



Urban Floods, Clientelism, and the Political Ecology of the State in Latin America

Robert Coates & Anja Nygren

To cite this article: Robert Coates & Anja Nygren (2020): Urban Floods, Clientelism, and the Political Ecology of the State in Latin America, *Annals of the American Association of Geographers*, DOI: [10.1080/24694452.2019.1701977](https://doi.org/10.1080/24694452.2019.1701977)

To link to this article: <https://doi.org/10.1080/24694452.2019.1701977>



© 2020 The Author(s). Published with license by Taylor & Francis



Published online: 04 Feb 2020.



Submit your article to this journal [↗](#)



Article views: 32



View related articles [↗](#)



View Crossmark data [↗](#)

Urban Floods, Clientelism, and the Political Ecology of the State in Latin America

Robert Coates* and Anja Nygren†

**Sociology of Development and Change Group, Wageningen Universiteit*

†*Department of Development Studies, University of Helsinki*

In this article, we examine the coproduction of hazardous urban space and new formations of clientelist state governance. Work on hazards and vulnerability frequently demonstrates how hazardous urban spaces are produced, but a critical understanding of state power is often left untouched. Correspondingly, scholars analyzing clientelism and state formation habitually discuss the configuration of new forms of governance and the consolidation of state power without intersecting these processes with the production of vulnerabilities and “hazardous nature.” Drawing on ethnographic research in urban areas susceptible to serious floods and landslides in Brazil and Mexico, we argue that clientelist governance and state making, including complex forms of political favoritism, create urban hazardscapes, as much as the management of urban disasters acts to reconfigure patron–client relations within “hazardstates.” The article contributes to an emerging body of literature analyzing linkages between urban environmental governance, state authority, and the reproduction of vulnerability. *Key Words:* *clientelism, hazardscapes, Latin America, political ecology, the state, urban floods.*

在本文中，我们考察了危险城市空间的附加产生以及新形式的侍从主义国家治理。很多关于危险和脆弱性的文章都展示了危险的城市空间是如何产生的，但是这些作品往往没有触及对国家权力的批判性理解。相应地，分析侍从主义和国家形成的学者会习惯性讨论新治理形式的配置与国家权力的巩固，但没有将这些过程与弱点与“危险性质”进行交叉联系。根据对巴西和墨西哥易受严重洪水和山体滑坡影响的城市地区进行的人种学研究，我们认为，侍从主义治理和国家决策（包括复杂形式的政治偏袒）制造了城市危险现象，正如城市灾害管理会在“危险地带”内重塑侍从关系。本文有助于构建一个分析城市环境治理、国家权威和脆弱性再生之间联系的全新文献体系。关键词：侍从主义、危险现象、拉丁美洲、政治生态、国家、城市洪水。

Este artículo está dedicado a examinar la coproducción de espacio urbano peligroso y las nuevas formaciones de gobernanza estatal clientelista. Con frecuencia el trabajo sobre riesgos y vulnerabilidad demuestra cómo se producen los espacios urbanos peligrosos, pero una comprensión crítica del poder del estado a menudo se deja sin considerar. Al respecto, cuando los eruditos analizan el clientelismo y la formación del estado habitualmente discuten la configuración de nuevas formas de gobernanza y la consolidación del poder del estado sin que asocien estos procesos con la producción de vulnerabilidades y “naturaleza peligrosa”. Con base en investigación etnográfica en áreas urbanas susceptibles a inundaciones de cuidado y deslizamientos en Brasil y México, sostenemos que la gobernanza clientelista y la construcción de estado, incluyendo formas complejas de favoritismo político, crean paisajes de peligro urbanos por más que el manejo de los desastres urbanos actúe para reconfigurar las relaciones de patrón–cliente dentro de “estados-peligro”. El artículo contribuye a un cuerpo emergente de literatura que analiza los vínculos entre la gobernanza ambiental urbana, la autoridad estatal y la reproducción de vulnerabilidad. *Palabras clave:* *América Latina, clientelismo, ecología política, el estado, inundaciones urbanas, paisajes de peligro.*

Relatively little analysis has taken place that links clientelist forms of governance with the production of hazardous nature. Indeed, the two issues seemingly grate when placed together:

Clientelism provokes imagery of an underhand political exchange of favors, assumed in mainstream politics to be swept aside as democratic rules of good governance advance; nature, on the other hand,

engenders a sense of that outside human society— heavy rainfall or a catastrophic flood that comes to disturb an established (urban) population. Both concepts have been highly questioned in recent political-ecological work on urban risk governance. Despite clientelism involving practices related to access and control of resources, and social natures addressing the politics of state territorial power, scholars in geography and related fields have been slow to critically explore the linkages between state power and production of environmental hazards and vulnerabilities in neoliberal(izing) urban contexts.

In this article, we contribute to filling this gap by drawing on our long-term research in urban areas susceptible to serious floods and landslides in Brazil and Mexico. Recent political-ecological research has stressed the interrelationships between the production of space, political positioning, and environmental vulnerability, and yet the modes through which the state engages with inhabitants residing in hazardous environments are rarely analyzed in detail. We argue that an understanding of the production of hazardous urban spaces and socially differentiated vulnerabilities necessitates a focus on the intricacies and informalities through which the state acts and manifests its power. An analysis of shifting forms of state making and clientelist networking helps to understand the everyday encounters of the state and heterogeneous groups of residents, who seek to negotiate their place and reformulate their positionality within hazardous living conditions and volatile politics in segregated cities in the Global South.

We engage here with (urban) political ecologies of hazards and vulnerability alongside those of the state and clientelism. Critical-geographic research has largely moved away from residualist notions of clientelism—viewed as an unfortunate hangover of paternalist rule—toward analyzing multifaceted configurations of clientelist relationships within shifting sociopolitical circumstances, including social segregation, gentrification, neoliberalizing governance, and struggles for the right to the city (Gandy 2008; Roy 2009; Ghertner 2011; Hilgers 2011; Gupta 2012; Harris 2012). Moreover, scholars focusing on the ethnography of the state have analyzed the capillary effects of state power and residents' day-to-day negotiations in formal and informal arenas of political representation, based around shifting positionality and differentiated understanding of how to play brokers' games (Das 2011; Auyero 2012; Meehan

2013; Caldeira 2015; Sletto and Nygren 2015). We engage with these interpretations of everyday politics, simultaneously arguing for a stronger focus on broader scalar politics and on the manifold materialities within and through which these political negotiations and contestations take place.

Urban flood hazards fit well with this concern for environmental vulnerabilities alongside changing modes of governance, and yet approaches to environmental hazards have often interpreted vulnerability in terms of the incapability of the state to mitigate risks and alleviate urban poverty (cf. Maricato 2003; Pelling 2003; Collins 2009). Paying scant attention to clientelist practices, or multifaceted negotiations between governmental, private sector, and civil-society actors, the tendency has been to view clientelism normatively in the same bracket as illegality, informality, and unruliness. In contrast, we are interested in shifting forms of state making and clientelism, and strategies of urban policy and planning that lead to aggregated floods and landslides. Our study intersects with literature on hazardscapes, probing the role of clientelist governance and technocratic knowledge in producing hazardous and socially segregated urban environments (Scott 1998; Mustafa 2005; Collins 2009), simultaneously illustrating how engagement with environmental hazards reshapes clientelist relations and the role of the state in environmental governance. To avoid claims of institutionally coherent and monolithic state power, we explore how multifaceted interventions aimed at mitigating volatile natural forces are implemented and contested through actual forms of clientelist governing and political networking (Robbins 2008; Harris 2017; Sud 2017). Given recent theoretical interest in political ecologies of governance and ethnographies of the state, our study contributes to a developing literature linking disasters, state power, neoliberal governance, and socioecological interactions in hazardous urban environments (Bakker 2012; Zeiderman 2012; Robertson 2015; Swyngedouw 2015; Nygren 2018; Coates 2019).

We present here two cases—the city of Nova Friburgo in Brazil and the city of Villahermosa in Mexico—as representative landscapes to explore wider interlinkages between urban governance, serious floods, and clientelist processes experienced across much of Latin America and beyond. Despite contextual variations, these two cases have in common the strategic implantation of urban modernity

into places highly susceptible to flood hazards. In both cities, the economic growth of the last few decades has led to an increasingly unequal distribution of environmental hazards and state responses. Whereas the poor remain most vulnerable to state-led resettlements, infrastructural engineering is delivered overwhelmingly for the wealthy. Through careful analysis of these two cases, we show how the (re)emergence of clientelist politics is linked to broader intertwinements of repressive state making, populist calls for sociospatial ordering, and neoliberal forms of governance (McCarthy 2019).

