Decolonization through Technology and Decolonization of Technology

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ABSTRACT

Through colonialism, external forces can alter and shift social structures and practices, thus, profoundly marginalizing the collective identities of local and indigenous populations. Decolonization is the undoing of the impacts of colonial domination. While sociotechnical systems (e.g., online platforms) can support the identity work of such marginalized communities, scholars have also discussed how these systems impose values and exhibit colonial impulses. By employing a mixed method approach, I am interested in understanding how the previously colonized Bengali people decolonize their identities on online platforms; how the designs of these platforms support and impede their identity work and expression–to develop decolonial designs for postcolonial cultural contexts.

CCS CONCEPTS

• **Human-centered computing** → **Human computer interaction (HCI)**; **Collaborative and social computing**.

KEYWORDS

Colonialism, Decolonization, Online spaces, Identity, Design

1 INTRODUCTION

1.1 Colonialism's Impact on Collective Identity

Colonialism is one of the primary ways influencing people's identities and ways of life. According to Fanon [10], colonists often viewed native and indigenous cultures as inferior to that of the colonial rulers. They thus worked to replace native and indigenous cultures with that of the colonial power–the process of cultural assimilation. Thus, external forces can alter and shift the social structures, norms, practices, economies, and thus the collective identities of local and indigenous populations in profound and long-lasting ways, preventing the colonized people from developing an independent sense of

identity. Scholars have identified various impacts of colonialism embedded in the minds of the people and the fabric of our world [23] in myriad ways, such as cultural erasure [15], colonial mentality [18], cultural supremacy [2], communal and regional conflicts [12].

1.2 Decolonization: Beyond Political Liberation

Decolonization in its most basic form is the national liberation, reawakening, the restoration of the nation to the people [9]. While many countries got independence from European colonization post-WWII, Linda Tuhiwai Smith [23] argues that we still live in a colonially structured world and impacts of the colonial past are prevalent in the lived experiences of local and indigenous people around the world. According to decolonial thinker Fanon, beyond the emergence of nation-states, the reformation of social, economic, and political structure reflecting the values of the previously colonized people is one of the critical objectives of decolonization [10]. Postcolonial scholars, emphasizing the cultural impacts of colonialism, have called for reclaiming narrative agency, challenging the dominant Western discourse of modernity through active interrogation and critical theoretical perspectives [2, 21].

1.3 Computing's Relation to Identity and Colonialism

Scholarship in CHI and CSCW has found that online community spaces provide opportunities for marginalized communities to negotiate and think about their identities [7, 22]. I am interested to understand how colonially marginalized communities can engage in the decolonization of their identities in online spaces. Existing works studying different marginalized communities have highlighted how these communities continue to experience harassment, exclusion, and other forms of harm through their engagements in such spaces [13, 16, 20]. These works motivate me to understand how these spaces can impede the decolonization process. Moreover, recent scholarships in HCI have highlighted that computing as a discipline has colonial values and impulses embedded within [1, 8]–often manifested through designs of computing systems and platforms [14]. Therefore, as I study the decolonization of identity in online spaces, it is crucial to understand how we, computing researchers, can decolonize these platforms.

2 RESEARCH QUESTIONS

While studying the impacts of colonization on the indigenous people, my research describes colonization as a long-term normalized crisis that has marginalized local and indigenous communities worldwide. I am interested in understanding how these colonially marginalized communities use online platforms to decolonize their identities.

Study 1: Local and indigenous communities' strategies for decolonization

- **RQ1:** How do the colonially marginalized communities work toward decolonizing their identity by participating in online discourses?
- **RQ2:** What ecology of sociotechnical systems do the colonially marginalized communities use to reconstruct and sustain their local and indigenous identity?

Scholars have highlighted how computing platforms systematically reify colonial values, white supremacy and reinforce the marginalization of black, indigenous, and people of color (BIPOC) communities [1, 6, 14]. Drawing on decolonial and postcolonial computing research together with identity research in social computing, the second part of my research seeks to understand how sociotechnical systems, especially online platforms, reflect colonial hierarchies.

Study 2: Sociotechnical systems' colonial impulses in the context of indigenous identity

- **RQ3:** How do sociotechnical systems support and impede colonially marginalized communities' identity performances and identity expressions?
- **RQ4:** How do colonial ideologies, perceptions, and influences get embedded in a platform's governance, moderation, and surveillance?

Based on the findings of the first two stages of my research, I want to design decolonial platforms–online spaces that prioritize the sociocultural values of local and indigenous communities. In my design research, I will consider social and technical (e.g., multimodality, automation) aspects.

Study 3: Designing Decolonial Platforms

- **RQ5:** What design decisions do we need to consider to support local and indigenous communities using sociotechnical platforms effectively?
- **RQ6:** How to design to mitigate the politics in both social and computational components of online platforms?

