A Case for Digital Sovereignty of Indigeneity in HCI Research Projects

Sena A. Kojah
School of Information
University of Michigan
Ann Arbor, MI, USA
Senami@umich.edu

Oliver L. Haimson
School of Information
University of Michigan
Ann Arbor, MI, USA
Haimson@umich.edu

ABSTRACT

Current post-colonial and decolonial approaches to human-computer interaction and social computing privilege non-indigenous conceptions of indigeneity in technology research, technology deployment, and design praxis. We argue for the establishment of "digital sovereignty of indigeneity," a concept connected to indigenous notions of identity through landholding, particularly in the digital space and in social computing research.

KEYWORDS

Indigenous, indigeneity, digital sovereignty, post-colonial, decolonial, land.

Introduction

Colonial tensions in computing literature often arise between the studier and the studied. Self-recognition and the ability to posit oneself as indigenous, especially in the Global South, is complex and steeped in centuries-old classification traditions - and in some instances, tethered to by-products of colonialism. While studies by postcolonial computing scholars are important for understanding technology's colonial manifestations, design, and cultural differences in technological practices [5], we need further research and theorization to understand how to better conceptualize and center indigenous identities in social computing. Post-colonial scholars in computing have been questioned both on earlier grounds of being jargonistic, somewhat depoliticized, and encouraging a rarefied approach to culture and literature and on newer grounds of being unable to account for the complexities of globalization [1].

Critics of post-colonial computing approaches hold two main positions; the first being that post-colonial theory grounds itself in Eurocentric theories and engages with proponents such as Foucault, Lacan, and Derrida while overlooking knowledge paradigms and terms set from "periphery" world systems [1]. Others argue that while the post-colonial way of thinking about computing addressed power relationships, they did not necessarily adequately address different cultural power relationships [2]. These critiques signal the need for centering non-Western epistemologies, especially when theorizing on technology deployment and how people in the Global South interact with technology.

In response, decolonial computing scholars argue for studying the innovation practices in the Global South in a way that reflects the local needs, imagination, and values of the people and how they interact with technology [5]. The goal of the decolonial scholars is articulated as a need to engage with computing phenomena from a perspective that takes into account those at the margins or periphery of the modern world system. It seeks to understand how computing and knowledge production are situated in geopolitics [1].

It is clear that current computing research and existing global power asymmetries in research and epistemological production contain hierarchical imbalances so much that even when well-meaning, post-colonial, and decolonial research approaches privilege perspectives that perpetually consider the Indigenous as "others." Indigenous people are unable to fully posit themselves as having knowledge or the ability to explore methods of research that make more sense for their context.

We argue that the conceptualization of indigeneity in Human-Computer Interaction scholarship should be exclusive to indigenous people in a term we describe as "digital sovereignty of indigeneity." In this position paper, we argue that because there are already existing imbalances in whose research becomes visible, is accorded respectability, and is widely distributed (due to geopolitical asymmetries); and because of the complexities that exist in varying indigenous cultures, computing scholarship should defer entirely to indigenous scholars on how to define and conceptualize indigeneity. We further argue that epistemic reservations be created for them in computing real estate as a way of preserving indigenous people's self-conception and digital sovereignty.

Land and Indigeneity in Post-Colonial and Decolonial Social Computing

In many African, Latin American, Middle Eastern, Oceanic, Asian, and also for American Native cultures, the land is pivotal to the concept of indigeneity, and this association follows through when it comes to using technology. Indigenous people from these cultures are connected to landed identities that come from villages, tribes, clans, and chiefdoms. Displacement often poses an existential threat. When using digital technology, there are many manifestations of displacement that are often overlooked when discussing how indigenous people take up space. For example, [7] found that content moderation on social media is not applied equally among social media sites and that the content of black participants was removed frequently when it featured topics of racial justice or racism. If marginalized people are being displaced when having conversations that are existential to constructing their identities in the digital space, how can they reclaim that space? As is with settler colonialism in land-based colonial systems, settlers invade and seek to dispossess indigenous peoples of their digital spaces by enacting racist discourse and stealing indigenous knowledge in acts of cultural appropriation [4]. And if when indigenous people try to counter these narratives, their digital lands consisting of their handles, accounts, and online content are put in precarious positions for disproportionate moderation.

