Cultural Hybridity in Design with Australian Aboriginal Communities

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Abstract

Design is culturally-situated, and postcolonial
computing advocates for a shift in perspective from
understanding culture through taxonomic models, to
culture as generatively-enacted through everyday
practices. Border terms (e.g. 'Western cultures' and
'Australian Aboriginal cultures') are often discursively
invoked to describe the differences in technology
design and use in local cultural contexts. These terms
are sometimes thought to be incompatible with
generative views of culture, particularly when used to
power imbalances between designers and users. Yet,
we suggest that border terms in themselves are not
inherently harmful, particularly when advanced by the
communities themselves with whom we work rather
than proposed by the designers. We reflect on the
"both worlds" discourse of Australian Aboriginal
communities, and the important purpose it serves in
describing lived experience of cultural hybridity and
expressing aspirations for the future.

Author Keywords

Postcolonial computing; cross-cultural design;
Aboriginal design; cultural hybridity; generativity;
borders.

ACM Classification Keywords
H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous;

Introduction
We acknowledge the Australian Aboriginal peoples and the Anindilyakwa people of Groote Eylandt, whose culture and knowledge date back countless generations.

Design paradigms, practices and artifacts are culturally-situated. Since design is heterogeneous, enacted through and framed by local practices and contexts, "difference abounds" [20]. Efforts to acknowledge and make sense of the differences between design in different local settings inevitably involves invoking "borders" in the terms we use to describe and discuss these differences. Many of these borders are characterised with respect to differences in cultural contexts. Examples of this include: the aspects of culture embedded in designed products and the practices of users within a particular (possibly different) context [20]; the cultural backgrounds of "designers" and "users" in UCD, and of different design participants in PD; and cultural contexts of technology design and use [20]. The circulation of designed products between cultural different cultural contexts has also given rise to local forms of innovation through practices of reverse engineering [8], technology appropriation [22], and design inspiration for new "consumer-specific products" addressing the needs of local markets [12].

The postcolonial computing movement advocates for a shift in perspective from engaging with culture through design on the basis of "taxonomic" cultural models, to approaching culture as something that is "generative" and "dynamic, collectively produced, and enacted in

everyday encounters" [8]. A nuanced reading of the postcolonial computing literature (e.g. [8,20]) suggests that a "generative" and "hybrid" view of culture is not incompatible with acknowledging difference or with invoking borders. Certain border-making practices can be harmful when they reinforce colonial logics and perpetuate uneven power relations. Yet, the border terms framed by the people with whom we work can play an important role in reflecting the lived experience of cross-cultural communities who must synthesize disparate world views in their everyday activities. To illustrate this point, we engage with expressions of cultural hybridity from Australian Aboriginal communities through the idea of "walking in both worlds" [19]. This is grounded in our experience of working with the Australian Aboriginal community of Groote Eylandt to develop a cross-cultural Digital Community Noticeboard [25].

Unpacking A "Generative" View of Culture in Postcolonial Computing Literature
The concept of culture as "generative" has received much attention in postcolonial computing literature. Irani and colleagues have highlighted the pitfalls of inherently taxonomic cultural model's such as Hofstede's cultural dimensions that present culture as quantifiable values, treat cultural traits as inherent, and use them as a way to group and differentiate between people based on "cultural difference" [7]. In particular, they highlight that static perspectives of culture and the borders between them are increasingly questionable in light of technologically-facilitated globalization [8]. Yet, some scholars have remarked on the difficulties in developing practical understandings of the ways in which cultural generativity is experienced, and how this perspective can be operationalized in design practice

[14]. A generative view of culture has been described in several different ways in the postcolonial computing literature, in terms of both individual cultural identity and collective cultural expression. These include culture as:

- a "*lens* through which people collectively encounter the world"[7]
- *positions* in relation to multiple flows of people, capital, discourses…" [7] and the process of "investing in a particular (subject) position" [14]
- the "cultural *experience* [emphasis added]" of an individual [8]
- a "*spectrum* along which a single person's cultural identity may traverse over time [emphasis added]" in which "the temporal movement and passage […] prevents identities at either end of it from settling into primordial polarities" (Bhabha in [14]);
- " a "third space" where the subjectivities of both researcher and researched are mutually constructed, and meanings and interactions are also mediated, as is knowledge itself" [13].

Design and the Invocation of Borders
Yet, a generative view of culture does not dissolve the plurality of cultural perspectives held by design participants. These differences have been described by some in terms of tensions and "cultural collisions [that] impact the nature of the design process" [14]. Since postcolonial computing advances the notion of design as being framed by "encounters" between people [8], Philips et al. themselves acknowledge that cultural difference exists and can present "productive possibilities" and even "sites of creativity and

possibility" [20]. To productively engage with these differences requires the ability to discursively invoke them by naming them, often expressed through the "border" terms used to distinguish x from y, while at the same time acknowledging that x and y are not mutually exclusive.

A postcolonial approach questions the assumptions between taxonomic models for presenting differences between "here" and "there", or the "self" and "other", as distinct from each other and "stably distanced" [20]. However, what if these borders are not imposed by the designer, but are instead proposed by the communities with whom we work? We explore this question through cultural hybridity concept of "both worlds" [19] expressed by Australian Aboriginal communities.