In the next section, we discuss relevant literature on hazards, clientelism, and the political ecology of the state within the context of neoliberalizing governance, and with attention to the gaps identified for theoretical contribution. We then explain our empirical cases from Brazil and Mexico and the methodologies used, before we analyze floods and landslides as arenas of clientelist state making and governance. Next we explain floods and landslides as grounds where hazardscapes and hazardstates are intertwined. We conclude by linking the political ecology of hazards and vulnerabilities with the political ecology of state making through clientelist practices.

Theoretical Approaches to Hazards and Clientelist Governance

Political ecology has for some time sought to problematize the interrelationships between governance, state making, and management of hazardous environments. By drawing on the idea of the state as an effect of engaged policies and practices, including construction of flood-protection infrastructures and enforcement of human relocations, it has placed emphasis on governance of “unruly” environments and “undisciplined” people as an arena to legitimize state authority (Harris 2012; Bridge 2014; Meehan and Molden 2015; Swyngedouw 2015). In the following analysis, we contribute to this literature by defetishizing the state as an established set of institutions acting over nature. Instead, we show how the production and control of nature—including the socially differentiated distribution of environmental benefits and burdens—is key to understanding state making (Robertson 2015; Loftus 2018; Mullenite 2019). In our view, drastic transformations in waterscapes produce complicated socioecological

conditions and unforeseen risks that promote new justifications for repeated state interventions. These socioecological linkages cast the state as both producer and product of such engagements. The ability to problematize certain environments and populations as requiring corrective interventions marks the critical boundary work indicating which areas and citizens are at the center of state interest (Zeiderman 2012; Harris 2017). Intensified contact with these unruly areas consolidates state power and legitimizes a particular sociospatial order, interweaving the very notion of stateness with the governance of environments and populations considered hazardous and undisciplined.

We take these dynamics of state making seriously as we examine the role of clientelist practices in the production and control of flood and landslide hazardscapes in urban Latin America. Our contention is that rather than a signifier of the state’s inability to address the risks and vulnerabilities of hazardous environments, clientelist engagements act as relational boundary markers, or techniques of governance (Foucault 2007) through which the state consolidates its visible and concealed power vis-à-vis volatile environments and unruly citizens. As Ioris (2012) pointed out, the management of urban water problems implicates socially differentiated service delivery through which powerful groups negotiate their position vis-à-vis service providers to assert their privileges. Although the state presents itself as acting cohesively for the environmental safety of all citizens, an ethnographic analysis of hazard governance reveals a much more fragmented sociopolitical fabric (Harris 2012; Hilgers 2012).

Clientelism, nonetheless, can appear nebulous as a descriptor of political behavior, reciting conventional clichés of an ungovernable South and ideal-state North, which probably explains the limited engagement of geographical-oriented scholarship with the concept. Loosely defined around state officials’ providing small benefits to the poor in exchange for political legitimacy, clientelism has conventionally been perceived in opposition to equitable citizenship (Holston 2011). Viewed essentially as a residue of authoritarianism, it has been thought to wither away in progress from state paternalism to liberal democracy (Fox 1994; Carvalho 1997).

Here we avoid such residualistic views, and instead focus on the relations between environmental and institutional factors that reproduce the state

through clientelist interactions (Guarneros-Meza 2009; Sud 2017). We view these arrangements as ambiguous responses to shifting material and institutional conditions, including modified interpretations of what the state should represent politically and economically under neoliberalizing governance (Hilgers 2011; Bridge 2014). Moreover, whereas conventional approaches view clientelism only as authorities' provision of favors to the marginalized, we argue that it is constituted by exchanges of diverse benefits and burdens among heterogeneous actors, often in unequal encounters. Following Harvey (2005), we consider clientelist processes within neoliberalism as powerful, if highly selective, modes of governmental intervention in favor of elite politicians and capitalist markets. In recent institutional changes toward public sector privatization, where loosely coordinated authorities implement market-based forms of urban planning, environmental regulation, service delivery, and flood prevention, socially differentiated exposure to environmental risks has augmented. Simultaneously, neoliberal discourses of self-responsibilization urge the vulnerable to take an active role in mitigating hazards through individualized adaptation strategies (Nygren 2016). River canalizations and containment walls protect privileged neighborhoods from disastrous floods, whereas the poor strive to survive in environmentally hazardous and politically volatile circumstances.

We also assert the capacity of clientelism to act as boundary marker in the state's problematization of environments and populations at risk, showing how residents acquiesce to, reconfigure, and contest patron–client relationships (Meehan 2014; Nygren 2018). This point is often missing from historical analyses of clientelism that fall back on cultural interpretations within a priori states. Nonetheless, understanding historical trajectories is imperative. Scholars of Latin American politics discuss clientelism's roots in colonial *latifundia*, labored over by slaves and impoverished peasants within the global production of sugar, coffee, minerals, and other commodities. As Hilgers (2011) pointed out, “in return for access to needed resources, the peasant provided labor, gifts, deference, shows of affection, and political support to the patron, enhancing the latter's status” (570). Leal's ([1949] 1986) haunting study of multiscale politics over colonial socioeconomic order presented a landmark in understanding how the modern state in Latin America emerged and

functions, by explaining the deceptions and dependencies characterizing the lives of those in the margins. Plantation owners' “nature blaming” discourses enabled the use of environmental hazards to justify paternalistic relationships and peasant subservience. In numerous contexts, plantation owners marshaled workers' bodies, minds, and spirits to support their own political-economic endeavors (Wolf and Mintz 1957; Scott 1972).

Recent scholarship on clientelism in Latin America has largely focused on explaining the survival of clientelist networks through urbanizations and third-wave democratizations following region-wide developmentalist authoritarianism. The concept of *obrismo*, widely used in Latin American studies, refers to the games played by stakeholders attempting to gain authority to implement an *obra* (infrastructural project), and to the power that public officials and brokers wield in exchange for votes and political support from the target groups. Diniz (1982) explained clientelism as a political strategy of elite competition, where multiple scales of governance and vast urban constituencies are drawn together through numerous promises of obras or services.

Seen from the clients' side, Auyero and Swistun (2009) and Hilgers (2011) emphasized reciprocal processes of bargaining, in which patrons are not all-powerful, but depend on shifting grounds of political recognition by target groups, who can play a particular political candidate off against another in multifaceted negotiations (Holston 2011). Simultaneously, tacit threats of violence and subtle insinuations about withdrawal of benefits can reinforce existing patron–client relationships, depending on the exchange in question and whether more favorably viewed patrons are accessible. Regardless of being often oppressive, clientelist relations are the key means through which people gain access to resources and services, including public-sector jobs, education bursaries, piped water, land for house building, and levees against disastrous floods within hierarchical institutional arrangements (Auyero 2012).

Although these ideas provide us with important insights into the political dimensions of clientelism, they still demand deeper analysis of cognate environmental and sociospatial underpinnings. By focusing on the delivery of services to marginalized groups through routinized networks of “client-ship” over citizenship (Taylor 2004)—or by favor rather than by right—the emphasis has been on the

(mal)functioning of institutional procedures and the political subjectivities they engender. According to Shefner (2012), understanding the rise of informal political and economic engagements requires detailed examination of the resources actors actually wield within changing state capabilities under neoliberalizing governance. Shefner emphasizes the embeddedness of social institutions and the need to avoid separating politics from material and economic outcomes. Neoliberal discourses of public sectors as corrupt, costly, and inefficient are closely linked to the uneven distribution of access to resources and exposure to hazards across urban populations. Neoliberalizing governance and associated privatizations partly explain surges in more arbitrary forms of urban brokerage.

Shefner's (2012) analysis helps to problematize "what is politics for" (41); that is, the fact that without resources to allocate or bargain over, state institutions—or indeed the state itself—would cease to exist. Moreover, clientelist state governance has a salient, if shifting role also within multifaceted forms of neoliberalizing governance. This notion urges us toward comprehensive analyses of the actual impacts of neoliberalization on state institutions and political arrangements. For several scholars, the personalized structures of power evident in clientelist networks demonstrate repeated private control over the public, and a mix of authoritarian legacies with hybrid regimes of neoliberal governance (Collier 2009; Müller 2016; Nygren 2016). Examining urban governance in Mexico, Guarneros-Meza (2009) argued that shifting forms of clientelism and neoliberalization have both shaped and been contingent on existing state particularities, especially during decentralizations from federal to state and municipal authorities. Civil society mobilizations across Latin America have clamored for more inclusive local governance, and yet "local bosses, state governors and municipal presidents ... perform as if they owned their posts without being accountable to the state congress, municipal council or to the general public" (Guarneros-Meza 2009, 467). As campaigns to weaken state interventions have dovetailed with neoliberal strategies to stimulate economic efficiency, instead of the reduced role of the state, the state has, in essence, been reconfigured through neoliberal governance (Sud 2017). Tightened public–private partnerships in urban service provision of water, sewage, education, health care, and flood prevention have overridden participatory forms of

decision making and promoted hidden forms of clientelist behavior. On the other hand, rapid changes in urban service delivery have forced local elites to increasingly compete over and horse-trade the loyal bases of their political support (Lund 2016; Coates and Garmany 2017).

