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# Decolonial Design in Practice: Designing Meaningful and Transformative Science Communications for Navakavu, Fiji

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**ABSTRACT** Design practice, at its contemporary state, contributes to replicating a homogenizing ontology that subjugates aesthetic, functional, and cultural values of non-Western design. In so doing, it becomes an instrument of colonialism and reaffirmation of a Western-centric view of the world. Decolonial Design arises as a reaction to this, proposing the integration of decolonial thought into design theory and philosophy. This study proposes a collaborative approach to design that brings the philosophy of Decolonial Design into practice, positioning design as a vehicle for rethinking problems through creative processes and initiatives, and as a transformative tool through which design can

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decolonize itself (and designers) while in action. This approach is demonstrated through a case study in the Yavusa Navakavu, Rewa Province, Viti Levu, Fiji, where researchers, designers, and the local community co-designed initiatives to promote the environmental conservation of their protected marine area.

**KEYWORDS:** decolonial design, collaborative design, decolonial thought, Fiji, design activism, science visualization, community-led design

Contemporary understandings of design derive from the paradigm of Modernity and late Modernity. In most of its manifestations, Design is grounded in market-based perspectives in which the processes of creation, innovation, and production are tied to the networks of profit-making, human-centered, and technocratic objectives (Foster 2002, Shultz et al. 2018, Escobar 2018). In this form, Design contributes to the conditions of coloniality by replicating the culture of consumption and mass production derived from the Western-centric view of the world, and serves a homogenizing ontology that usually denies and oppresses aesthetic, functional, and cultural values of non-Western design, craft, and art traditions (Abdulla et al. 2019, Fry 2017, Mafundikwa 2013, Tunstall 2013, Fry 2009, Escobar 2018).

In spite of this tendency, or maybe as a reaction to it, theory and practice around social design evolved from the early 2000s (Amaral, Taboada, and Chamoro-Koc 2014, Meurer 2001, Shea 2012, Thorpe 2010, Tromp, Hekkert, and Verbeek 2011) and the idea of doing design for the “good of others” rather than for commercial purposes became real (and lucrative). Human-centered design culminates with the expansion of the field beyond design itself, becoming a driver for business innovation through Design Thinking (Brown 2009, 2008). These initiatives, despite demonstrating a movement towards change in the design praxis, are still intrinsically embedded within the notions of an artefact-focused design paradigm (Tunstall 2013).

Further calls for change in the design praxis have been made by Fuad-Luke (2009), Dunne and Raby (2013), and Manzini and Rizzo (2011), amongst others, who advocate for design that goes beyond producing artefacts or services to be concerned with social and cultural change involving direct or indirect public participation. Fry (2009), Escobar (2018), Schultz et al. (2018), and Irwin, Kossoff and Tonkinwise (2015) have initiated academic conversations in which they propose a paradigm shift towards moving beyond the dominant market-based and human-centered perspectives to incorporate decolonial concepts into the thinking of design. However, there is little evidence of the impact of Decolonial Design (DD) in practice, as it is usually reserved to the philosophical and academic realms due to

the risk of transforming DD into a tokenistic activity – “another way of improving things” – in Danah Abdulla’s words (in Shultz et al. 2018) by practicing it under the usual Western-capitalist-modernist design standpoint.

Decolonial Thought is a political project and proposal that questions the universality of Eurocentric knowledge and unmasks the paradigm of Modernity as a social-cultural project of exclusion. One of the aims of the decolonial project is to “de-link (epistemically and politically) from the web of imperial knowledge (theo- and ego-politically grounded)” (Mignolo 2011, 143). DD emerges from this project and seeks to understand and practice design from an alternative standpoint, which is critical and reflective and intends to stimulate the ability to imagine other possible non-European-defined ways of being and living in the contemporary world.

The recognition that multiple ways of thinking and doing are essential for breakthroughs of creativity and viability of proposed outcomes is not a new concept. It has been extensively acknowledged and employed in participatory, collaborative design process, as well as in Design Thinking processes (Brown 2013, Herbert 2005, Palmås and von Busch 2015, Simoff and Maher 2000, Taboada, Haworth, and Spence 2008, Dutra, Haworth, and Taboada 2011, Dutra et al. 2019). The difference between these approaches and a DD approach is that DD is based on a political project and, as such, takes into consideration the ontological aspect of design. The aim of DD goes beyond designing new interventions or stimulating social, developmental, or economic change. The aim of DD is to trigger subversive transformation, in which the process of designing together changes not only the participants but also design itself, according to each reality it is applied to.

