

Algorithmic governmentality in Latin America: Sociotechnical imaginaries, neocolonial soft power, and authoritarianism

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Abstract

Latin America stands as one of the most unequal regions globally, where economic and social crises persist regardless of the ideological leanings of the ruling governments. Many countries in the region grapple with pervasive issues such as corruption, impunity, and a lack of adherence to the rule of law. In this context of generalized crisis, governments have turned to discourses of innovation and technological progress to justify their actions, advocating for the incorporation of automated systems into public administration. Algorithmic governmentality, the government of the social world through the algorithmic processing of data, emerges as a political rationality. Drawing from recent contributions in the theory of governmentality and critical data studies, our commentary centers on three critical dimensions: algorithmic governmentality as political rationality manifested in sociotechnical imaginaries; as an expression of soft power wielded by the U.S. government over the region; and the means by which regional governments automate social asymmetries and social control. This commentary delves into the intricate dynamics of algorithmic governmentality in Latin America, shedding light on its multifaceted implications for governance, democracy, and social structures in the region.

Keywords

Public policy, governance, Latin America, algorithms, governmentality, Automated Decision-Making

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After a decade of “continuous and systematic deterioration of democracy” (Latinobarómetro, 2023), Latin America is also becoming more vulnerable to authoritarianism. In this context of generalized crisis, governments and tech corporations have promoted automation as a way to foster efficiency and security in public administration. In this commentary, we delve into the construction of narratives surrounding technology within the political discourse and policies enacted by governments, as these serve as pivotal anchors in determining the extent to which democracy can be enhanced or restricted in the region.

Drawing from recent contributions in the theory of governmentality as a political rationality in the era of big data (Costa, 2022; Rouvroy, 2020; Rouvroy and Berns, 2013), our commentary is grounded in three critical premises.

First, we argue that algorithmic governmentality manifests in sociotechnical imaginaries that are built on historical experiences of coloniality to shape political discourses in

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the region. These imaginaries have worked to anchor technosolucionist approaches to some of the most pressing issues in Latin American society: security, economy, and technological development. Second, we suggest that algorithmic governmentality is a form of neocolonial soft power, “a means of obtaining desired outcomes,” without coercion (Nye, 2023: 49) that, according to Costa, is operating at two scales: a macro-macro scale (at the planetary level), “involving the relationships between major corporations and macro-political entities (corporations associated with significant states, not detached from them, along with political entities) and less powerful states”; and a second scale “concerning the relationships between states and citizens” (Costa, 2023). Finally, we contend that, at the state-citizen scale, algorithmic governmentality is the means by which regional governments automate social asymmetries and social control. One of the most clear examples of this is the implementation of public policies for social welfare and security.

In the articulation of the macro-macro scale, and the scale between the states and the citizens, algorithmic governmentality curtails the self-governance capacity and sovereignty of countries in the region. Considering the historical context and the persistent risk of authoritarianism, the integration of algorithmic decision-making and automation into public administration can become a threat to democracy. The implementation of policies involving algorithmic systems in the region often takes place in contexts of insufficient regulatory frameworks, sometimes during states of exception, and within settings marked by corruption, impunity, violence, inequality, and negligence. These three dimensions of algorithmic governmentality have profound implications since they can potentially pave the way for authoritarianism to increase its ability to monitor and control populations.

Algorithmic governmentality through sociotechnical imaginaries: Colonial legacies and political U.S. interventions

Latin America and the Caribbean is a complex and diverse region. However, despite this diversity, there is a common imaginary that emerges from a shared colonial past, historical political interventions of the United States, and the ongoing experience of coloniality.¹ The intertwined historical legacies and contemporary dependencies have a profound influence on the sociotechnical imaginaries—the collective visions, shared understanding and expectations of technology and society (Jasanoff and Kim, 2015)—of Latin American governments, shaping the formulation and implementation of public policies rooted in these hegemonic sociotechnical visions.

Historically, Latin America has been central to U.S. geopolitical interests, both as a market, as a terrain of political and military influence (Chomsky, 1993), and as a site for

experimenting with neoliberal models and extraterritorial administration (Grandin, 2006: 2). Through multifaceted and sustained interventions, the United States has maintained hard and soft power over the region (Nye, 2023).

