

The technopolitics of security: Agency, temporality, sovereignty

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Abstract

This introduction to the special issue on ‘the technopolitics of security’ outlines key concepts and engages debates pertaining to the relationship between techno-materiality, security governance and struggles over sovereignty. ‘Technopolitics’ refers to the strategic practice of designing and using technologies to enact political goals, producing hybrid forms of power that combine cultural, institutional and technological dimensions. These technopolitical practices give rise to new forms of agency, producing effects unintended by their designers that may alter logics of political contestation and allow technologies to be reappropriated for different political purposes. To illustrate the distributed forms of agency and contingent encounters that the technopolitics approach evokes, the article develops three key aspects of technopolitics in its relationship to security governance: (1) an understanding of agency as distributed between human and non-human actors, but also asymmetric in that human intentionality plays an assembling role that is frequently overrun by the unintended effects; (2) the temporal horizons of imagination and action over which technopolitical interventions unfold, identifying the importance of logics of anticipation and eventization; and (3) the relationship between technopolitics and sovereignty, arguing that it encourages a decentred and materialized understanding of how claims to sovereignty are made and contested.

Keywords

Agency, anticipation, Latin America, materiality, sovereignty, technopolitics

Introduction

In recent years the social sciences have undergone something of a ‘material turn’ as researchers have developed a renewed interest in the material ‘things’ that populate our lived world (Bennett and Joyce, 2010; Pilo’ and Jaffe, 2020). Rather than viewing material objects primarily as referents around which competing discursive practices are mobilized, or as inert inputs and outputs of social systems governed primarily by the abstract force of capital (the meaning of ‘materialism’ in its Marxian sense), the material turn calls on us to think about how the physical and technical features

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of ‘things’ matter in and of themselves and can alter the ways in which society and politics function (DeLanda, 2008). Critical security studies has certainly not been left untouched by this shift, and diverse studies have sought to explore the implications of technologies, objects and infrastructures for security governance and politics (Amicelle et al., 2015; Anaïs, 2013; Mutlu, 2013). Nonetheless, there has also been ‘resistance’ to such approaches in the field (Ingram, 2019). Since security politics are ‘immersed’ in antagonistic roles and discursive procedures, the techno-material dimension of security practices is often viewed as external and secondary to a primary political dimension (Leese and Hoijtink, 2019).

This special issue asks what happens if we take the techno-materiality of security seriously and see it as intertwined with, rather than separate from, security politics. While we and the various contributors to this special issue draw on diverse theoretical traditions, the concept that guides our engagement with these questions is ‘technopolitics’. Gabrielle Hecht (2011: 3) has defined technopolitics in the first instance as the ‘strategic practice of designing or using technology to enact political goals’, producing hybrid forms of power that rest simultaneously on (interconnected) cultural, institutional and technological dimensions. The sociotechnical systems that emerge out of such arrangements tend to reflect, and seek to reproduce, the hierarchies and inequalities of particular societies. However, this does not mean that the power embedded in such systems is unassailable. As Hecht has also observed, they can produce effects that ‘exceed or escape the intentions of system designers’ (Hecht, 2011: 3), and even be subject to appropriation by other human actors with different, perhaps directly opposed, political objectives. To quote Timothy Mitchell (2002: 42), this implies understanding technopolitics as an assembly of elements that are ‘both human and nonhuman, both intentional and not, and in which the intentional or the human is always somewhat overrun by the unintended’.