Traditionally, design processes are led and defined by design experts, hence the epistemological dominance of the designer in the process – echoing the Cartesian dichotomy (founder of Modernity) “body and reason” – in which body is nature/women/the other, and reason is the designer. DD processes are defined by the participants, in which expected actions, outcomes, and agendas are designed together. In so doing, DD accepts and incorporates potential uncertainties and acknowledges the process of designing as an outcome in itself (Taboada et al. 2010), which may be also used in the making of policies, as the formulation of solutions, implementation, and evaluation is designed and legitimized by and through the process (Orach and Schluter 2016).

This paper proposes a set of DD principles based on collaborative design methods to demonstrate that DD can be successfully applied in practice. These principles are expected to guide designers, academics, and practitioners who are willing to question and change their own ways of doing design. However, they should not be seen as a “recipe book” on how to do DD. The principles are demonstrated through a design project from the Yavusa Navakavu, Rewa



Province, Viti Levu, Fiji. Levu (2018), the cultural broker in the research team, wrote in her reflective report:

[this process] created opportunity for community-led thinking and action, interlinking areas of learning and creating awareness amongst women, men, and youth. This kind of process affirms their resilience, accountability, and informed local decision making into how and where the Yavusa can take the lessons learned and re-build to cohesive social and environmental changes that would benefit the community.

## **Theoretical Perspective**

### ***Principles of Decolonial Thought***

Decolonial Thought (DT) began in countries at the time they were colonized (e.g. authors such as Guamán Poma de Ayala and Bartolomé de las Casas in the sixteenth century), and its approach to social understanding has been solidly articulated in the twentieth and twenty-first centuries by authors including Enrique Dussel, Walter Dignolo, Boaventura de Sousa Santos, Silvia Rivera Cusicanqui, Hamid Dabashi, Juan José Bautista, Arturo Escobar, and Ramón Grosfoguel. Before them, Franz Fanon, Paulo Freire, Léopold Sédar Senghor, and W.E.B. Du Bois marked the road (Grosfoguel 2018).

Some of the defining elements of DT are its questioning of the universality of Eurocentric thought and its questioning of the paradigm of Modernity. DT posits that Modernity did not start with the Industrial Revolution but in the fifteenth century, when the first Europeans reached Abya Yala, known now as the Americas (Dussel 1993), a claim that reveals coloniality as constitutive rather than derivative of Modernity. DT also stated that the colonial heritage models the forms in which Modernity is expressed (Mignolo 2007). This is important because it redefines Modernity as a social and cultural project that normalizes and perpetuates the subordination and inferiorization of the other.

DT comes from outside European or Western thought, from the periphery: places where local knowledge has been rendered invisible in Western and Westernized cultures (Grosfoguel 2013). In this manner, DT is a form of “border thinking” which is “grounded in the experiences of the colonies and subaltern empires” (Mignolo and Tlostanova 2006, 206). Thinking from the periphery means having the experience and awareness of being outside the world that created the dominant paradigm: the paradigm of Modernity. Border thinkers necessarily possess du Bois’ famed “double consciousness” (Du Bois 1994), which can be described as the awareness of being classified by the gaze of power as an outsider, while also having one’s own classification.

The rhetoric of Modernity presents the dominant knowledge as universal; that is, the only valid knowledge, and the only knowledge capable of being the truth (Grosfoguel 2011); in essence marginalizing the knowledges that come from the Global South. De Sousa Santos, through his concept of “Epistemologies of the South,” proposes to identify and work against the “epistemicide” that ignores and suppresses other ways of thinking in order to recover and value epistemological diversity. The concept of Ecology of Knowledges encompasses the idea that multiple epistemes co-exist in any given setting, and that all ways of seeing and understanding the world are equally valuable; which does not mean that are all equally desirable given specific contexts (Dussel 2013, Meppem and Gill 1998). Intercultural translation then needs to connect these knowledges, creating bridges through which these multiple value systems can interact.

DT also recognizes that all knowledge, including scientific knowledge, is provincial; that is, situated (Haraway 1991). This means that every knowledge is constructed within a historical and environmental context, and that this awareness recognizes that its applicability may or may not function in different contexts. With the aims to make visible other epistemes and celebrate the pluriverse (Mignolo 2013), DT claims that many ways of knowing and doing must not only be verbally acknowledged but need to be enacted. As such, it is *necessary to recognize and adopt the bases of alternative knowledges that come from other cultures* (de Sousa Santos 2014). This is applied, for example, through the concept of “cultural safety” developed by Indigenous nurses from different countries, defined as: “an environment which is safe for people; where there is no assault, challenge or denial of their identity, of who they are and what they need. It is about shared respect, shared meaning, shared knowledge and experience, of learning together with dignity, and truly listening” (Williams 1999).