The internet is sometimes conceived as a no man's land in social computing research, so vast and unmitigated that it accommodates the tenancy of all, often ignoring the policies in moderation, ownership, and digital infrastructure that displaces those on the margins.

"Since its beginning, cyberspace has been imagined as a free and open space, much like the New World was imagined by the Europeans...the as-yet-unclaimed areas of his cyberspace are portrayed as an ink-black nothingness awaiting the code that will turn them into useful virtual habitations. But if Aboriginal peoples learned one thing from contact, it is the danger of seeing any place as terra nullius, even cyberspace. Its foundations were designed with a specific logic, built on a specific form of technology, and first used for specific purposes (allowing military units to remain in contact after a nuclear attack). The ghosts of these designers, builders, and prime users continue to haunt the blank spaces" [9].

The landless portrayals of the internet rip land-based relations away from internet technologies taking away their connection from people who rely on landed forms of identity [4].
Some decolonial studies in human-computer interaction have attempted to make connections between technology and land. A study by [7], for example, argues that "the technologies we use, as currently designed, are not possible without the minerals and metals that are an essential part of several of their components" and described these forms of exploitation as a wicked cycle that disrupts the lives of people living near mining sites in the Amazon

"which are affected by the ecological impacts of mining and rely on digital technologies made with such mines' products, including telecommunication technologies, to effectively and successfully advocate for and realize their own local visions of development." But even this conception of the indigenous identity in the face of precarity promotes a lens that depicts indigenous peoples of the Amazon in a colonial light, as needing saving. The authors go on to center themselves in the discourse by adding that the paper is intended to create a space for HCI researchers to acknowledge their own complicity and propose a series of questions that highlights the part they play in this "wicked cycle". We argue that if indigenous populations are to be researched in contexts where they have no institutional power over funding, framing, and the language used to describe their lived experiences, then decolonial scholarship must center their voices as people who can re-imagine ways that technology can exist sustainably and architects of design in the creation and deployment of technology that has a direct impact on their lives.

Ceding academic and technological real estate in the Global North and on the Internet is one way to accomplish this proposition. A study by [4] attempted to conceptualize the land-based nature of the internet, how indigenous people navigate the colonial dynamics of cyberspace and decolonial resistance by holding space for indigenous people to self-conceptualize themselves drawing on insights from #NativeTwitter. They found that "Mainstream discourse about the Internet as landless risks presenting or misconceiving online learning as inevitably disconnected from physical place. While the Internet cannot replace the experience of literally being on the land (especially land that colonizers have stolen from indigenous people), language learning occurring within #NativeTwitter emphasizes that Indigenous peoples are practicing consciously land-based cyber-pedagogy—pedagogy that, though occurring online, is committed to teaching the connections between Indigenous lands and Indigenous languages." It is a great example and reminder that when indigenous people occupy space online, they are able to self-determine in ways that are outside the lens of colonial traditions.

Intersectional Indigeneity

The question of who is indigenous on the internet still remains. For many HCI studies, those considered indigenous are situated in the Global South and some parts of the Global North, but it is much more complex than that. According to Olsen [2018] "A challenge when it comes to providing a clear-cut definition is that the span of those who count as indigenous stretches from tribal people living in the rainforests of Borneo, via reindeer herders living in the Sámi mountains of Sweden, to professional politicians on Manhattan in New York...the diversity of indigenous people points to a huge variety of indigenous localities. A dilemma, possibility, and/or tension within indigenous studies is related to the relationship between what is

local, specific, or relevant for one community or group of people on the one hand, and what is global, general, or concerning indigenous people worldwide on the other". It gets even more contentious when we ask the question of who gets to be Indigenous, especially on the internet, a place where people co-opt or take marginalized identities with the aim of furthering personal or political objectives, a practice rooted in racism. One such manifestation is known as digital blackface. It is a practice where mostly White people co-opt expressions of black imagery such as profile pictures, slang, catchphrases, and culture for either comic relief or to steer political commentary away from an issue at hand [3]. An example of how this manifests will be a profile created by a white person with a black person's profile picture, making comments on racialized news stories with a counter-narrative "As a black person, I agree with what has happened." This practice is already seeping into how indigenous people are constructing their identities in cyberspace. Cashman [2017] observed that it is becoming increasingly difficult to ascertain if the person behind the screen identifies as Indigenous or not and the impact that this type of identification might have on the representation of Indigenous people's lives. In Cashman's example, a Facebook page called "Diversidad Cultural Indígena Latinoamericana or Latin American Indigenous Cultural Diversity" is appropriated by an anonymous group in Buenos Aires, posting stereotypical images that perform indigeneity, promotes harmful cultural practices with what seems like a lens pointedly targeting a Western audience. We argue that this phenomenon poses a challenge to researchers of HCI who rely on public data from the Internet to carry out research about Indigenous populations and that researchers not accounting for these issues can be harmful to Indigenous populations who already occupy very little land on the Internet.