These trends illustrate the critical role of clientelist relations in current state making as it relates to rationalities of urban environmental risk protection and social vulnerabilization. From construction of piped water and drainage canals to flood-prevention levees and containment walls, hazardous urban expansion and risk-reduction strategies are mediated and implemented through clientelist political relationships that act as conduits and schemas for the legitimization of state authority (Rodina and Harris 2016; Anand 2017; Kelly-Richards and Banister 2017; Mullenite 2019). Given intensified urbanization in Latin America, as elsewhere in the Global South, state power has become acutely connected to the "conduct of conduct" of urban constituents (Foucault 2007, 193) via the management of a host of hazards in densely populated urban spaces. Our work on socially differentiated responses to urban floods and landslides in Brazil and Mexico is testament to how such engagements become central to the state as both an idea and a practice. Governmental authorities promote their commissioning of flood infrastructures as evidence of their quick response in the face of disaster and their role as accountable civic protectors; yet state accountability is mediated through clientelist networks that reinforce urban environmental risks that hazardous state policies have largely created. Whether or not accountable protection is realized, risk management acts as a crucial mechanism to consolidate state power.

Researching Clientelism in Flood-Prone Cities

Our research, undertaken in Brazil and Mexico between 2011 and 2018, fits into recent work exploring the political-ecological dynamics of floods and landslides in Latin America, the world's most urbanized region (World Bank 2019). Indeed, the processes through which urbanization takes place has become the central point of our enquiry given the unevenly distributed efforts to shore up, manage, and displace urban dwellers in continuing (peri)urban expansion. Although interested in hazards and

disasters and how vulnerability to such phenomena accumulates, we invert this more conventional focus through attending to the politics of hazardous spaces. How do people come to live in the settlements that become the front line of flood and landslide exposure? How do residents and (nominally) state actors engage with these neighborhoods and attempt to deal with hazards? Through this emphasis on political-ecological processes, we seek to unpack how the formulation of state cohesiveness is achieved through an engagement with material practice.

As political ecologists of urban disasters and the state, we employ ethnographic methods to understand contextual specificities surrounding people's uneven exposure to volatile natures; that is, latent conflicts concerning inequalities in flood-risk governance, including who receives interventions and in what form (Rademacher 2015). Participant observations and the sourcing of oral histories enable us to examine the city as a process rather than completed phenomenon, and to link everyday life to institutional governance across multiple scales. We are also interested in exploring the biophysical circumstances of urban spaces to understand "the multiple social and natural interactions upon which [socioenvironmental problems] are grounded" (Little 2007, 89). This requires a multi-actor approach to understand the connections between poorer and wealthier social groups, as well as with intervening governmental, private, and civil-society actors. Each group's claims are triangulated and cross-checked through interviews, participant observation, historical memorization, and exploration of biophysical conditions. In a certain way these ethnographic extensions are analogous—or add extra dimensions—to Burawoy's (2009) extended case methodology. Taking seriously the idea that local politics and ecologies are in no way autonomous and that sociospatial scales are not inherent, we amplify the boundaries of the ethnographic cases to highlight multiscalar links between local environmental managers and higher level institutions in the production of socially differentiated resource distribution, cultural recognition, and political representation (Robertson 2015; Nygren 2018).

Although flood and landslide catastrophes have directed us to these particular study sites, our primary concern is the largely invisible, overshadowed existence of urban hazards. The first author's field research in Nova Friburgo, a city of 170,000 people, 130 km inland of Rio de Janeiro, Brazil, focused on

the aftermath of one such disaster in 2011, in which approximately 1,000 people lost their lives across the region. This notwithstanding, floods have been endemic to Nova Friburgo since it was founded in 1819, an effort to implant colonial modernity into the "barbarous" indigenous territory of untamed Atlantic Forest (Coates 2019). Burgeoning from a few hundred European settlers and Afro-Brazilian slaves at the outset, due to industrialization in the 1920s and 1930s, this site grew to a city of some 70,000 inhabitants by 1960. Developmentalist expansion under the military dictatorship (1964–1985), alongside a dramatic decline in coffee exports, fed urban growth along a narrow valley wetland and onto mountainsides. A similar history is common to many urban agglomerations within the 2,000-km-long mountains of the Serra do Mar, with each rainy season bringing destruction of abodes of poor residents under torrents of rain and slides of mud, as inundated valley floors paralyze life and livelihood along the river margins. The catastrophization of natural disaster risk serves state making through its repression of narratives of causation in capitalist urbanization and the everyday political-ecological realities of hazardous urban margins, simultaneously enabling the mobilization of claims to authoritative state scientific expertise (Valencio 2014; Arefin 2019).

The research in Nova Friburgo is primarily based on two mixed-class areas in the city's industrial north, Conselheiro Paulino and Córrego D'Antas, both hit hard in the 2011 disaster. In the former, we focus on poorer residents along the river margin, many of whom were evicted for river canalization, whereas in the latter we discuss residents who returned to condemned housing after failing to gain landslide containment infrastructure. These cases are juxtaposed with two more affluent neighborhoods that quickly gained risk-prevention infrastructures to avoid resident displacement. The first author undertook significant field work in Nova Friburgo in 2013 and 2014, with follow-up visits in 2017 and 2018. Ethnographic work consisted of participant observations with residents, nongovernmental organizations (NGOs), and state agencies, including public and council meetings. Eighty open-ended interviews, sometimes with walk-or drive-arounds, focused on local residents, civil defense, and other municipal officials, and further discussions took place with local historians, and employees of state and federal government, the United Nations, and the World Bank.

The second author carried out ethnographic research in Villahermosa, a city of 1 million inhabitants, located in the floodplains of the State of Tabasco, southeastern Mexico, during several rounds of field work between 2011 and 2018. The research focused on the uneven distribution of flood hazards and disasters in this socially segregated, but inherently interconnected city. The oil boom in the 1980s led to Villahermosa's rapid growth, with large numbers of migrants seeking industry or service sector employment. Land prices simultaneously skyrocketed due to speculation linked to dizzying economic growth. Due to its location near the Gulf of Mexico, on wetlands just above sea level and at the confluence of some of Mexico's most capricious rivers, Villahermosa is exposed to extreme hydro-meteorological events. Given 31 percent of Mexican freshwater sources are located in Tabasco (García García 2013), and that the region is also a key area for oil and natural gas extraction, the challenges related to flood governance are extraordinarily high.

Serious floods have been recorded in Villahermosa since the early 1800s. In 2007, 62 percent of the city was inundated during exceptional devastation—in several places flooding up to four meters above street level—and since then there have been serious floods almost annually. The second author carried out eighty semistructured, open-ended interviews with residents in four sectors of the city, including the high-income residential area of Tabasco 2000; a middle-income neighborhood, El Guayabal; a low-income, working-class neighborhood, Gaviotas Sur; and an informal settlement called Casa Blanca. Informants were selected considering their living conditions, age, gender, social position, political power, and length of residence. Interviews focused on residents' experiences of disasters and everyday vulnerabilities, and on their views of flood governance and provision of services. Special attention was paid to informal residents' forced relocations from the city center to an urban periphery, and residents' views of the state's ambiguous intrusion and absence in their lives. This work was complemented by seventy interviews with multi-level governmental authorities, policymakers, urban planners, flood-risk consultants, journalists, academics, and representatives of NGOs and socioenvironmental movements in Villahermosa. The second author also organized policy dialogue workshops between government, private, and NGO sectors with

a focus on water governance, and associated risks and vulnerabilities.

Informal conversations on environmental vulnerabilities and governance were crucial to understand people's experiences of changing hazardscapes and quotidian realities in both case studies. Participant observation was especially helpful in understanding contextual shifts in people's views of governance and explanations of socially differentiated vulnerabilities, and the negotiations and networks involved. Interview and participant observation data were complemented by analyses of policy documents, development reports, environmental and social impact assessments, and plans for flood-management infrastructure and territorial ordering. Archival documents and media reports further helped us in understanding change through the two cities' socioenvironmental histories.

By focusing on these sites in Brazil and Mexico, our analysis seeks to illustrate the political-ecological and sociospatial complexities that characterize people's efforts to live, or muddle along, within shifting hazardscapes and hazardstates in socially segregated cities. In line with political ecology, we propose actors' multifaceted claims to a safe living environment and inclusive governance and the efforts of those vulnerable to hazards to achieve their right to the city.

Clientelist Governance

A key trope of conventional work on clientelism concerns its informal nature, in contrast to the legitimate processes of a formal state. This teleology plays out socially and spatially, as "backward" sociopolitical organization is supposed to be modernized through urbanization. Instead, here we demonstrate how the state itself acts informally by reproducing its power through clientelist networks. We show how the very effort to modernize—through urbanization and neoliberalization—extends hazardscapes that require a deepening of clientelist governance. A modified state thrives on the development of hazardous urban space and operates through clientelist networks that ensure continued differentiation in vulnerability and hazard exposure.