Design, with its North-centered origin, continues to define its values and quality standards based on the universalist European dominant episteme, tending to ignore design epistemes that come from other places, cultures, or forms of practice (Amaral, Taboad, and Chamoro-Koc 2014, Mafundikwa 2013, Andreotti 2016). It is through Modernity that Design defines itself as a field on its own, separated from the “arts” and “crafts.” Its multiple areas and expressions offer innovative “modern” products to suit the demands of the “new worlds” and the new elites. Design is born and thrives on the European-centered pool of knowledge (Margolin 2005, Holland 1997, Flusser 1999).

### ***Decolonial, Collaborative, or Human-Centered?***

Most designers understand that the impact of design goes beyond the object created. What goes unnoticed, however, is that, despite its declared inclusive approach and concern with the process and



impacts of design, human-centered design continues to be object- and solution-focused (Tonkinwise 2015, Tunstall 2013). It continues to feed and be fed by ideas of development and improvement of communities that need “help.” Usually, that need for help is defined by the designers from their own perspectives and biases, and without considering what “improvement,” “development,” or “help” actually mean for those specific communities.

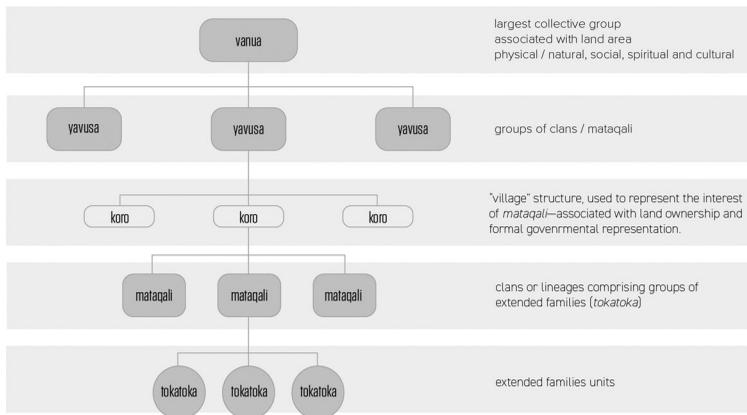
This approach often does not consider that the very concept of “helping” creates an imbalanced relationship of power between the helper and the helped (Tunstall 2013, Andreotti 2016, Freire 1970), often does not fully incorporate the multiplicity of knowledges that arise from these interactions into the design process, and might even undermine local social and decision-making structures with unintended negative consequences for the locals. Tunstall (2013, 237) claims that, approached in this way, design might become “another form of cultural imperialism that destabilizes and undermines indigenous approaches coming out of other creative traditions.” Tunstall (2013) also states there should be no distinction between any kind of creative making (art, craft, or design), advocating for a process that is dialogical and critical, in which “[o]ne must look simultaneously at what is gained, what is lost and what is created in the combination of value systems/cultures” (Tunstall 2013, 242).

Collaborative design can be a suitable methodology for applying DT to design practice as, by definition, it breaks with relationships of power by echoing Freirean thought and placing designers and participants at the same level, including the multiple value systems in the decision-making process (Brown 2013, Meppem and Gill 1998, O’Loughlin, Taboada, and Gill 2006, Palmås and von Busch 2015, Taboada et al. 2010, Taboada, Haworth, and Spence 2008). However, not all collaborative design instances are based on decolonial principles, and most will be guided by the designers’ own value systems. The example that follows demonstrates DD in practice, through a community-led collaborative methodological approach.

## **The Yavusa Navakavu Case Study**

### ***Context of Design in Fiji***

From a Westernized point of view, design practices in Fiji are mostly small (one–five staff members), focused on commercial activity, and usually close to the production businesses (printers, furniture makers, builders, signage). With the exception of fashion design, which is strong in the country and has its own yearly festival celebrating local designers and traditions in fashion, other design areas do not seem to have as strong public recognition or representation. Fiji National University (FNU) seems to be the only university that offers design courses that attend to business demand, including graphic design and fashion. The University of the South Pacific (USP) offers courses with a knowledge base that can be applied to design (such as Visual Arts, Critical Thinking, Philosophy, and Engineering). This means that

**Figure 1**

Traditional Fijian Social Structure, adapted from Ravuvu (2012, 77) and Veitayaki et al. (2014, 38).

to have a formal (Western) kind of design education, Fijians need to go overseas, usually to Australia or New Zealand.

