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SUBORDINATED BY THE ALGORITHM: EXPLORING DATA COLONIALISM AMONG LATIN AMERICAN CITIZENS

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Introduction

Data colonialism refers to the control of human life through the appropriation of data value (Couldry & Mejias, 2019). Regarding processes of data power such as data colonialism, van Dijck (2014) argues that datafication (infrastructures) and the circulation of dataisms (ideologies) together uphold new ways to exercise control (dataveillance) that have profound material implications. The resulting information systems—located in specific historical contexts of colonialism (Couldry & Mejias, 2021)—replicate, transform, and expand capitalist accumulation by dispossession (Thatcher, O’Sullivan & Mahmoudi, 2016). Together, these forces are theorized to reproduce colonialism through dataveillance of the global south by global data powers, with accompanying psychological and material impacts.

One of the most notorious effects of data colonialism is how its ideologies expand and reproduce power imbalances that arise from our contemporary economic and cultural ecosystems. Indeed, such processes result in the colonization of citizens’ everyday life, where “data-driven narratives guide our imaginaries and govern what it means to live in contemporary urban societies” (Ricaurte, 2019, p.352). In this context, it is necessary to better understand how data practices are lived by those most impacted by data colonialism—especially in the Global South (Milan & Treré, 2019). Moreover, it is necessary to examine the value of data colonialism as a theoretical approach to research the impacts of contemporary information systems. Accordingly, this paper seeks to explore data colonialism as a lens to better understand how citizens in Latin America experience the datafication of their everyday lives.

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Methodology

This paper presents findings from a collaboration with civic data organizations in five countries in Latin America that conducted citizen-centered evaluations of private sector use of personal data. Evaluations were carried out with various groups including platform workers in Colombia, migrants in Chile, and older adults in Uruguay. Following a participatory research approach (Reilly, 2020), these five projects shared an interest in the role and impacts of personal data but adjusted their focus to specific contexts and perspectives—for example, the banking system, pharmacies, or food delivery apps. Discussions of each case were then transcribed and analyzed following an open coding and constant comparison approach.

Findings

Findings show that several elements of data colonialism are present across the five cases. First, we find evidence of direct harm caused by the processes of value extraction through data—which include material and psychological dimensions. Material harm could take the form of limited access to health or financial services, fraud, harassment, and surveillance. Participants across the case study also evidenced psychological impacts due to their involvement with different information systems, as shown by a participant who claimed that "every time I press the 'accept terms and conditions' I feel like I'm being killed a little bit just for the sake of convenience" [Peru]. Additionally, there are cases where the impacts of data colonialism are seen across communities. Such was the case of communities who were targeted due to their nationalities, gender, or class, to name a few—as narrated by a participant in Chile, who recounted the risks of the "misinformed migrant population where they run many risks of being defrauded and harassed" due to the misuse of their personal data in the financial system.

Finally, a series of ideological shifts highlight the impacts of data colonialism in participants' everyday perception of and engagement with informational systems. In this sense, participants claim to perceive a shift in their role in society, where they are constantly overpowered by datafied systems. For example, an employee in Colombia said, "we are being subordinated through an algorithm." Such feeling of subordination is expanded through participants' perceived inability to access and fully understand the ways data practices work ("data is invisible to 99% of the population and companies are also taking advantage of this" [Uruguay]). Overall, this subordination results in a shared perception that citizens are increasingly immersed in a dehumanized society, where most of their interactions with public or private institutions are exclusively conducted through and directed by algorithms. Furthermore, they feel there are few opportunities to opt out of these systems, as "refusing to provide data requested by the system is to be left out of it" [Uruguay].

Yet the forces of data colonialism do not seem to encompass all data relations. Indeed, some elements are lacking in an analysis of citizens' experience through data

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colonialism—highlighting contextualized spaces of resistance, escape, or negotiation. First, there is a need to relocate and recenter agency in the discussion about data, both in terms of why citizens choose to establish data relations (e.g., "for a discount" [Peru]) and their ways of resistance/subversion (e.g., provide false or incomplete information [Paraguay]). Additionally, participants emphasize that not all data relations are the same—such as the case where they note to have no problem providing their data to doctors but not to their medical suppliers [Uruguay]). There is also the need to take a nuanced approach to understand the contexts where data colonialism occurs, as these processes and their impacts vary significantly across cases. Finally, participants show that various benefits of datafication promote their engagement with the information systems and should be considered when studying data colonialism, as shown by citizens who said that data collection and analysis allowed doctors better decision-making due to data available in medical history [Uruguay].

Conclusion

As shown by the results of this study, data colonialism is a valuable lens to understand how information systems harm communities and individuals. Indeed, findings highlight how data colonialism transforms citizens' imaginaries about their place in society and how they interact with different information systems. In this sense, this study underscores data colonialism's reach into both the material reality and our meaning-making processes (Couldry & Mejia, 2019; Ricaurte, 2019) with implications for autonomy, freedom, and wellbeing. However, results of this study also emphasize the need to integrate theoretical and methodological frameworks into data colonialism that emphasize how data relations processes are contextualized and how people/communities enact agency. Accordingly, it could be of value to integrate data colonialism with theoretical lenses that foreground an epistemological shift in the way we study data—that is, that prioritize efforts to re-center people's voices and experiences.

References

- Couldry, N., & Mejias, U. A. (2019). *The costs of connection: How Data Is Colonizing Human Life and Appropriating It for Capitalism*. Stanford University Press. <https://doi.org/10.1515/9781503609754>
- Couldry, N., & Mejias, U. A. (2021). The decolonial turn in data and technology research: What is at stake and where is it heading? *Information, Communication & Society*, 1–17. <https://doi.org/10.1080/1369118X.2021.1986102>
- Milan, S., & Treré, E. (2019). Big Data from the South(s): Beyond Data Universalism. *Television & New Media*, 20(4), 319–335.
- Reilly, K. (2020). The Challenge of Decolonizing Big Data through Citizen Data Audits. *BigDataSur*. <https://data-activism.net/2020/04/bigdatasur-the-challenge-of-decolonizing-big-data-through-citizen-data-audits-1-3/>

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Ricaurte, P. (2019). Data Epistemologies, The Coloniality of Power, and Resistance. *Television & New Media*, 20(4), 350–365.
<https://doi.org/10.1177/1527476419831640>

Thatcher, J., O'Sullivan, D., & Mahmoudi, D. (2016). Data colonialism through accumulation by dispossession: New metaphors for daily data. *Environment and Planning D: Society and Space*, 34(6), 990–1006.
<https://doi.org/10.1177/0263775816633195>

van Dijck, J. (2014). Datafication, dataism and dataveillance: Big Data between scientific paradigm and ideology. *Surveillance & Society*, 12(2), 197–208.
<https://doi.org/10.24908/ss.v12i2.4776>

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