Nova Friburgo's development in recent decades is a case in point. Geraldo, an elderly man living alone along the riverbank in the midst of Conselheiro Paulino's industrial zone, was facing eviction and demolition of his house to accommodate river canal

engineering following the 2011 disaster. He declared with incredulity:

Back then, in the 1980s [then mayor] Heródoto came to this house and danced on our veranda; he gave a lecture to win our votes ... And when I went to legalize my little house here in that era, it cost me something like 8,000 *reais* [R\$].

Like those in some 800 households along the riverbank, Geraldo's anger was underpinned by a sense of powerlessness following the spray-painting of a red "X" on his front wall, indicating forthcoming demolition at an unknown date. Another resident, Julia, affirmed:

People have lived close to the river for sixty years, but the government's eyes were closed throughout, permitting them to live there. We say to them, "How can the municipality charge me IPTU [local government tax] if I live in an irregular area?" And now they come and say "You can't live in a risk area; this area can't be inhabited." It's easy, no? These evictions are incoherent ... ! Now there'll be a housing deficit of 10,000 or 15,000.

The two residents' stories are indicative of hazardous urban expansion that accelerated in the 1980s and 1990s in Nova Friburgo. After 2011, the drive for risk management infrastructure led to evictions, controversial resettlements at the city's fringes, and deep distrust in political processes across many affected neighborhoods. Whereas politicians and scientists focused on the external quantities of rainfall and river flow—and what should be done to the marginalized in their wake—residents themselves were well aware of the contradictions of state governance that had aided and abetted their settlement in dangerous locations and ultimately caused what was then labeled a "natural" disaster.

Since the early 1960s, municipal politics in Nova Friburgo had been dominated by a feud between Heródoto—who "danced" for Geraldo's vote to become mayor in the mid-1980s—and two generations of the Azevedo family. As a road engineer, Heródoto represented the national-developmental dreams of Brazil's military dictatorship (1964–1985), and was instrumental in long-standing policies to beautify the city and relocate the unsightly settlements of the poor from the center to mountainsides and wetlands at the fringes. Whereas his core support lay amidst the middle class, the populist Azevedos drew their base from among the workers, and occupied a series of key

municipal positions during and after the dictatorship. In interview, Araújo, local historian and academic, compared these two figures' violent rivalry to the days of *coronelismo* from the Old Republic (1889–1930), when strong landowners competed for power over the state by marshaling supporters' votes.

In Nova Friburgo, key devotees have frequently been paid in cash to gain new constituents through promises, bribes, and threats, and to upset opposition areas. Those who achieved were rewarded, together with their relatives, with municipal *cargos* (jobs), priority in service delivery, and other favors like preferential schooling and health care. The younger Azevedo, Paulinho, gained local notoriety in the early 1970s when he shot an opponent of his uncle, the older Amancio, at point-blank range in Nova Friburgo's council chamber—a murder for which he escaped significant jail time. Ever charismatic, Paulinho later served twice as mayor, as opposition leader against Heródoto, and as the patriarch in whose name other straw prefects and councilors acted. Paulinho died in the 2011 disaster, but is fondly remembered across the city's factory-worker class for his personal touch—he spoke of constituents as "my darling children"—and his reliability in following through on promises and favors.

The significance of the Heródoto–Paulinho story goes beyond a supposed cultural and political inheritance of clientelism from an older personalistic order. Although colonial legacies and republic-era state making bear relevance, politicians' power bases were reformulated through and over socio-environmental changes inherent to urbanization. Local politicians fought over decades to (re)settle and legalize informal residents to build power bases that could take control of the delivery (or concession delivery) of services, alongside the associated rewards of public and private power. Most of this urban expansion was illegal according to the Federal Forest Code, which was designed precisely to prevent erosion on steep inclines and along river margins (Ministério do Meio Ambiente [MMA] 2011). As a federal environmental regulator operative in Nova Friburgo advised:

To have *fiscalização* [planning compliance] in the municipality, there are political questions and private interests ... *Fiscalização* generates such a headache, even for a diligent mayor—a headache that loses votes—so he prefers to withdraw entirely or delegate responsibility elsewhere.

Corresponding clientelist politics over hazardscapes are evident in urban policy and planning in Villahermosa, Mexico. Like in Nova Friburgo, clientelism acts here as a crucial way to grant small favors and allocate slender amenities to the poor to garner their votes, and scant attention is paid to long-term vulnerabilities. In clientelist networks managed through persuasion, manipulation, and coercion, the poor are expected to maintain humility to allow bureaucrats to act as beneficial patrons. Mauricio, an ambulant trader working in a stall near the market of Pino Suárez in Casa Blanca, noted:

The government gives you something to eat, so that you're content; they give you small presents so that you don't start to protest. ... Local political leaders invite you to this and that meeting and give you small privileges ... to make sure that you vote for a certain candidate. ... They control politics by generating *obras* and services, and by facilitating access to upper level authorities.

The engagement in clientelist networks requires much flexibility on the part of the poor, as tactics of manipulation and humiliation require them to spend considerable time appealing for basic amenities, filing small petitions, and waiting to be attended. Many people in poor neighborhoods of Gaviotas Sur and Casa Blanca in Villahermosa lamented how officials repeatedly put them through the ringer: postponing agreed appointments, asking them to come in then failing to attend, selectively revealing and hiding information, and requesting extended waits and thereafter claiming that another institution is responsible. Residents expressed mistrust over whether officials' promises would be fulfilled, or whether they would ever gain something from the petitions in question. Anxiety and shame were also prevalent, resulting from missing an opportunity to gain critical resources from elsewhere or from being ignored. While weakening people's confidence in state institutes, clientelist procedures reinforce authorities' power, helping them to maintain a political clientele at their service and demonstrating the supremacy of the state to set the rules (Auyero 2012; Wiesel and Freestone 2019).

There are two interrelated mechanisms here in the clientelist allocation of resources and governance of urban environmental hazards in Villahermosa, Nova Friburgo, and in many other Latin American cities. First, the state actively intervenes in poor people's lives and livelihoods in the form of strict control and

surveillance. Second, it is simultaneously absent through its institutional inability and unwillingness to provide adequate water, sanitation, security, and flood-prevention infrastructures in impoverished settlements. These two sides of governance—tight supervision interlinked with institutional intrusion—situate the poor at the intersection of multiple marginalizations, while reinforcing state power (Nygren and Wayessa 2018). This conjuncture of institutional presence and absence leaves the poor on the shadows of informality, while hiding state responsibility for securing a safe living environment for all citizens. Residents' feelings of coercion and abandonment are further enforced by institutional misrecognition that invokes humiliating discourses about who has the right to which parts of the city.

At the same time, our ethnographic analyses demonstrate the reach of clientelism beyond granting small favors to the impoverished, toward incorporating powerful elites and big business. The intersection of authorities' practices with the loci of social position and political power regulates residents' opportunities to symbolic power and social status, through their ability to access goods, and at which speed. Although conventional analyses of governance often assume a clear distinction between public and personal interests, in everyday politics these lines are blurred, especially in circumstances where people's loyalties and reputations are tied to political networks (Gandy 2008; Gupta 2012). In Villahermosa and Nova Friburgo, upper, middle, and lower class residents all pointed out that engaging with the state apparatus through official channels yields few results, and thus access to resources must be approached through patronage and political connection. In these vernacular webs of influence, the state as a formal set of institutional procedures becomes mixed with a range of informal and concealed arenas. Officials provide inside information on tenders and areas to be developed for particular businesses, even as they turn a blind eye to questionable land appropriations, grant permission for illegal construction in high-risk areas, and allocate favorable contracts and personal benefits for certain companies in exchange for political loyalty. As most bureaucratic positions are politically volatile, officials need their authority to be continuously recognized through rewards and favors to privileged sectors (Lund 2016).

As Balls and Fischer (2019, 466) noted, access to water, electricity, and other services has strong

political significance as a marker of inclusion within governmental development projects. It also crucially resonates with physical and symbolic presence or absence of the state in residents' everyday lives. Haphazard urban development and socially differentiated service delivery in Villahermosa have strong links to institutional structures driven by powerful political and personal interests that constrain more equitable resource distribution. Governmental censuses indicating water supply coverage of 95 percent, even in the poorest neighborhoods in Villahermosa, hide its quality and regularity. Piped water is intermittent in Gaviotas Sur and Casa Blanca, as politically instituted power cuts at peak times concentrate there: At times, women wait for hours to get enough water for washing, whereas at others the water emerges under so much pressure that it is mixed with mud. In contrast, affluent residents have efficient systems of water storage and filtration, and concealed ways to "milk" the authorities. As Roy, an influential entrepreneur living in the elite neighborhood of Tabasco 2000, stated:

We have mechanisms for making demands of the authorities. If I pay taxes, how can it be that they don't serve me? ... Just a couple of telephone calls, and the problems get solved.