This does not mean that there is no design in Fiji. On the contrary, Fijian and Pacific Art are manifested and celebrated in many forms and are integral and essential to local identity and life. One of the strongest expressions of this identity and symbolic imaginary is the Fijian *Masi* (tapa cloth). From the production of the bark cloth, through to the design of garments or mats to the painting of the graphic symbols, the creation of *Masi* is in itself one of the most complete and meaningful forms of design (Koojiman 1977, Neich and Pendergrast 1997, Spicer and Me 2004, Vaka'uta 2013). Similarly, other manifestations such as *Salusalu* designs (garlands made with natural or dried flowers) or *Meke* dances are used to represent a *Vanua*, a tribe, clan, district, or province as recognized forms of communications (although subtle), influenced by local values, identities, and traditional ties in such a way that one will know someone else's origin through their dance performance or from the *tapa* designs they wear or present. In knowing, one can relate or engage appropriately following traditional ties protocols. Fijian design is therefore better understood through a decolonial perspective which does not make distinctions between arts, craft, design, or any other forms of making (Tunstall 2013, Flusser 1999).

### **Socio-Ecological Context**

In Fiji, the social structure is centered around the *vanua*, a concept that encompasses physical (territorial land and sea, river, mountain, forest, and people) and abstract aspects of place such as social structures, spirituality, traditions, and the idea of clan "belongingness" (Nabobo-Baba 2006, 77–86, Veitayaki et al. 2014, 38). The *vanua* also represents how people are socially structured

and related to one another (Figure 1). The village (*koro*) is at the core of Indigenous social and economic organization. In the *yavusa* – and also at each village – a number of separate committees, embodying church, women, and youth, have representatives who participate in decision making at both village and *yavusa* levels (Itaukei Affairs 2016b, Veitayaki et al. 2014, 58).

Navakavu is a *yavusa* that encompasses four villages: Muaivuso, Nabaka, Waiqanake, and Namakala. *Yavusa* Navakavu is under the leadership of the *Turaga* na Roko Baleni. Fijian coastal *Yavusa* also include a *iqoliqoli* (areas within which customary fishing rights are held; Sloan and Chand 2016), which in Navakavu is managed by a special committee that coordinates activities around the locally managed marine area (LMMA). A *tabu* (no-take) area is part of the LMMA, formed in 2002 to improve fish stocks for current and future generations (O’Garra 2007, Cakacaka 2008, Gillet 2014, Tawake and Tuivanuvou 2004, van Beukering et al. 2007). Although the *tabu* area is not officially gazetted, it is recognized by Fijians because of its links with traditional management history. Both traditional and formal (central government) governance systems co-exist in Fiji (Torii and Kitolelei 2016, Itaukei Affairs 2016a, 2016b).

*Yavusa* Navakavu currently faces several issues due mainly to its proximity to the capital, Suva. For example, fisheries are threatened by loss of traditional knowledge and practices, mangrove degradation, poison fishing, improper rubbish disposal from the city and villages, overfishing, poaching inside the *tabu* area, coral bleaching, and mortality (Gillet 2014).

The USP funded a research project in 2015 to map the socio-ecological reef systems in Navakavu. This project involved: (a) **bio-physical research** to examine the state of the marine environment (fish, reef, pollution); (b) **social-economic research** to examine the community, its governance, organization, communication structures, and relationship with the reef and marine environments; and (c) **communication design research** to effectively engage with the community, develop methods to visualize and communicate the scientific research effectively, meaningfully, and transformatively. To achieve this communication goal, messages have been deeply linked to the community’s ways of knowing and doing. Only when a message is aligned, and the medium and participants are in an environment of trust, can the message be incorporated into village life in a way that provokes transformation.

### ***A Decolonial Design Approach to Science Communication***

de Sousa Santos (2008, xlv) identifies nine theses that conduct “towards an emancipatory, non-relativistic, cosmopolitan ecology of knowledges.” Of these, three are especially relevant to the Fijian case. *Thesis 1*: “Different human communities produce diverse forms of viewing and dividing up the world,” highlighting the validity of all knowledges and situatedness of their production; *Thesis 4*: “there

are no complete knowledges,” emphasizing there is no knowledge that can account for everything; and *Thesis 6: the “epistemological privilege of modern science,”* being aware that science (and design) is one among other forms of knowledges and that its privilege is not ontological.

These theses inform the overarching research approach in the Navakavu project: *to create spaces of trust in which the medium and timing for biophysical and social science communication can be collaboratively designed by the locals in their own ways and for their own benefit.* The process for designing science communication for this project started with one community-led collaborative workshop, which led to two follow-up workshops, plus some community action as a result of the process (see [Table 1](#) for workshop details and outcomes).

