project. This means that tensions should be confronted in a space where discontent can be communicated and social questioning raised in a creative way (Giroux et al., 2011). For example, in *Emergencia de Educación*, including different indigenous nationalities working together has generated tensions around caring for diversity in the research design. However, sharing a continuous chat to discuss the challenges through videos, voice notes and texts has helped rework power structures within the group. First, repositioning what research can bring for each indigenous nationality. And second, showing us how we can join forces to strive more sharply towards common goals. Similarly, when a Peatonías' play street is designed, one part of the work focuses on making alliances with different institutions as a means to achieve a bigger impact, while another, equally important, involves a constant examination of who is represented in which moments to preserve an 'insurgent' spirit. In the case of tšombiach creation spaces, it also means to keep attentive to the temptations of appropriate a practice which does not belong to all involved and keeping open the possibility of knowledge dialogues instead.

A commitment to tensions could help us assess research aspects related to social change outside of academic boundaries and the sustainment of heterogeneous thinking. That is the degree to which a design practice demonstrates a commitment to stretching academic practicality and reinforcing alterity as a strategy. This can be evaluated based on the project's ability to allocate time and resources towards exploring tensions and positioning other interests, needs, and knowledge in their work. Additionally, academic regulations, bodies and stakeholders' ability to navigate and respond to conflicting and arduous situations in a manner that prioritizes creative agency rather than mediation between academic requirements and communities' needs. Overall, this commitment could aim to evaluate the project's ability to challenge dominant design discourses through serious engagement with communities while maintaining a strong sense of collective creative autonomy.

4. Conclusions

To respond to interventions at the intersection and emergence of "other types of design", "new ways of designing", "expanded design", and "designing otherwise" from diverse territories and communities, we propose valuing and assessing through design commitments. Moving away from strict social impact measurements towards ways of following collective knowledge and skills building.

That is valuing and committing so that design research can make a difference, much in the ways Julier & Hodson (2021) have suggested. This means that commitments to practice are to be drafted early (in the project or intervention) and should be developed continuously. Commitments do not only provide guidance to practice, They might help in articulating goals with collaborators and, finally, the way we are looking at them now, provide direction to assess and value the interventions and actions in ways that are transparent to all those involved. Articulating the commitments requires that we also avoid the use of deficit models in data collection and analysis and compels us to incorporate our personal histories and motivations into our research.

This approach has helped us recognise aspects that are now always considered in strict measurements of social impact, such as the importance of making epistemological contributions by incorporating other voices and topics not typically considered in dominant design discourses, ensuring ethical research practices, while considering critical questions regarding privilege, risk, and consequences of making certain groups or topics visible. Furthermore, we acknowledge the complexity and contradiction inherent in our work. We need to avoid romanticising it, and that is not always easy. These forms of practice should prioritise forming long-term alliances, coalitions, and partnerships in our research projects rather than working alone. Lastly, it demands from us to critically evaluate the relevance of observations outside of the niche created by our research so that the project is able to make a difference.

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Andrea Botero is an associate professor at the School of Arts, Design and Architecture of Aalto University (FI). Her research aims to understand the emergence, limits and long-term sustainment of distributed, collaborative, and experimental arrangements for innovation and design otherwise.

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