Our point here is that rather than representing a legacy of earlier authoritarianism, clientelist relationships are modified and reproduced according to surrounding political, economic, and environmental circumstances. In recent decades, clientelism in Latin America has been altered through overlapping decentralization and neoliberalization. Decentralization was a key transition policy across Latin America in the 1980s and 1990s, uniting constitutionalists' demands for local accountability alongside national elites' and foreign investors' pushes for urban competitiveness, including service privatization (Guarneros-Meza 2009). As such, urban planning and provision of water, sanitation, and other basic services became increasingly municipal concerns across much of Latin America, while simultaneous neoliberalization demanded strategic public-private partnerships for improved efficiency. Yet many municipalities—very often viewed by mayors as personal fiefdoms—lacked the technical capability or willingness to negotiate growing demands for homes and urban services, which raised the risk of environmental disaster. This translated into an increased focus on environmental problems, as political leaders and their strawmen

competed for lucrative votes by *enabling* new settlements within risk zones and turning a blind eye to the actions of friendly developers of illicit real estate (Coates and Garmany 2017). Hazardous urban peripheries, along riverbanks, floodplains, and steep slopes, were gradually legalized, displaced further out, and legalized again.

These processes reaffirmed the state as allocator of resources and basic services, at the same time demanding its stronger hand in disaster mitigation. Sud (2017) discussed this "rescaled spatiality of the state" (76), in which urban development becomes an arena of networked governance, where nominal formal-informal divisions wither away alongside the overarching drive for neoliberal growth. Local elites are well positioned to take advantage of a rescaled, neoliberalizing state, as they have opportunities to establish clientelist networks with new subcontracted intermediary developers and brokers. Furthermore, as shifting forms of governance interact with elevated risk of torrents of water, mud, and debris, the politics of designing "sustainable" cities becomes increasingly socioenvironmental in nature (Coates 2019). Certain residents are repeatedly evicted and resettled, which provides legitimation for selective control by the state while reproducing the vulnerable settlement-disaster-vulnerable resettlement cycle again and again (Rodina and Harris 2016).

The Interplay of Hazardscapes and Hazardstates

In our view, hazardscapes and hazardstates are intrinsically coproduced and comodified through urban policy and planning in Nova Friburgo, Villahermosa, and other environmentally fragile and socially vulnerable cities in the Global South. In the literature on hazardscapes, the relationship between state power and the production of hazards has received scant attention, and literature on the formulation of clientelist governance has largely ignored the significance of environmental hazards (Mustafa 2005; Collins 2009; Saguin 2017). We argue that floods and landslides, as powerful and to a degree unpredictable biophysical forces, need serious consideration in understanding the shaping of governance, and governance in turn mediates the causes and consequences of devastating floods and landslides.

For several decades, the achievement of services and infrastructures through clientelistic *obrisimo* was

assumed to be a mode of governance within prevailing state apparatuses in Latin America. We show here that engagement in clientelist networks surrounding such infrastructure delivery is part and parcel of weaving the idea of stateness through urban material. Defetishizing the state requires an understanding of the construction of urban hazardscapes that simultaneously calls forth “responsible” institutional governance.

In Nova Friburgo, a desire for ideal-state delivery of flood and landslide engineering was contradicted by the awareness of the everyday reality of clientelism. As a state-level geologist asserted, when commenting on infrastructural *obras*, “We provide all the technical data, but the selection of sites for containment we have no control over.” Across the city, a number of sites were quickly approved for containment in places that suffered no deaths in 2011, over other locations with many fatalities. This was most obvious near the *Praça Paissandu*, an affluent area that experienced a landslide with property damage but no injuries. The expensive containment wall there was one of the first, and known by most to have been completed through residents’ effective pulling of political strings. Similarly, at *Duas Pedras*, a lower middle- and working-class neighborhood between the center and *Conselheiro Paulino*, the containment of some 100 meters of hillside protected no one except a former politician whose large house and swimming pool occupied the hilltop above. For much of the city, these and other decisions really grated, given their often life-and-death implications.

Containment delivery for elites contradicted strongly the situation in *Córrego D’Antas*, a large valley neighborhood to the northwest of the city that had felt the full magnitude of the disaster with numerous casualties. A mixed-class district, containment *obras* were built there to repair the immediate riverbanks and to strengthen loose boulders on the mountainside high above. Immediately north of the river, however, where the poorest housing is located, the promised containment never materialized. Numerous residents were removed here, and people felt much anger that in all cases they had paid municipal taxes and supported local councilors. Plans for a riverine park with community facilities and for containment on the northern hillside were presented on paper, but these public works were never started. Many residents returned to their

condemned properties, balancing the risk of landslide with the discomfort of living a long way from their workplace and feeling abandoned. As Gabriela, a local resident elaborated, “People were simply left to reinhabit a landslide site [They returned] even knowing the position of risk that they are in.” Clientelist negotiation related to reinhabitation was the means by which marginal populations sought their right to the city—as much as it had been the process enabling them to build their homes in a hazardous place at the outset.

The *Estrada da Girasol* road links *Córrego D’Antas* to another neighborhood, *California*. To the eastern side of the road, below a 2011 landslide site, evident deforestation took place in 2017 and a new low-income housing subdivision was being marked out on the ground. According to João, this peri-urban expansion was unregulated according to federal legislation but effectively encouraged by the municipality. Gabriela explained how this kind of development was possible:

It’s about who has friends in the right department, someone who can expedite a process; to make sometimes what is not correct to become correct. ... The fact that our ex-mayor is now in charge of [environmental monitoring] is incoherent, because he owes favors to certain people, so he’s likely to allow certain construction projects. I don’t want to give details but I find it reckless. Principally with subdivisions, it just gets worse with him inside and a new cycle [of disaster] begins.

The residents were resigned to skepticism over whether this situation would ever improve. The new subdivision—which produced yet another new hazardous landscape—was the likely result of a clientelist compromise between the ex-mayor, a local councilor or service provider for the neighborhood to whom the ex-mayor was indebted, and the land developer himself. In his new post as environmental chief, the ex-mayor could both repay existing debts and do favors for new associates by turning a blind eye to responsible land management, knowing that markets for needed votes and services would ensue. If landslide risk ever received consideration, he knew that long-term responsibility would never fall his way. The overarching push for urban development, mediated through clientelism, produced a potential new disaster, just as state power was itself consolidated through this process of horse-trading

new markets for urban environmental security, services, and votes.

Similar conditions where socially differentiated governance produces hazardous landscapes and vice versa are prevalent in Villahermosa. Powerful political-economic interests have reinforced technocratic approaches to flood management in Tabasco for several decades, including construction of massive floodwalls, embankments, and water-diversion channels. Under the increasing threat of future disaster, however, consultants and government officials are now stressing the social disciplining of “environmentally unruly” residents in addition to infrastructural measures (Nygren 2016). Intensive awareness-raising programs, led by governmental institutes and NGOs, are based on the view that floods are caused by a cultural deficit of order among the poor, leading to them dropping garbage and choking the drains. The implicit idea is that informal residents are culpable for heightened flood risk and should transform themselves into responsible citizens. At the same time, scant attention is paid to illegal dumping and discharge of untreated wastewater by industry, alongside speculative landfills, and land appropriations in other parts of the city, with multifaceted links to devastating floods.

We also emphasize that although governments use flood-risk prevention agendas for their political convenience, volatile natural forces, such as floods and landslides, are difficult to control and “discipline.” People’s increased exposure to hazards in Villahermosa and Nova Friburgo is strongly linked to long-term governmental missions to master “volatile nature” and manipulate the biophysical phenomena of river courses and water flows. For decades, respective governments have invested in costly hydraulic infrastructures to modify river courses, with significant changes in hydrological regimes. When traversing either city, river courses have been canalized into narrow channels that allow minimal room for the river to grow during heavy rain. In Nova Friburgo, muddy runoff from degraded mountainsides increases river sedimentation and causes heightened flood risk that can only be mitigated by frequent, costly drainage, which also tends to be delivered through clientelist channels. In Villahermosa, the technocratic vision to “fix the rivers” ignores deltaic rivers’ frequent changes of course, as well as the biophysical processes of rapid sedimentation and riverbank erosion. There are several cases

where floodwalls have broken during heavy rain. This has led to catastrophic consequences, with meters of water inundating certain neighborhoods for several days. In interviews, residents of Villahermosa emphasized the difficulty in “domesticating” the furious hazardscapes of capricious rivers. Residents of Gaviotas Sur who lived through devastating floods made clear that rivers “always search their course,” and “if controlled too much, will take revenge.”