Workshops were delivered in English and Fijian. All participants were fluent in English – one of the three official languages of Fiji – with Fijian the home language. Levu is a Fijian and was responsible for language and cultural brokering during the project. Following customary protocols, all participants, including workshop presenters, sat on floormats ([Figure 2](#)). This sitting arrangement places everyone literally at the same level with each other and with the ground/earth. Position and ways of sitting are gender and status specific, and this practice was also observed.

Before the beginning of each workshop, an “ice-breaker” session was used, in which participants introduced themselves in the Fijian way, which involved passing a shell and stating names, the names of ancestors, totems, the Indigenous Fijians bird, fish, or plant totem that defines the identity of each participant and links them to their ancestors (Veitayaki et al. [2014](#)), and their role in the group. This activity reveals and establishes each participant’s connection with one another, their social links within their community, and their bonds with their *vanua*. According to Veitayaki et al. ([2014](#), 33), a “feature of the Fijian social system is the close relation that people have,” in which these “common links and bonds” are often repeated to honor and make visible those relations:

In a iTaukei village the structure is invisible but comes alive in times of decision making or managing group decisions and organizing projects [...] and aligning with appropriate protocols, also opens opportunities to further engagements in the future with the Yavusa and village, (Levu [2018](#))

The questions in **Workshop One** were designed based on the idea that benefits are maximized when knowledge is used by local communities and action is centered on what they prioritize (Freire [1970](#)). The aim was to stimulate participants to think beyond the formal deliveries of a research output or simple science visualization outcomes and instead to trigger the imagination of possible local actions ([Figure 3](#)).

**Table 1**  
**A summary of workshop activities and outcomes in Navakavu, Fiji, 2016.**

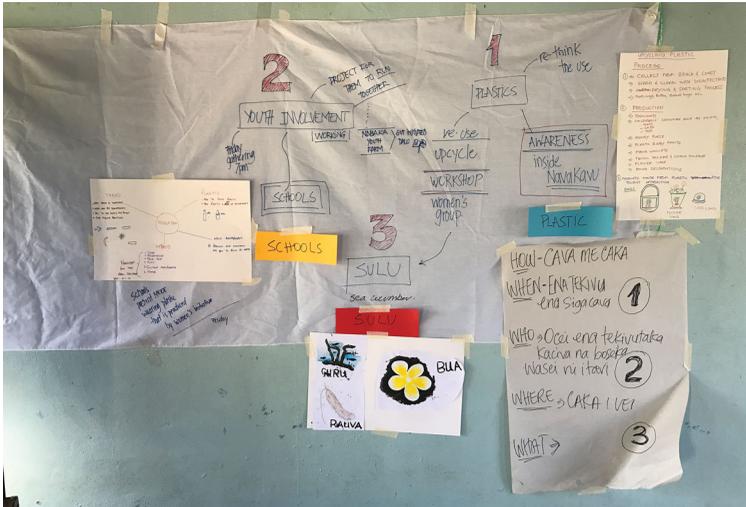
	<b>Workshop One: The Visualization Workshop</b>	<b>Workshop Two: The Planning Workshop</b>	<b>Workshop Three: The Making Workshop</b>
<b>Aims</b>	To present preliminary results from scientific survey on the reef (corals, fish, and reef organisms, plastic pollution, sedimentation levels), held at Nabaka.	To outline the actions that would help gain a better understanding of the reef system and improve conservation and life quality within the community, held at Waiqanake.	To detail and initiate action regarding the main areas outlined during Workshop 2, held at Nabaka.
<b>Participants</b>	Forty, including men, women, chiefs, and government representatives.	Eight: six local leaders and committee members from <i>iqoliqoli</i> , two women.	Twenty-nine, of which sixteen were women. Participants included members of the community, and members of the village decision-making committees and government.
<b>Workshop process</b>	Visual presentation of data followed by questions: (a) "What does this information mean for me, my <i>vanua</i> , and my people?" (b) "How best can we utilize it?", and (c) "What more do we need to know about this?"	Open discussions and visual mapping of proposed actions.	Creative, hands-on approach in which participants were asked to re-define, unpack, and visualize/ prototype their ideas for each of the areas outlined during Workshops One and Two.
<b>Key themes</b>	(a) The seagrass patch growth, its drivers, and impacts; (b) alternative income opportunities; and (c) pollution, particularly plastic pollution and waste.	Re-affirmation of participant confidence and local committee foci, roles, and responsibilities.	(a) Pollution and waste; (b) education and alternative income opportunities; and (c) representation of local identity.