Adopting technopolitics as a schema implies addressing a number of questions that run transversally across the different articles of this special issue. In this introduction, we take up three questions in particular. First, how can we understand the *agency* of both the human and the non-human actors that are bound up in security governance and politics, in terms of both their nature and their influence? While proponents of actor-network theory (Latour, 2005) or the ‘new materialism’ (Bennett, 2010) argue for a flattened and radically distributed understanding of agency, questioning prevalent androcentric hierarchizations of agency across all scales of international politics (Salter, 2015a, 2016), others insist on preserving a sharper distinction between human and non-human types of agency (Bowden, 2015), or retaining a privileged place for capital as a force that ‘animates’ human and non-human assemblages (Brenner et al., 2011). Second, if security technopolitics involves the mobilization of technologies by humans to enact political goals, how can we understand the *temporalities* of imagination and action within which this occurs? Here we draw on the insights of critical security studies to identify how technologies are integrated into increasingly *anticipatory* security protocols (Adey and Anderson, 2012; Aradau and Van Munster, 2012), and also implicated in the *eventization* of security governance, whereby, at certain moments, decisionmaking occurs within dramatically compressed timeframes (Fassin, 2011; Zebrowski, 2019). Third, how does reimagining security politics as technopolitics affect the way we understand state *sovereignty*? This entails that we reflect both on the techno-material dimensions of how claims to sovereignty are made and contested and on the way claims to sovereignty rest on the control of, or violence inflicted upon, differentially coded (racialized, gendered, etc.) bodies (Alves, 2019; Mbembe, 2003).

Although we do not frame this special issue as having exclusive or even primary applicability to Latin America and the Caribbean (LAC), it is no coincidence that all of the empirical contributions presented concern that region. LAC has long been a rich source of analysis and theory development on questions of contested sovereignty (Arias and Goldstein, 2010; O’Donnell, 1993) and

on the use of security technologies and infrastructures by both state and non-state actors (Bruno et al. 2018; Caldeira, 2000). The contributions all provide detailed, in most cases ethnographic, accounts of particular cases, paying close attention to the on-the-ground impacts of security policies and technologies, and the connections, ruptures and (re)arrangements they produce. In this way, the special issue acts upon recent calls to decentre the sites from which we develop theories of contemporary security dynamics (Hönke and Müller, 2012).

In the remainder of this introduction to the special issue, we deepen the discussion of these transversal themes and introduce the various contributions. First, however, we wish to present a brief, illustrative case study of a violent incident that occurred in Rio de Janeiro in 2019 as a starting point for discussing the technopolitics of security and the insights it offers for our understandings of agency, temporality and sovereignty.

Death on the Rio-Niterói Bridge: A technopolitical analysis

On 20 August 2019, a video of Wilson Witzel cheering and punching the air circulated around Brazil's news channels and social networks (Mello, 2019a). The governor of the state of Rio de Janeiro, in office since January of that year, was clearly in a mood for celebrating (or at least wanted to give that impression). Early that morning, Willian Augusto da Silva, a 20-year-old black man from the low-income municipality of São Gonçalo, had hijacked a bus on its way into central Rio, later forcing it to stop on the famous Rio-Niterói Bridge. Armed with a toy gun, a knife, a taser and a gallon of petrol, Da Silva took the bus's 39 passengers hostage. This prompted a police siege and over three hours of tense negotiations and tactical manoeuvres. The confrontation ultimately resulted in Da Silva's death, though no one else was injured.

The way events unfolded was later reconstructed on the basis of accounts from the hostages and other witnesses (Seabra and Garcia, 2019a). Acting on Da Silva's orders, passengers themselves had contacted the authorities and relatives. Photographs sent from their phones showed that Da Silva had filled numerous bottles with gasoline and hung them along the aisle of the bus, turning it into a tinder box. He threatened to set the bus on fire and, at one point, threw a burning object at police. Passengers later reported that he seemed highly agitated, repeatedly stating that he had not slept for several days. Watching the media repercussion excitedly on his smartphone, he reportedly told his hostages that he was going to 'make history' and that a documentary would one day be made about him (Seabra and Garcia, 2019a). However, he had also told them that he did not intend to hurt anyone and did not want their money. As negotiations advanced, he began to release some of the hostages. Six had already left the bus by the time the siege came to its bloody end.