Simultaneously, increased flood risk in Villahermosa is linked to socially differentiated flood governance strategies. After the 1999 flood, new embankments were built along the right margin of the Grijalva River where elite neighborhoods are located, whereas the left margin was left unprotected. Inevitably, in 2007 the unprotected left margin flooded, and the government began carrying out forceful displacements from Gaviotas Sur and Casa Blanca in the name of environmental safety for the entire city. Residents unwilling to leave were forcibly removed, and their houses bulldozed to prevent return. Ironically, powerful local politicians had persuaded the poor to settle in these areas a few decades earlier to canvas voter support. Meanwhile, policy documents emphasized that the 2007 disaster was caused by extreme hydrometeorological conditions that would worsen with future climate change, thus ignoring the role of institutional politics in shaping the causes and consequences of flooding and the intimate interconnections between environmental and political causes of vulnerability.

Operations to relocate informal settlers from Villahermosa’s center to the periphery have close links to land speculation and city beautification, whereby the state advances the interests of upper classes and private investors to make the center economically and socially more attractive. Since 2009, some 35,000 people living along the riverbanks have been relocated to new, highly compact peri-urban resettlement sites. One of these was paternalistically named *Gracias México* (Thanks Mexico), as, according to authorities, beneficiaries should demonstrate gratitude to the government. At the same time, affluent neighborhoods, commercial centers, and industrial facilities were built in equally risky areas enabled by massive flood protection infrastructure. The institutional categorizations of legal settlement and illegal encroachment, and risky and safe living environments, depend fundamentally on the social position of people living in a given area.

Beyond authorities' assurances that relocations were necessary to protect the city from future disaster, soon after the expropriation, semihidden planning agendas emerged for real estate redevelopment in Casa Blanca. These plans link displacements to investment opportunities for land speculators and construction companies in areas officially classified as risk zones. These agendas are strengthened with essentialist discourses separating "proper citizens" with rights to the city from those conceived of as "illegal invaders" to be relocated. Although millions of people in different Latin American, Asian, and African cities have been displaced in recent years, scant attention is paid to links between hazard governance, consolidation of state power, and the production of socially differentiated urban agglomerates (Ghertner 2011; Amoako 2016; Janoschka and Sequera 2016). Institutional politics in Villahermosa, Nova Friburgo, and other socially segregated cities in the Global South enforce what is considered economically profitable and socially prestigious in key areas, relocating impoverished people to the margins of state responsibility.

Through our ethnographic analyses of everyday forms of governance, we want to avoid an essentialist view of clientelism as an inherently cultural phenomenon, as well as the idea that we have a privileged knowledge of "good" governance. Rather, we argue, like Smith (2014), that clientelism is "a socially produced, historically explainable phenomenon" (790), and a crucial mechanism through which the state manifests itself. On this basis, we call for political-ecological and urban-geographic approaches that link the micropolitics of clientelist manipulation to larger scale regimes of socially differentiated governance and political favoritism, to understand how paternalistic networks shape people's tactics of acquiescence, negotiation, and contestation across time and scale. As Li (2018) laudably noted, clientelism is not just a form of acting by corrupt individuals or particular companies that do not obey the law. It is "an extended, densely networked system in which everyone must participate in order to get something, or simply to survive" (329). It is a style of socially differentiated governance of environments and people, and socially differentiating allocation of rights and responsibilities.

This perspective also helps to explain why the poor, although criticizing the system, simultaneously seek clientelist networks to advance their social

reproduction. During our interviews, marginal residents argued for more transparent governance, at the same time identifying their underprivilege as a result of disproportionate allocation of strategic resources within clientelist networks. People repeatedly voted for politicians they knew to be corrupt, and followed leaders engaging in a politics that ultimately acted against their interests. These contradictions need to be understood in relation to constrained living conditions and social positions within wider regimes of governance and political economy. As an entrenched and yet always modifying system, clientelism leaves few other options for the poor than to voice their concerns through paternalistic channels, making it difficult to overcome (Lukes 2011; Smith 2014; Balls and Fischer 2019). One explanation for this reproduction is in politicians' skillful manipulation of people's feelings for particular political purposes: Their discourses of negligence and need of care sensitively resonate with residents' everyday experiences (Smith 2014, 795).

At the same time, subtle forms of threat, bribery, and punishment make people confused and timid to act otherwise. Although residents of Villahermosa engaged in heated discussions on corruption and clientelism, and circulated rumors surrounding fraudulent officials' latest deals, participation in overt political actions was risky due to state-induced oppression. As Tabasco is one of Mexico's most important oil extraction regions, the government often forcefully terminates open protests. At other times, authorities purposely tolerate counteractions because demonstrations that do not receive much reaction from government tend to recede quicker from public attention. These mechanisms lead people to question prevailing forms of governance mainly through everyday forms of resistance. Many residents in Gaviotas Sur and Casa Blanca regularized their land occupations by filling their plots with mud and waste to show authorities that they are living within flood-risk limits. Likewise, they renovate their rustic huts with concrete and corrugated iron to demonstrate that they are built according to flood mitigation guidelines. People also regularize their lives by developing diverse systems of informal water, electricity, and waste services.

Nevertheless, instead of being simply improvised "weapons of the weak," these tactics have close links to wider scale patterns of clientelist governance and unequal resource distribution. Although authorities

denounce informal water and electricity connections as illegal, in everyday politics they tacitly overlook or support them (Meehan 2013). Considering the innumerable illegal electricity wires hanging across poorer districts in Villahermosa, Nova Friburgo, and numerous other Latin American cities, and the collective efforts required for their maintenance, these networks are far from clandestine. The issue is more that authorities are unwilling to dismantle them, as denying people access to water or electricity is politically risky. Through such politics, the poor are left at the mercy of unreliable, informal options, with the burden of self-help, and with unpredictable petitions from political leaders. As Marta, resettled in the peri-urban settlement of Bicentenario after eviction from Villahermosa's center, noted:

My house was near the riverbank. They threatened us to leave ... they intimidated us as if we were animals, as if we're worth nothing. People who have more power could stay; the government doesn't meddle with them. ... The leaders give us water just for one hour in the morning and another in the evening. And there is much corruption. One leader took four houses during the resettlement and thereafter sold them. When people criticized, he just said: "It's not bad to try to go forward."

A central point here is that the politics of vulnerabilization manifest themselves through creation of hazardous landscapes, a conjunct of capital-intensive development and unevenly distributed services and flood-prevention infrastructures. Beyond the limited options available to poor residents, intensifying hazardscapes are riddled with clientelist forms of governing. This indicates that hazardstates create hazardous landscapes, and these hazardscapes reinforce the hazardousness of the state apparatus, via clientelist governance. On this basis, urban hazards and disasters can only be understood through analysis of political-ecological processes that produce vulnerable populations within hazardous environments alongside the very state institutions that act over and through them.

Conclusion

This study has analyzed how socially differentiated hazards and vulnerabilities are produced and reinforced through clientelist governance characterized by selective institutional intrusion and absence in segregated cities in Latin America. Recent work in

political ecology and critical geography has sought to defetishize the state as a coherent entity, by examining state making as an ongoing process involving multiple actors and multiple interests. Our study, drawing on ethnographic analysis of Nova Friburgo in Brazil and Villahermosa in Mexico, contributes to these theoretical discussions, by showing how current state making relies on remodified forms of clientelist governance within neoliberalizing urban environments. Characteristic of these forms of governance is strategic control and ignorance of environments and populations inhabiting risk-prone areas through authoritarian state surveillance intertwined with neoliberal outsourcing and deregulation (McCarthy 2019).

By analyzing clientelism as an arena and a means through which the state manifests itself in relation to urban hazards, we reveal the mutually reinforcing production of hazardscapes and hazardstates. The study shows how state making and clientelist governance, including multifaceted forms of political favoritism, create urban hazardscapes, as much as the management of urban disasters motivates new configurations of clientelist governance within contemporary hazardstates (Arefin 2019). Hazardscapes thus imbricate with hazardstates on the basis of clientelist relationships that determine the uneven exposure to environmental hazards and unequal experiences of state making across social groups.

To understand socially differentiated and social differentiating urban governance requires analysis that interconnects uneven distribution of environmental benefits and burdens to institutional frames of (mis)recognition and authorities' categorization of marginalized residents as intrusive others. It also requires consideration of residents' differentiated opportunities to take part in political decision making. In our analysis of the cities of Nova Friburgo and Villahermosa, we have shown how the poor request governance that would allow them a greater say in the decisions that affect their lives, and a state that is more oriented toward equal citizenship. Prevalent politics, however, leaves few opportunities for the vulnerable to get their claims recognized in hierarchical channels of political representation and social segregation.

The association of clientelist politics with urban environmental hazards breaks with traditional views of clientelism as the informal bargaining behavior of the poor. Rather, neoliberal urban governance has

granted new impetus to clientelist relationships, as stakeholders with different degrees of authority and power negotiate and trade off problems related to hazards and vulnerability in multifaceted arenas, where formal, informal, and shadow decision making are mixed. By addressing urban environmental hazards through engineered infrastructure, state authority materializes within seemingly banal, everyday hazardscapes that at once demand recognition of state power and legitimacy (Mullenite 2019). Urban governance, operating through clientelist logics, is extended and embedded in sociospatially differentiated terms.