These interventions are firmly anchored in neoliberalism and are a lasting expression of coloniality. Quijano’s (2011) concept of the coloniality of power² implies the control over (a) nature, its resources, and products, (b) labor, its resources, and products, (c) sex, gender, and the body, (d) subjectivity and intersubjective relations, communication, knowledge, imaginaries, and sensibility, (e) institutions, systems of authority, and violence. Coloniality is tied to the idea of modernity as the prevailing narrative, resulting in development being equated with economic growth and scientific and technological progress, as defined by Western narratives. This hegemonic perspective on development is closely tied to technological advancement. Automation enables these forms of control and reproduces technosolucionist AI imaginaries that have become the model of governance in the region. These imaginaries are the result of various mechanisms that involve direct political, technical, and economic interventions.

Ideological and economic expansion is tied to technological infrastructure, policies and geo/political agendas (DeNardis, 2014). Organizations such as the U.S. Agency for International Development (USAID) and the Inter-American Development Bank (IDB) are entities created to shape development in Latin American countries in ways that favor U.S. political and economic interests. For example, some of these agencies have sought to expand digital connectivity in remote communities by providing funding to organizations and local governments (USAID, 2023). These strategies, along with national government policies, explain why the infrastructure of big tech companies such as Google or Amazon is prevalent in the region (Rosa and Hauge, 2022). In the case of Mexico and Central America, these strategies have also implied creating conditions to take advantage of nearshoring, such as new tax incentives for projects in sectors such as electronics (Arena Pública, 2023; Siles et al., 2016). Through national agencies, foundations, and tech corporate grants, the U.S. government, influential political actors, the financial sector, and tech corporations, have tried not only to shape technological development, but also to influence political, legislative, institutional, and digital rights agendas. The Snowden affair provided evidence of how the U.S. government acts in complicity with corporations (Greenwald 2013) to operate an interventionist agenda that involves the surveillance of political leaders.

These economic, political, and technological expansionist strategies are shaping the sociotechnical imaginaries of regional governments, and in turn, these imaginaries help expand such strategies. In the recent history of Latin America, alternative technological projects guided by non-market imaginaries have often been obscured or impeded.

This was evident in instances like the fate of Cybersyn in Chile (Medina, 2011) or the technological sovereignty policies pursued by leftist governments in countries such as Ecuador or Venezuela.³ Some enduring cultural and societal legacies of technological sovereignty policies, deployed by the Worker's Party in Brazil and the Frente Amplio in Uruguay, can still be observed today.⁴

The persistence of current hegemonic technological imaginaries wrapped up in the Silicon Valley ethos explains why the narratives around artificial intelligence and big data have been rapidly adopted by Latin American governments of the left and the right, as well as universities, companies, and civil society organizations. The notion that these emerging technologies, as well as datafication processes, are drivers of economic development, creating new forms of (data-based) value that will make governance more efficient, secure, and democratic, remains a powerful trope. These imaginaries demand that governments allow foreign tech companies to operate in their countries without much control or regulation, under the premise that they will improve the lives of citizens “for free.” A telling example was the Loon project, which aimed to provide Internet access to rural and remote areas using high-altitude balloons at 18 to 25 km in the stratosphere to create an aerial high-speed wireless network (X, 2023).

This outcome stems from the absence of public infrastructure investment and a comprehensive commitment to public interest technologies, as well as the insufficient development of education systems geared toward nurturing a strong talent pool to support a sovereign technological project. Governments are forced to prioritize acquiring Infrastructure as a Service and Software as a Service⁵ to address immediate requirements, allowing foreign corporations to control the market and extract data consolidating their competitive position. How these sociotechnical imaginaries are transformed into political rationality and a form of governance is discussed in the next section.

Algorithmic governmentality as neocolonial soft power

Building on these prevailing sociotechnical imaginaries, Latin America has embraced the project of automating society (Stiegler, 2016) as a political rationality. Rouvroy and Berns (2013) coined the term algorithmic governmentality to show how the norms entailed in knowledge production are translated into a politics of prediction (Aradau and Blanke, 2016) in automated societies. According to the authors, algorithmic governmentality is the government of the social world through the algorithmic processing of data. This implies that politics, law, and social norms are enacted through algorithmic operations.