3 RESEARCH DESIGN

3.1 Sites of Study

In my research, I explore the identity decolonization work engaged by the Bengali people who comprise part of the larger Indian subcontinent, which has been a site of prolonged colonialism. I am interested in studying how the Bengalis use online platforms of different types (e.g., Q&A sites, social media) and modalities (e.g., textual, multimedia-based); and how these platform support and impede their decolonization discourse. I am considering the Q&A site Bengali Quora (BnQuora), video sharing platform YouTube, and the social media platform Facebook as sites for my research.

3.2 Methods

I plan to employ a mixed-method approach to answer my research questions on sociotechnical systems' decolonization and identity decolonization through those. First, to answer RQs 1, 3, and 4, I collected data from BnQuora using purposive and snowball sampling through quoras API [4]. Using trace ethnography [11, 19] as an inductive approach, I explored the collaborative decolonization strategies employed by Bengali users and their experiences of identity expression and performance on Quora. To understand Bengali users' decolonization strategies in content creation across different sociotechnical systems (RQ2), I have interviewed YouTube content creators and am currently analyzing the data. To answer RQ5, besides learning from the findings of my studies to answer RQ1 through RQ4, I will involve active users, moderators, and content creators of different online platforms in design. I plan to go through a systematic design process involving speculative designs, design workshops, and low-fidelity prototypes. To answer RQ6, I will take an explainable natural language processing (NLP) approach to understand how AI and NLP models can embody the values and power of those who develop these models and label the training datasets and how these can influence users' experiences with the accountability and automation of the platforms.

4 RESEARCH DIRECTIONS

4.1 Completed Works

4.1.1 Study 1: Decolonization as Collaborative Reclamation of Narrative Agency. I have collected Q&A threads from BnQuora in which the Bengali users talk about their identity in relation to their colonial past. Analyzing the data using a dual inductive and deductive approach by drawing in Poka Laenui's framework of the process of decolonization [17], I have explored the strategies undertaken by South Asian Bengalis on the platform BnQuora to engage in collaborative identity decolonization work to reclaim narrative agency [5]. To resist colonial trauma, the BnQuora users collectively conceptualize the impacts of colonization, mourn through speculative identity play, and dream for the reconfiguration of geo-political relationships, using the platform as an identity mirror. In that same study, I coined a concept called "postcolonial sociomateriality" and connected our work with concepts like narrative resilience and areas like crisis informatics.

4.1.2 Study 2: Governance Shaping a Platform's Identity. I collected Q&A threads from BnQuora in which the users talked about their experience of identity expression on the platform [3]. In drawing on a conceptual framework that brings together identity performativity, governance, content moderation, and surveillance, I have found that the sociotechnical mechanisms of governance that mediate people's performances on the BnQuora platform give rise to a kind of platform identity—particular identities are privileged while others are pushed to the margins based on linguistic practices, nationalities, and religious affiliations. I have illustrated this through the themes of moderation as prioritizing and creating hierarchies, collective surveillance as enforcing a majority identity, algorithmic coloniality, and staging as self-imprisonment.

4.2 Forthcoming Works

4.2.1 Study 3: Decolonial Content Creation on Video-based Platforms. To understand the decolonization of identity in a content creation-oriented sociotechnical platform (e.g., videos on YouTube),

I have interviewed 15 YouTubers from Bangladesh, India, and Pakistan who create videos on regional issues, cultural identity, and their relationship with their colonial past–topics related to decolonization work online. I am analyzing how their lived experiences have influenced their content creation activities, the different types of content they create, how these multimedia contents contribute to the decolonization of their and their audience's identity, how people use combinations of sociotechnical platforms (e.g., YouTube, Quora) to engage in the process and the challenges that content creators face in making content toward decolonial objectives.

4.2.2 Study 4: Designing Platforms towards Decolonization. I will draw upon prior scholarship in postcolonial and decolonial computing [1, 8, 14] as guiding frameworks to design sociotechnical platforms for the objective of decolonization appropriate to the Bengali cultural context. In addition to including the voices of users, moderators, and content creators in the design process to incorporate different functionalities and modalities, I will pay close attention to the politics and power dynamics embedded within the organizational scaffolds and different AI-based components of the system.

4.3 Expected Contribution

My research aims to expand the current literature on colonialism, decolonization, algorithmic governance, and identity work within HCI. Given the Bengali people's long history of being colonized, divided across communal and national boundaries, and underrepresented in computing, my work has significant potential to support their identity decolonization process and design of cultural context-aware sociotechnical systems. Moreover, my work can inform the studies on the decolonization of marginalized communities worldwide.

5 EXPECTATIONS FROM GROUP DOCTORAL CONSORTIUM

In my research, I seek to understand better how people from colonially marginalized communities can use sociotechnical systems like online platforms to decolonize their identities. By attending the GROUP Doctoral Consortium, I want to discuss my research with my peers to develop my research agenda and better define how this line of research can further develop in the field of CSCW and CHI. Additionally, from my experience, while the reviewers have recognized the process that I am studying as identity work, they have sometimes been reluctant to accept this as decolonization. This reluctance to accept the possibility of decolonizing identity raises conceptual concerns I would like to discuss with others and further push the broader scope of decolonization across different dimensions.

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