Whereas traditional conceptualizations of clientelism privilege a political order abstracted from the environmental circumstances with which it is imbricated, we have argued that clientelism can only be understood as the result of contradictory efforts to govern nature in favor of capitalist urbanization. Through our case studies in Brazil and Mexico, we reveal the underpinning of contemporary clientelism in the political-ecological material of the city, within which repeated cycles of environmental degradation and social exploitation reproduce unequal exchanges of favors as the basis of state power. In this dynamic, multiple interventions aiming to mitigate catastrophic disasters are hazardously delivered. For the vast majority of citizens, the state itself is experienced as hazardous: a system of deal-making privilege that can neither be ignored nor circumvented. The best available opportunity for those most vulnerable to environmental hazards is to build clientelist ties that could lead to a less unfavorable outcome than displacements to urban fringes and increasing marginality.

Acknowledgments

We are grateful to residents in Nova Friburgo, Brazil, and those of Villahermosa, Mexico, as well as to the governmental institutions, private-sector representatives, and nongovernmental organizations that cooperated with our research. We would like to thank the editor and the three anonymous reviewers of the *Annals* for valuable comments on an earlier version of the article.

Funding

This article draws on research funded by King's Brazil Institute, King's College London, and by the Academy of Finland (Projects 1295044 and 1317319).

References

- Amoako, C. 2016. Brutal presence or convenient absence: The role of the state in the politics of flooding in informal Accra, Ghana. *Geoforum* 77:5–16. doi: [10.1016/j.geoforum.2016.10.003](https://doi.org/10.1016/j.geoforum.2016.10.003).
- Anand, N. 2017. *Hydraulic city: Water & the infrastructures of citizenship in Mumbai*. Durham, NC: Duke University Press.
- Arefin, M. R. 2019. The state, sewers, and security: How does the Egyptian state reframe environmental disasters as terrorist threats. *Annals of the American Association of Geographers* 109 (2):412–21. doi: [10.1080/24694452.2018.1497474](https://doi.org/10.1080/24694452.2018.1497474).
- Auyero, J. 2012. *Patients of the state: The politics of waiting in Argentina*. Durham, NC: Duke University Press.
- Auyero, J., and D. A. Swistun. 2009. *Flammable: Environmental suffering in an Argentine shantytown*. Oxford, UK: Oxford University Press.
- Bakker, K. 2012. Water: Political, biopolitical, material. *Social Studies of Science* 42 (4):616–23. doi: [10.1177/0306312712441396](https://doi.org/10.1177/0306312712441396).
- Balls, J. N., and H. W. Fischer. 2019. Electricity-centered clientelism and the contradictions of private solar microgrids in India. *Annals of the American Association of Geographers* 109 (2):465–75. doi: [10.1080/24694452.2018.1535312](https://doi.org/10.1080/24694452.2018.1535312).
- Bridge, G. 2014. Resource geographies II: The resource–state nexus. *Progress in Human Geography* 38 (1):118–30. doi: [10.1177/0309132513493379](https://doi.org/10.1177/0309132513493379).
- Burawoy, M. 2009. *The extended case method: Four countries, four decades, four great transformations, and one theoretical tradition*. Berkeley: University of California Press.
- Caldeira, T. P. R. 2015. Social movements, cultural production, and protests: São Paulo's shifting political landscape. *Current Anthropology* 56 (Suppl. 11):S126–S36. doi: [10.1086/681927](https://doi.org/10.1086/681927).
- Carvalho, J. M. 1997. Mandonismo, coronelismo, clientelismo: Uma discussão conceitual. [Mandonismo, coronelismo, clientelism]. *Dados* 40 (2):229–50. doi: [10.1590/S0011-52581997000200003](https://doi.org/10.1590/S0011-52581997000200003).
- Coates, R. 2019. Citizenship-in-nature? Exploring hazardous urbanization in Nova Friburgo, Brazil. *Geoforum* 99:63–73. doi: [10.1016/j.geoforum.2018.12.001](https://doi.org/10.1016/j.geoforum.2018.12.001).
- Coates, R., and J. Garmany. 2017. The ecology of citizenship: Understanding vulnerability in urban Brazil. *International Development Planning Review* 39 (1):37–56. doi: [10.3828/idpr.2017.3](https://doi.org/10.3828/idpr.2017.3).
- Collier, S. 2009. Topologies of power: Foucault's analysis of political government beyond “governmentality.” *Theory, Culture, Society* 26 (6):78–108. doi: [10.1177/0263276409347694](https://doi.org/10.1177/0263276409347694).
- Collins, T. W. 2009. The production of unequal risk in hazardscapes: An explanatory frame applied to disaster at the US–Mexico border. *Geoforum* 40 (4):589–601. doi: [10.1016/j.geoforum.2009.04.009](https://doi.org/10.1016/j.geoforum.2009.04.009).
- Das, V. 2011. State, citizenship, and the urban poor. *Citizenship Studies* 15 (3–4):319–33. doi: [10.1080/13621025.2011.564781](https://doi.org/10.1080/13621025.2011.564781).
- Diniz, E. 1982. *Voto e máquina política: patronagem e clientelismo no Rio de Janeiro* [Voting and the political

- machine: Patronage and clientelism in Rio de Janeiro]. Rio de Janeiro: Paz e Terra.
- Foucault, M. 2007. *Security, territory, population*. London: Palgrave.
- Fox, J. 1994. The difficult transition from clientelism to citizenship: Lessons from Mexico. *World Politics* 46 (2):151–84. doi: 10.2307/2950671.
- Gandy, M. 2008. Landscapes of disaster: Water, modernity, and urban fragmentation in Mumbai. *Environment and Planning A: Economy and Space* 40 (1):108–30. doi: 10.1068/a3994.
- García García, A. 2013. Las inundaciones fluviales históricas en la planicie tabasqueña [Historical floods in the Tabasco basin]. In *Cuencas en Tabasco: Una visión a contracorriente*, ed. E. Kauffer, 61–99. México: CIECAS.
- Ghertner, D. A. 2011. Green evictions: Environmental discourses of a “slum free” Delhi. In *Global political ecology*, ed. R. Peet, P. Robbins, and M. Watts, 145–65. London and New York: Routledge.
- Guarneros-Meza, V. 2009. Mexican urban governance: How old and new institutions coexist and interact. *International Journal of Urban and Regional Research* 33 (2):463–82. doi: 10.1111/j.1468-2427.2009.00864.x.
- Gupta, A. 2012. *Red tape: Bureaucracy, structural violence, and poverty in India*. Durham, NC: Duke University Press.
- Harris, L. M. 2012. State as socionatural effect: Variable and emergent geographies of the state in southeastern Turkey. *Comparative Studies of South Asia, Africa and the Middle East* 32 (1):25–39. doi: 10.1215/1089201X-1545345.
- Harris, L. M. 2017. Political ecologies of the state: Recent interventions and questions going forward. *Political Geography* 58:90–92. doi: 10.1016/j.polgeo.2017.03.006.
- Harvey, D. 2005. *A brief history of neoliberalism*. Oxford, UK: Oxford University Press.
- Hilgers, T. 2011. Clientelism and conceptual stretching: Differentiating among concepts and among analytical levels. *Theory and Society* 40 (5):567–88. doi: 10.1007/s11186-011-9152-6.
- Hilgers, T., ed. 2012. *Clientelism in everyday Latin American politics*. New York: Palgrave.
- Holston, J. 2011. Contesting privilege with right: The transformation of differentiated citizenship in Brazil. *Citizenship Studies* 15 (3–4):335–52. doi: 10.1080/13621025.2011.565157.
- Ioris, A. 2012. Applying the strategic-relational approach to urban political ecology: The water management problems of the Baixada Fluminense, Rio de Janeiro, Brazil. *Antipode* 44 (1):122–50. doi: 10.1111/j.1467-8330.2011.00848.x.
- Janoschka, M., and J. Sequera. 2016. Gentrification in Latin America: Addressing the politics and geographies of displacement. *Urban Geography* 37 (8):1175–94. doi: 10.1080/02723638.2015.1103995.
- Kelly-Richards, S. H., and J. M. Banister. 2017. A state of suspended animation: Urban sanitation and water access in Nogales, Sonora. *Political Geography* 58:104–13. doi: 10.1016/j.polgeo.2015.04.002.
- Leal, V. N. [1949] 1986. *Coronelismo, enxada e voto* (5th ed.) [Coronelismo: The municipality and representative government in Brazil]. São Paulo, Brazil: Editora Alfa-Omega.
- Li, T. 2018. After the land grab: Infrastructural violence and the “mafia system” in Indonesia’s oil palm plantation zones. *Geoforum* 96:328–37. doi: 10.1016/j.geoforum.2017.10.012.
- Little, P. E. 2007. Political ecology as ethnography: A theoretical and methodological guide. *Horizontes Antropológicos* 3 (SE):85–103.
- Loftus, A. 2018. Political ecology II: Whither the state? *Progress in Human Geography*. Advance online publication. doi: 10.1177/0309132518803421.
- Lukes, S. 2011. In defense of “false consciousness.” *University of Chicago Legal Forum* 3:19–28.
- Lund, C. 2016. Rule and rupture: State formation through the production of property and citizenship. *Development and Change* 47 (6):1199–28. doi: 10.1111/dech.12274.
- Maricato, E. 2003. Metr pole, legisla o e desigualdade [The metropole, legislation and inequality]. *Estudos Avan ados* 17 (48):151–66.
- McCarthy, J. 2019. Authoritarianism, populism, and the environment: Comparative experiences, insights, and perspectives. *Annals of the American Association of Geographers* 109 (2):301–13. doi: 10.1080/24694452.2018.1554393.
- Meehan, K. 2013. Disciplining de facto development: Water theft and hydrosocial order in Tijuana. *Environment and Planning D: Society and Space* 31 (2):319–36. doi: 10.1068/d20610.
- Meehan, K. 2014. Tool-power: Water infrastructure as wellsprings of state power. *Geoforum* 57:215–24. doi: 10.1016/j.geoforum.2013.08.005.
- Meehan, K., and O. C. Molden. 2015. Political ecologies of the state. In *The Wiley Blackwell companion to political geography*, ed. J. Agnew, V. Mamadouh, A. J. Secor, and J. Sharp, 438–50. Chichester, UK: Wiley.
- Minist rio do Meio Ambiente (MMA) [Ministry of Environment, Government of Brazil]. 2011. *Relat rio de Inspe o,  rea atingida pela trag dia das chuvas, Regi o Serrana do Rio de Janeiro:  reas de Preserva o Permanente &  reas de Risco: O que uma coisa tem a ver com a outra?* [Inspection report: Area affected by the rainfall tragedy, Rio de Janeiro uplands: Permanent preservation areas & areas at risk: What has one to do with the other?] Accessed December 23, 2019. https://www.mma.gov.br/estruturas/182/_arquivos/relatoriotragediarj_182.pdf.
- Mullenite, J. 2019. Infrastructure and authoritarianism in the land of waters: A genealogy of flood control in Guyana. *Annals of the American Association of Geographers* 109 (2):502–09. doi: 10.1080/24694452.2018.1490635.
- Mustafa, D. 2005. The production of an urban hazard-scape in Pakistan: Modernity, vulnerability, and the range of choice. *Annals of the Association of American Geographers* 95 (3):566–86. doi: 10.1111/j.1467-8306.2005.00475.x.
- M ller, M.-M. 2016. *The punitive city: Privatized policing and protection in neoliberal Mexico*. London: Verso.