As we already discussed, the use of technology as an infrastructural arm of politics is not new. According to Barreneche et al. (2021), state informatization through

direct technological transfer has a long history in Latin America. Tied to the dominant neoliberal economic model, it has operated as a concrete form of neocolonial power that rearranges the international division of labor based on cognitive-informational terms, unequal infrastructure development, and new geopolitical balances. Thus, algorithmic governmentality not only materializes this form of automated power but amplifies it by reinforcing the region's knowledge and technological dependence that keeps reproducing social asymmetries.

As a soft power mechanism, these intersections reproduce the subordinate geopolitical position of Latin America to the United States through technologies, processes, and infrastructures. Although this has occurred at the level of individual countries, it is largely a regional issue that shares common characteristics: extractivist economic models; unfair labor practices; technical services growing as markets; the lack of a regional approach to data protection; corporate lobbies promoting the adoption of soft laws; institutional weakness; and dependence on foreign technologies. Infrastructural asymmetry widens the divide between the Global North and the Global South (Rosa and Hauge, 2022).

Within countries, algorithmic governmentality also functions as a mechanism to maintain an unbalanced social order through automation. To make this case, we next examine how these systems are being used in current political scenarios in the region.

Algorithmic governmentality: Automating inequality and authoritarianism

The integration of automated systems into public administration, particularly in the area of Automated Decision-Making (ADM) for welfare and security, requires a comprehensive examination as part of the broader framework of algorithmic governmentality. These systems serve to standardize and normalize social categorizations (Barreneche et al., 2021), perpetuate societal norms, and automate social control. ADM initiatives in Latin America have helped test and implement projects that are “likely to cause or propagate harm and discrimination based on gender and all its intersections of race, class, sexuality, age, territory” (Varon and Peña, 2021). We discuss the cases of childhood, gender, and security to illustrate the problematic issues that characterize the implementation of ADM in Latin America.

Public policies subject children to government data collection and surveillance. For example, social programs like *Criança Feliz* in Brazil and *Alerta Niñez* in Chile were developed by companies like Microsoft and targeted children in vulnerable conditions. Valderrama (2021: 8) argues that the study of predictive analytics for social policy in Chile with the program *Alerta Niñez*—aimed at

predicting social risk among adolescents in low-income areas by determining their probability of committing a crime—shows the risk of “inaccurate predictions, lack of transparency in their operation, use of data without effective consent, leakage of personal data, stigmatization of vulnerable populations, deepening a neoliberal rationality in which social problems are individualized or social services are prescribed.”

Another example is the case of gender inequalities. As Castro and López (2021: 9) note in the case of the welfare program *Families in Action* in Colombia, “a complex web of surveillance and data exploitation [...] ends up limiting the autonomy of women in poverty through the imposition of gender stereotypes, and the autonomy of women who are poor and dependent on welfare.” This social classification includes not only the definition of who should be considered poor by the state, but also the values associated with what a family should be and the role of mothers as formal caregivers. Embedded within social policy, ADM systems encompass datafication and surveillance, reflecting deeply ingrained societal norms related to race, gender, class, age, and ability classification. Automated social policies define who is most likely to become a delinquent, or who needs to be protected, reinforcing social stereotypes associated with children, youth, women, and low-income people, thus reproducing inequality (Barreneche et al., 2021; Eubanks, 2018; López and Castañeda, 2020; Masiero and Das, 2019).

Technodeterministic approaches that seek to address violence by automating national security lie at the heart of new forms of authoritarianism. This trend is pervasive in contemporary political discourse across Latin America, transcending the ideological orientations of different governments. In 2023 in Mexico, Marcelo Ebrard, aspiring presidential candidate for the leftist Morena party, presented a security plan called “Plan ANGEL,” an acronym for Advanced Geolocation and Security Norms. The campaign slogan was “We will have the safest Mexico in history.” Ebrard explained:

I have acquired, from all around the world, the eight most advanced security technologies: facial recognition in public areas, pinpoint identifiers of the exact location where a weapon was fired, weapon detectors, morphological recognition of criminals based on their walking patterns, tracking and vehicle tracing systems, drones that tag and pursue criminals, intelligent cameras integrated into the components of the National Guard. (Ebrard, 2023)

This political discourse, which justifies surveillance and discrimination as part of the search for efficiency and security, also characterizes other political figures in the region, such as the presidents of Ecuador, Daniel Noboa, and Argentina, Javier Milei, elected in 2023 as figures that represent the extreme right ideology. However, Nayib

Bukele in El Salvador, the most popular president in Latin America, embodies the convergence of a techno-utopia with authoritarian social control (Marroquín, 2023; Salas and Siles, 2023). National governments themselves use technologies to influence the political agenda, for example by using bots on social networks, or spyware such as Pegasus to monitor their opponents, journalists, defenders, and activists, as in the case of Mexico (R3D, 2023).