(Continued)

	<b>Workshop One: The Visualization Workshop</b>	<b>Workshop Two: The Planning Workshop</b>	<b>Workshop Three: The Making Workshop</b>
<b>Outcomes</b>	Follow-up workshop to define actions related to each of the key themes that emerged from the discussions.	Two main actions were identified for follow up: (a) education within and outside the <i>Yavusa</i> , through schools, church, government, and community structures; and (b) pollution-related actions, such as waste-management and upcycling (Figure 3).	Three main outcomes were presented: (a) the need to build capacity towards plastic upcycling to tackle plastic pollution issues; (b) “Navakavu Day” as a way to educate the community on conservation issues, highlighting the importance of protecting the <i>tabu</i> area; and (c) as a strategy to strengthen the <i>Yavusa</i> ’s identity, the concept for a <i>sulu</i> (sarong) was designed (a <i>sulu</i> is an important cultural clothing used to represent community groups or organization).

Due to hierarchical *itaukei* (Indigenous Fijian) structures<sup>1</sup> (Nabobo-Baba 2013, 100–1), the two women present in the second workshop did not speak or address the group during the meeting. As the women are used to navigating the social systems without challenging or disrupting it, they informally approached the female facilitator at the end of the workshop and asked to be taught how to use plastic waste to make artefacts. Together the team agreed that an “upcycling” workshop should be organized in Navakavu. Levu suggested that the local women’s group, inactive at the time, should be re-activated to lead this initiative. This resulted in a much larger participation of women in the third workshop, as they identified practical avenues to address their issues and priorities. Figure 4 presents a summary of all actions outlined during the three workshops.





**Figure 4**

Map at end of Workshop Three, summarizing actions and including each group's creative work. Photo: Manuela Taboada.

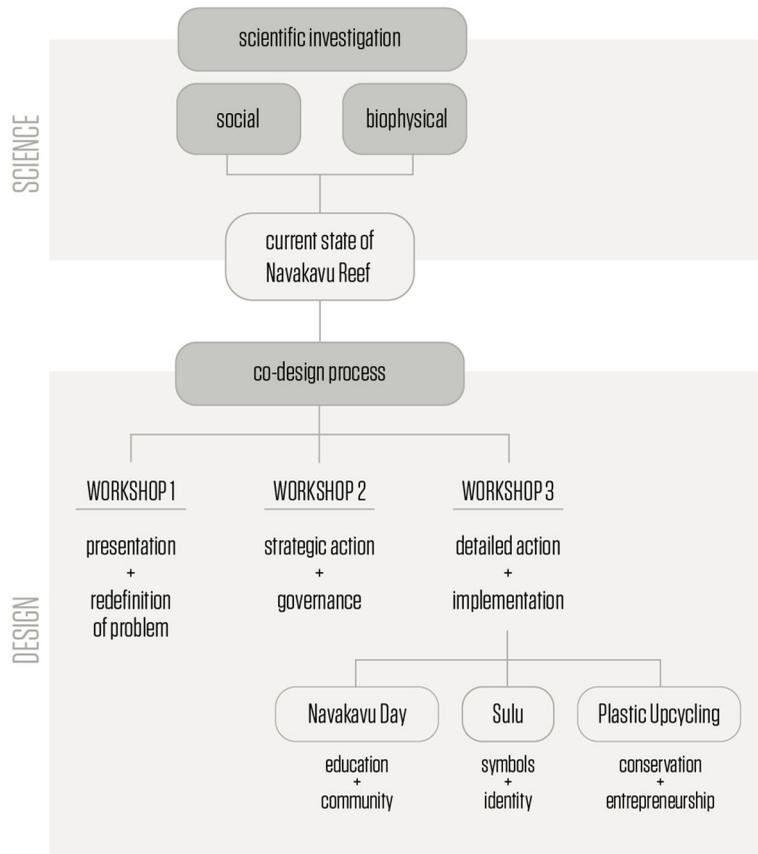


**Figure 5**

Works by Nabaka women during Plastic Upcycling and Sewing Workshops. Photos: Manuela Taboada.

listening, everyday chatting, discovery, creation, and interaction (Figure 5).

The workshops were held by the women, for the women, and planned and organized by them. The agenda and content emerged from their own needs and interests and morphed according to discoveries and breakthroughs, and the combined capacity of participants and facilitators. The outcomes of these workshops went



**Figure 6**

From science to action through co-design. Author: Manuela Taboada.

beyond the learning of new skills: they helped re-ignite the activities of and relationships within the Nabaka Women’s Group.

When the research team returned to the community in April 2017, they were welcomed by a full collection of upcycled jewelry created by the Nabaka women from used plastic bottles. They had adapted the learned techniques to their traditional jewelry making from shells and other natural materials. By then, the women had exhibited their designs at the Kalokolevu village market in March 2017. During this visit, they asked the researchers to design a brand and stamp for the upcycled pieces of cardboard which described and identified their jewelry.