Within cultures, there are varying kinds of indigenous cultures and identities. In Nigeria, there are 371 ethnic groups each indigenous to their own nations and lands, with distinct languages, social systems, and cultural practices – the same can be said for different indigenous communities around the world. Thus, research projects that offer recommendations to indigenous populations in very non-context-specific ways are contributing to the displacement of the very unique presentations of technological phenomena in varying indigenous communities. We recommend that researchers use an intersectional perspective. This will enable an analysis of these different levels, as well as of how different levels and aspects of identity work together [10].

Conclusion

Indigenous identities in social computing are complex. Contrary to early research which suggested that the internet is a no man's land with equal opportunity for all, physical world asymmetries carry on into the digital world that further complicate the way we think of indigenous populations' identities. We recommend

adopting intersectional approaches and argue that epistemic space be created for indigenous populations in computing real estate as a way of preserving indigenous people's self-conception and digital sovereignty.

REFERENCES

[1] Ali, S. M. (2016). A brief introduction to decolonial computing. *XRDS: Crossroads, The ACM Magazine for Students*, *22*(4), 16–21. https://doi.org/10.1145/2930886

[2] Alvarado Garcia, A., Britton, M. J., Doshi, D. M., De Choudhury, M., & Le Dantec, C. A. (2021). Data Migrations: Exploring the Use of Social Media Data as Evidence for Human Rights Advocacy. *Proceedings of the ACM on Human-Computer Interaction*, *4*(CSCW3), 268:1-268:25. https://doi.org/10.1145/3434177

[3] Blake, J. (2023, March 26). *What's "digital blackface?" And why is it wrong when White people use it?* CNN. https://www.cnn.com/2023/03/26/us/digital-blackface-social-media-explainer-blake-cec/index.html

[4] Caranto Morford, A., & Ansloos, J. (2021). Indigenous sovereignty in digital territory: A qualitative study on land-based relations with #NativeTwitter. *AlterNative: An International Journal of Indigenous Peoples*, *17*(2), 293–305. https://doi.org/10.1177/11771801211019097

[5] Cashman, P. (2017,). Representing Latin American Indigeneity Online. *Mediático*. https://reframe.sussex.ac.uk/mediatico/2017/05/30/representing-latin-american-indigeneity-online/

[6] Das, D., & Semaan, B. (2022). Decolonial and Postcolonial Computing Research: A Scientometric Exploration. *Companion Computer Supported Cooperative Work and Social Computing*, 168–174. https://doi.org/10.1145/3500868.3559468

[7] De Castro Leal, D., Bustamante Duarte, A. M., Krüger, M., & Strohmayer, A.(2021). Into the Mine: Wicked Reflections on Decolonial Thinking and Technologies. *C&T '21: Proceedings of the 10th International Conference on Communities & Technologies - Wicked Problems in the Age of Tech*, 269–280. https://doi.org/10.1145/3461564.3461578

[8] Haimson, O. L., Delmonaco, D., Nie, P., & Wegner, A. (2021). Disproportionate Removals and Differing Content Moderation Experiences for Conservative, Transgender, and Black Social Media Users: Marginalization and Moderation Gray Areas. *Proceedings of the ACM on Human-Computer Interaction*, *5*(CSCW2), 1–35. https://doi.org/10.1145/3479610

[9] Lewis, J. & Fragnito, S. T. (2021, May 27) *Aboriginal Territories in Cyberspace*. https://www.culturalsurvival.org/publications/cultural-survival-quarterly/aboriginal-territories-cyberspace

[10] Olsen, T. A. (2018). This Word is (Not?) Very Exciting: Considering Intersectionality in Indigenous Studies. *NORA - Nordic Journal of Feminist and Gender Research*, *26*(3), 182–196. https://doi.org/10.1080/08038740.2018.1493534