Conclusion

Grounded in contemporary insights from governmentality theory and critical data studies, this commentary has made three pivotal arguments. Firstly, it explored algorithmic governmentality as a political rationality that is evident in sociotechnical imaginaries held by governments and corporations in Latin America. Secondly, it delved into how algorithmic governmentality represents a form of soft power exerted by U.S. interests across the region. Lastly, it examined how the use of algorithmic governmentality by regional governments can exacerbate and reinforce social asymmetries and surveillance of their populations.

By discussing these three issues, we have argued that algorithmic governmentality is contributing to reproducing and expanding neocolonial policies, historical legacies, and social asymmetries that could further harm democracy and social justice in Latin America. The automation of the state in contexts where democratic quality and institutional solidity are quite fragile poses additional societal risks. When automation intersects with neoliberalism, authoritarianism, and corruption, democracy can potentially be undermined. As Barreneche et al. (2021) show, corruption and manipulation of these systems are functional for advancing data colonialism (The Tierra Común Network, 2023), amplifying an asymmetric social order.

As the Latin American case reveals, algorithmic governmentality is embedded within the set of wider geopolitical and economic relations driven by sociotechnical imaginaries, political rationality, and a form of governance that often reflects more political expectations than actual possibilities. This political rationality is anchored in policies framed around the tension between security, development, and innovation. But whereas Rouvroy and Berns (2013) envisioned algorithmic governmentality in largely neutral terms, we argued that in Latin America it further legitimizes authoritarian and discriminatory regimes by reinforcing the notion that certain people (immigrants, young people, women, and low-income people) pose a major risk. Thus, algorithmic governmentality helps automating state control and surveillance to maintain a social order in which vulnerable and marginalized groups are constructed as dangerous. State automation must thus be seen as part of a broader geopolitical interest that is materialized through local political elites that reproduce algorithmic governmentality in the nation-states of the region.


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Notes

1. The idea of Latin America and the Caribbean itself is a colonial construction (Mignolo, 2009) and a disputed imaginary, specially for the nations and communities that have been historically subordinated to the state internal colonization (González Casanova, 2003). However, this construction still remains a powerful force driving current sociopolitical discourses.
2. Drawing from feminist decolonial theorists, the sex-gender system and the body are an expansion of Quijano's understanding of sex.
3. In Ecuador, Executive Decree No. 1014 of 10 April 2008 mandated the use of Free Software in the computer systems and equipment of the public administration. It also developed a public software forge called MINKA. In Venezuela, Article 1 of Presidential Decree 3390 of 2004 establishes that public entities will use free software as a priority in their computer systems, projects and services.
<https://web.gestiondocumental.gob.ec/wp-content/uploads/2020/08/Decreto-Ejecutivo-N-1014.pdf>
4. Lula Da Silva's national government was the first executive worldwide to carry out a massive deployment of FOSS in public administration in his first mandate. In Uruguay, Law 19.179: Free Software and Open Formats in the state was approved in 2013, which declares that the state shall give preference to investment and development in free software over nonfree software, except when it does not meet the necessary technical needs.<https://www.gub.uy/presidencia/institucional/normativa/ley-n-19179-fecha-27122013-regulacion-del-formato-para-procesamiento>
5. Amazon Web Services has maintained a steady 33% market share in the global cloud infrastructure services market since 2017, while Microsoft Azure and Google Cloud hold 22% and 10% market shares, respectively. These cloud infrastructure services, categorized as Infrastructure as a Service (IaaS), represent one of the three fundamental service models in the cloud computing market, alongside Platform as a Service (PaaS) and Software as a Service (SaaS) (Vailshery, 2023).

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