An activity that started as simple upcycling technique became an entrepreneurial expression of the women’s capability of managing conservation issues in the community in a creative and economically effective way. By appropriating the “Western” techniques for upcycling PET bottles to their traditional ways of creating jewelry from shells, the Nabaka women designed their own original collection, which is a *mélange* of both worlds and, as such, a material representation of the decolonial collaborative design process.

In general, this kind of decolonial community-led co-design process, based on local traditions, needs, and requests rather than on scientist- or designer-centered aims, enabled creative, viable action towards conservation in the *vanua*. Figure 6 demonstrates how scientific research questions led to emerging community actions through DD.

### **Towards a Framework for Decolonial Design in Practice**

DD is important and powerful. It facilitates outcomes that are focused on actions and benefits to participants according to their own value systems, as exemplified by the Navakavu case study. In light of this study, the authors propose a methodological approach to apply the philosophy of DD to practice. The starting point of DD is the recognition that design is not a neutral discipline, and that designers undertaking this process need to, first and foremost, decolonize their own minds. To achieve this, it is necessary to embrace *Principle 1: the need to learn to unlearn* and recognize non-Western epistemologies in the design process.

Following and adapting Freire (1970) to decolonize their minds, designers have to: (a) understand that design, as it is currently practiced, is at the service of an unjust system that constitutively sustains itself on the bases of exploitation of the “other” (humans, nature); (b) understand that Western knowledge is not universal knowledge and as such recognize and adopt the basis of alternative knowledges that come from other cultures; (c) *tomar consciência*: be conscious and critically aware of having a colonized mind that has (for example) made them see the other as an object, instead of a subject from whom they learn and whose knowledge is as valid as theirs; and (d) participate in and promote actions in which design practice is built on a dialogical relation with the other, and then follow with critical reflection (praxis).

The focus of the design activity then shifts from being set upon the designers’ agenda to “solve” the problem and “save the world” by designing an artefact or intervention to one that puts the process of designing together at center. Change emerges from designing and thinking together about possible interventions, not from the interventions themselves. A designer with a decolonized mind acknowledges the multiple value systems and hegemonic powers at play and embeds these value systems in the design process, adding flexibility to allow changes in direction when needed, and to make relationships visible, including the designer’s own.

In order to understand its own position within the process, designers need to embrace *Principle 2: practice exotopy*. Decolonial collaborative design is not grounded on empathy but on exotopy and deep criticality. While *empathy* refers to the process of putting oneself in place of the others, and seeing the world from their perspective, Bakhtin’s concept of *exotopy* (Todorov 1984, 99) can be understood as the ability to see oneself out of one’s own body and reflect on



one's action from an outside perspective. While Bakhtin describes exotopy in the context of performance and character construction, when applied to design – a performative action in itself (Sampaio and Taboada 2016) – it allows designers to extract themselves from their roles and see themselves from the perspectives of others with the intention to understand the impacts and implications of their own actions, as recommended by Tunstall (2013). Exotopy allows for a plurality of consciousnesses to be present in the process, providing, as such, the necessary environment to allow for mutual “creative understanding” and horizontal relationships of power (Foucault 1997, 1982, Freire 1970). For example, in the Navakavu case study, the researchers and designers were from outside the community (and the country) and, as such, conscious of their behavior and actions in the community. Working across two languages and multiple cultural symbolic systems also contributed to that out-of-body-like experience.

Being able to see themselves from the perspective of the other is critical for applying *Principle 3: integrate all epistemes*. Decolonial collaborative design differs from other collaborative design methodologies as it explicitly allows for the integration of existing ecologies of knowledge, in which the designers' voice is equal to that of the participants and the focus is on constructing the design process together, to the point at which participants become designers, and designers are conscious and critically aware of their own biases. Integrating local knowledges (ways of thinking) also means incorporating local procedures and protocols as grounds for designing the methods to elicit and define actions (ways of making). By integrating knowledges and respecting the dynamics between the multiple value systems, any scientific or external design knowledge is brought in as “unfinished.” This way, the design process embeds the political project of decoloniality by transforming all participants through mutual knowledge sharing and, by doing this, transforms design itself.

This is demonstrated in the Fiji case study as the designing of the process itself was collective during the planning stages and as it unfolded. By observing and respecting local social traditions and rules and through mutual deep listening, it was possible to integrate local Fijian knowledge, design expertise, and symbolic systems with Western scientific observations. Levu's reflective assessment of the project identified it as a process that, by merging multiple perspectives through a dialogical approach, reaffirmed community integration and resilience (Levu 2018). Through this process, the essence of designing science communication strategies was turned upside down and taken beyond the production of “designed artefacts” to elicit community-led action that informed the next steps of the scientific research itself, demonstrating that all processes were touched by the merging of the multiple epistemes at play.