- Nygren, A. 2016. Socially differentiated urban flood governance in Mexico: Ambiguous negotiations and fragmented contestations. *Journal of Latin American Studies* 48 (2):335–65. doi: [10.1017/S0022216X15001170](https://doi.org/10.1017/S0022216X15001170).
- Nygren, A. 2018. Inequality and interconnectivity: Urban spaces of justice in Mexico. *Geoforum* 89:145–54. doi: [10.1016/j.geoforum.2017.06.015](https://doi.org/10.1016/j.geoforum.2017.06.015).
- Nygren, A., and G. Wayessa. 2018. At the intersections of multiple marginalizations: Displacements and environmental justice in Mexico and Ethiopia. *Environmental Sociology* 4 (1):148–61. doi: [10.1080/23251042.2017.1419418](https://doi.org/10.1080/23251042.2017.1419418).
- Pelling, M. 2003. *The vulnerability of cities: Natural disasters and social resilience*. London: Earthscan.
- Rademacher, A. 2015. Urban political ecology. *Annual Review of Anthropology* 44 (1):137–52. doi: [10.1146/annurev-anthro-102214-014208](https://doi.org/10.1146/annurev-anthro-102214-014208).
- Robbins, P. 2008. The state in political ecology: A post-card to political geography from the field. In *The Sage handbook of political geography*, ed. K. Cox, M. Low, and J. Robinson, 205–18. London: Sage.
- Robertson, M. 2015. Political ecology and state theory. In *Routledge handbook of political ecology*, ed. T. Perreault, G. Bridge, and J. McCarthy, 457–66. London and New York: Routledge.
- Rodina, L., and L. Harris. 2016. Water services, lived citizenship, and notions of the state in marginalised urban spaces: The case of Khayelitsha, South Africa. *Water Alternatives* 9 (2):336–55.
- Roy, A. 2009. Why India cannot plan its cities: Informality, insurgency and the idiom of urbanization. *Planning Theory* 8 (1):76–87. doi: [10.1177/1473095208099299](https://doi.org/10.1177/1473095208099299).
- Saguin, K. 2017. Producing an urban hazardscape beyond the city. *Environment and Planning A* 49 (9):1968–85. doi: [10.1177/0308518X17718373](https://doi.org/10.1177/0308518X17718373).
- Scott, J. 1972. Patron–client politics and political change in Southeast Asia. *American Political Science Review* 66 (1):91–113. doi: [10.2307/1959280](https://doi.org/10.2307/1959280).
- Scott, J. 1998. *Seeing like a state: How certain schemes to improve the human condition have failed*. New Haven, CT: Yale University Press.
- Shefner, J. 2012. What is politics for? Inequality, representation, and needs satisfaction under clientelism and democracy. In *Clientelism in everyday Latin American politics*, ed. T. Hilgers, 41–59. New York: Palgrave.
- Sletto, B., and A. Nygren. 2015. Unsettling neoliberal rationalities: Engaged ethnography and the meanings of responsibility in the Dominican Republic and Mexico. *International Journal of Urban and Regional Research* 39 (5):965–83. doi: [10.1111/1468-2427.12315](https://doi.org/10.1111/1468-2427.12315).
- Smith, D. J. 2014. Corruption complaints, inequality and ethnic grievances in post-Biafra Nigeria. *Third World Quarterly* 35 (5):787–802. doi: [10.1080/01436597.2014.921430](https://doi.org/10.1080/01436597.2014.921430).
- Sud, N. 2017. State, scale and networks in the liberalisation of India's land. *Environment and Planning C: Politics and Space* 35 (1):76–93. doi: [10.1177/0263774X16655801](https://doi.org/10.1177/0263774X16655801).
- Swyngedouw, E. 2015. Urbanization and environmental futures: Politicizing urban political ecologies. In *Routledge handbook of political ecology*, ed. T. Perreault, G. Bridge, and J. McCarthy, 609–19. London and New York: Routledge.
- Taylor, L. 2004. Client-ship and citizenship in Latin America. *Bulletin of Latin American Research* 23 (2):213–27. doi: [10.1111/j.1470-9856.2004.00105.x](https://doi.org/10.1111/j.1470-9856.2004.00105.x).
- Valencio, N. 2014. Dos desastres recorrentes aos desastres à espreita [From recurring to spectacular disasters]. In *Ways of killing, dying and resisting: Boundaries in negotiating resolutions to environmental conflicts*, ed. A. Zhouri and N. Valencio, 277–316. Belo Horizonte, Brazil: Editora UFMG.
- Wiesel, I., and R. Freestone. 2019. Queue city: Authority and trust in the waiting line. *Geoforum* 100:229–35. doi: [10.1016/j.geoforum.2019.01.015](https://doi.org/10.1016/j.geoforum.2019.01.015).
- Wolf, E. R., and S. W. Mintz. 1957. Haciendas and plantations in Middle America and the Antilles. *Social and Economic Studies* 6 (3):380–412.
- World Bank. 2019. World development indicators: Urbanization. Accessed February 20, 2019. <http://wdi.worldbank.org/table/3.12>.
- Zeiderman, A. 2012. On shaky ground: The making of risk in Bogotá. *Environment and Planning A: Economy and Space* 44 (7):1570–88. doi: [10.1068/a44283](https://doi.org/10.1068/a44283).

ROBERT COATES is Assistant Professor in the Sociology of Development and Change Group at Wageningen University, 6700 EW Wageningen, The Netherlands. E-mail: robert.coates@wur.nl. His research interests include urban environmental change, hazards and disasters, and governance and the state, especially in Brazil.

ANJA NYGREN is Professor of Development Studies at the University of Helsinki, Helsinki, Finland. E-mail: anja.nygren@helsinki.fi. Her research interests include political ecology, disasters and vulnerabilities, urban governance, water and society, resource frontiers, and oil extraction. She has carried out long-term research in Costa Rica, Nicaragua, Honduras, and Mexico.