"Both Worlds": Australian Aboriginal Perspectives of Cultural Hybridity
One perspective of cultural hybridity that has received little attention in the HCI is the Australian Aboriginal expression of living in "two worlds". For example, lawyer and activist Noel Pearson articulates an aspiration for Australian Aboriginal people to "walk in both worlds" in being "integrated in the national and global economies" while at the same time to "remain distinctly Aboriginal and retain the connection with ancestral lands" [19]. This "two-worldness" has been articulated in various ways both in academic literature [6,15,16], and artistic productions such as the Bangarra Dance film "Spear" that explores "what it means to be a man with ancient traditions in a modern world" [18]. Aboriginal youth are positioned as reconciling "cultural traditions" with "contemporary innovation" such as information technology [10,24].

It is not clear where the terms "two-worlds" originated, though the "worlds" referred to have diverse meanings. These include interactions between Aboriginal community life and cultural identity, and: corporate culture [17]; mainstream services such as the healthcare sector [9]; and peer relationships within an educational setting [4]. The term "two worlds" does not imply the existence of two separate worlds and a crisp border between them, but conveys a deeply personal experience of socially shifting between the radically different Western democratic and Australian indigenous worldviews. We reflect on design and cultural hybridity from the perspective of Australian Aboriginal cultures, before suggesting the productive and necessary role of border making in expressing identity and designing futures. We reiterate that there is no one "Aboriginal culture" but a rich and diverse array of Aboriginal cultures in Australia, some of which have used the term "two worlds" or "both worlds".

Australian Aboriginal Design
As previously mentioned, definitions of "design" can differ between cultures and context. Nichols highlights *differences* between Western and First Australian concepts of innovation rooted in epistemological difference [16]. Knowledge traditions in Australian Aboriginal cultures are relational are "integrated, holistic, lived and performed […] on country" [5], underpinned by creation knowledge and laws known as "the Dreaming" [16]. While many Western cultures consider innovation in terms of 'creation' and 'originality', some Australian Aboriginal cultures considers innovation as 'discovery' of "a feature that had always been there" [16]. Yet, these perspectives can be reconciled within a common vision of design at the "cultural interface" [15] as in [16].

Australian Aboriginal Cultural Hybridity
The experience of living within and between two worlds has been articulated in both explicitly and implicitly in various ways. For example, Verran and Christie address this in their discussion of "bothways education", referring to "schooling that takes seriously both Indigenous and Western knowledge practices" by drawing on the Yolngu concept of "ganma" [6]. Ganma is rooted in the metaphor of salt and fresh water mixing together, representing the "vibrant productivity" of Aboriginal and Western ways interacting and balancing each other [6]. While Nakata's concept of the "cultural interface" reinforces the notion that the borders between the different worldviews are "not clearly black or white, Indigenous or Western" [15], Philips et al. point out the promise of these encounters as "sites of contestation and cultural innovation" [13].

Design and technology use are implicated in the performance of "two-worldness". For example, the design of custom knowledge management systems with Aboriginal communities has bridged traditional knowledge and ICTs by structuring database and interfaces in ways that reflect Aboriginal worldviews [27,28]. Bidwell and colleagues reflect on the ability for grounding documentaries to communicate the relationship between place and the performance of traditional knowledge in Aboriginal terms [2]. Technology has been appropriated into existing practices in Aboriginal communities to enhance familial relationships [23], view and share music and videos [3], and express Aboriginal cultural identity through multimedia such as music videos [10]. These uses of technology could thus support the vision Aboriginal communities to "stand in both worlds" [1].

Navigating and synthesizing Western and Australian Aboriginal cultures, and acknowledging the differences between them, has two important implications for postcolonial and participatory design in cross-cultural projects. Firstly, the "two worlds" perspective serves as an expression of "sovereignty and legitimacy with the Australian state" [20], and reflects the desire of Australian Aboriginal communities such as Groote Eylandt to "speak to the outside world on their own terms" [1]. Thus, a key preoccupation of postcolonial design is ensuring that these border terms voiced by communities, and their epistemological basis, are privileged in the design process [8].

Secondly, the notion of "both worlds" expresses visions for the future and the potential to bring about "the creation of new cultural possibilities" [13]. For example, the Digital Community Noticeboard project aims to support the Groote Eylandt community's aspiration for cultural hybridity through a cross-cultural interface. For example, the ability to create notices by uploading any combination of text, images, audio and video in English and Anindilyakwa languages supports both written literacies and oral traditions [21] through a multimodal interface [25]. Additionally, understanding cross-cultural temporalities has allowed us enhance the interface to better reflect Anindilyakwa perspectives of time, as well as identifying contexts in which a noticeboard is incongruent with the community's time practices [26].

Conclusion

In conclusion, we have provided an overview of salient definitions of a "generative" view of culture in postcolonial computing literature, and highlighted that acknowledging difference and articulating borders is not inconsistent with a postcolonial computing approach. On the one hand, borders can be considered useful for talking about cultural differences, and both the tensions and possibilities arising at cultural "seams" [20]. Our discussion has shown the expression of these borders by the communities with whom they work are consistent with local ways of knowing and play an important role in identity construction and voicing aspirations for the future.

On the other hand, these border terms can become "harmful" when they invoke colonial logics such as static perspectives of culture, and "a universal "self" who can observe and mark the difference "with the "other"" [8]. Recognising the experience of transacting a "two worlds" existence in Australian Aboriginal communities should not be taken as communicating a reductive binary, but instead as reflecting richness and complexity in the experience of cultural hybridity. The HCI4D community has articulated the importance of reflexivity in "reflecting on our-selves and whatever perspective we're bringing, and how that shapes our conversations and goals" [11]. We encourage a reflexive approach to thinking about and naming difference in cross-cultural design, and recognition of the agency exercised through the reconciling of different cultural perspectives in everyday life.

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