This leads to *Principle 4: have no set agenda*. Decolonial collaborative design differs from other collaborative design or human-

centered design as it has no set agenda in terms of expected results. Instead, the process is constantly negotiated between participants, based on collective synergy and framing of the issues to be investigated, allowing for the unknown and the diversity of knowledges to become its most powerful creative fuel. To enable this, the modes of engagement should be dynamic and emerge from each different context and iteration.

In Navakavu, this was enacted by articulating an initial workshop that presented unfinished work and asked participants to (a) guide the completion of that work, (b) express their understanding of the value (or non-value) of that work and what it meant to them, and (c) outline what kinds of actions could be taken to take the work further. The responses to these questions determined the process that came after and were strongly linked to local values and aspirations. During the plastic upcycling training, this went even further as the workshops mutated while in progress, triggered by an interest, a breakthrough, a question, or the discovery of a talent in the group that would be keen to share new ways of doing things. This, rather than making the process slower or removing focus from the aim, helped build trust by strengthening the bonds between participants and potentializing future collective creative action.

The case study of Fiji illustrates concepts of DD in practice, which mark the epistemological stance that influenced the approach, dialogue, workshops, and products of these encounters, and which consequently defined a framework for bringing DD to practice. First, the concept of *acknowledgement, respect, and celebration of diversity of knowledges* was manifested. Meetings took place at the community's preferred location and followed the community protocol regarding these sorts of gatherings.

Second, the concept that *"there is no complete knowledge," and it is essential to initiate and maintain an epistemological dialogue* was practiced. de Sousa Santos (2008, xvii) explains that "[t]here is no ignorance or knowledge in general. All ignorance is ignorant of a certain knowledge, and all knowledge is the overcoming of a particular ignorance." This idea avoids the romanticizing of border knowledge when it might not work in a specific situation. In the Fijian case, once the scientific data were presented, the focus shifted to understanding the issue through a local perspective before trying to find (or apply) solutions, meaning that both layers of knowledges were integrated, each playing their own appropriate roles.

The third concept recognizes that *scientific and designer knowledges – and the knowledge associated to them – has been epistemologically privileged*. Historically, one consequence of scientific privilege has been the creation of a hierarchy of knowledges, in which scientific knowledge is universally at the top holding exclusive validity, and non-scientific knowledge is ranked lower. In many cases, this has meant epistemicide (Reid and Rojas-Lizana 2014, Grosfoguel 2013).



In the case of Navakavu, the relationship between scientific and traditional design knowledge with other knowledges was one of dialogue, consultation, and respect. The use of exotopy allowed for scientists and designers to engage with participants from a critical and reflective perspective. Scientific knowledge was used by the community to inform the strategies and decisions taken in combination with traditional knowledge. As a result, strategies and actions were built upon dialogical interactions in which different types of knowledges informed one another equally. This kind of process is easier for border thinkers (Mignolo and Tlostanova 2006), who are used to reflecting on their own as “others,” removed from mainstream contexts. For those who think from within Western thought (in the position of privilege), this kind of process might require extra effort.

This dialogical design process – whereby design itself is transformed by the multiple value systems it encompasses – helps “demystify hegemonic ideologies” by “producing/co-producing forms of knowledge that can be useful and potentially liberating for the world’s dispossessed and oppressed” (Harrison 2010, 8, in Tunstall 2013, 241). Through decolonial collaborative design, multiple sides of the story and ways of being, knowing, and doing are acknowledged and embedded in the process of designing together.

The three actions outlined by the community as their pathway towards environmental conservation – traditional craft and upcycling, cultural events, and community symbolism – are deeply linked by the intention of strengthening identity through creative expressions. This link to local identities means that this kind of design practice mobilizes deep roots within the communities, going beyond “design for change” to become part of the political project of decoloniality: designing for meaningful transformation into other possible ways of living.

Every context is different, every place is different, and every culture will have a distinct way of designing, thinking, and making. Decolonial Design in practice opens a possibility of re-imagining and re-designing futures together through deep listening and deep criticality. It invites designers and researchers to re-design design and ask not only *how to* change through design, but *why* change and *what change means* in each specific context.

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## Note

1. These rules are not based solely on gender criteria (as it might seem to the Western-trained mind; instead, they are complex and deeply rooted in village life (Nabobo-Baba 2013, 2006; Ravuvu 2012; Veitayaki et al. 2014).

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