In response to the emergency, Rio's transport police and the Batalhão de Operações Policiais Especiais (Battalion of Special Police Operations, BOPE) of the Military Police performed a series of carefully executed steps. They quickly established a security perimeter and redirected traffic, as helicopters and boats monitored the scene. Explosives and ground invasion units were readied, and at least three snipers were positioned at strategic points around the bus, before contact was then made with the hijacker (Seabra and Garcia, 2019a).¹ After two hours of negotiations, police psychologists concluded that Da Silva showed signs of psychosis and was potentially unstable, therefore recommending tactical action by the BOPE (Seabra and Garcia, 2019b).² Eventually, Da Silva stepped down from the bus and, for reasons unknown, threw a jacket towards police officers standing nearby. At this point, one of the snipers, camouflaged atop a fire truck 80 metres away, shot him six times with a 7.62 mm calibre rifle (Seabra and Garcia, 2019b). Da Silva was taken by ambulance to a nearby hospital, but died shortly after. Throughout the negotiations, Governor Witzel had been communicating with police via WhatsApp and had authorized the fatal shots to be fired (Cappelli, 2019). He had also had a helicopter readied, and some 40 minutes later landed on the bridge greeted

by a crowd of TV cameras. It was at this point that the governor emerged in triumphant celebration, followed closely behind by his grinning secretary filming him on a smartphone.³

During the siege, there was live rolling coverage across Brazil's major news networks, with a constant cycle of live scenes of the bus and police at the security perimeter, aerial shots of the long lines of traffic, photographs that had been sent by the hostages from inside the bus, and footage of hostages being released during the siege.⁴ Commentary over these images continually restated the information that had already been gathered, while periodically cutting to interviews with spokespeople, experts and witnesses. Once the siege was over, rolling coverage continued for several hours. The details of what had occurred were gradually pieced together through statements and interviews, and footage of the shooting and Witzel's celebrations were periodically replayed. Governor Witzel, meanwhile, had taken to Twitter. First, during the siege, he informed that he was working with the Military Police command to bring the siege to an end and protect the hostages. After it had ended, he tweeted a photo of himself flanked by police, stating 'ideally everyone would have survived, but we preferred to save the hostages'.⁵

Later, in a press conference, Witzel declared, 'I have the conviction that this incident that happened today is linked to organized crime, which stimulates this kind of terrorist action' (Mello, 2019b), though he offered no evidence for this claim. Witzel also praised the police action, saying it showed to what extent they were 'prepared to protect lives' and drawing explicit links between the incident and recent violence in the city's favelas. Over previous weeks, the governor had come under fire for a spate of killings by police of young favela residents, including children. He asserted that the incident showed that the police had to be allowed to do what was necessary to tackle the 'terror' of the drug gangs in these communities (Garcia, 2019).

Although the Rio-Niterói Bridge incident dominated media conversation for several days, it would be an exaggeration to say that it had a major political impact or enduring influence on attitudes regarding crime and security in Rio de Janeiro or nationally. Unlike many of the young people killed by police bullets during Witzel's tenure, Da Silva was not widely regarded as an innocent victim, and few voices protested his execution (Mello, 2019a). Witzel, as we shall discuss, also did not benefit politically from the event in the way he had surely expected to,⁶ and it made little more than a ripple in the public consciousness. However, the Rio-Niterói Bridge incident touches on some of the key themes we explore in this special issue concerning the technopolitics of security and related themes of agency, temporality and sovereignty.

In reimaging this event using technopolitical lenses, it is helpful to start by zooming in on the *micro-scene of the event*, the human actors and techno-material objects it involved, the logics by which they acted, and the effects each produced. Given Da Silva's fevered state, it would be wrong to impute clear strategic objectives to his actions, let alone coherent political ones (as Witzel cynically sought to do). His family reported that he had researched kidnappings on the internet, but it is unclear that he had a specific outcome in mind. Nonetheless, his behaviour was clearly oriented towards holding his hostages captive (though not physically harming them) and gaining maximum possible media attention in the process. Although he was in possession of only a very rudimentary set of weapons, he was remarkably successful in these regards. The passengers, unarmed and frightened, did not resist, and the presence of gasoline forced police to engage him with great caution. By bringing the bus to a halt on a critical transport artery, Da Silva instantly shut down a key entry point into the city. By allowing his hostages to inform the outside world using smartphone technology, he created a grand media spectacle almost instantaneously. Da Silva's mobilization of an eclectic set of technologies, then, and the ramifying effects they produced, established the material conditions for the confrontation that would follow.

If Da Silva used these objects with a mixture of half-formed intentions and improvisation, the police response was highly methodical. To understand why, it is helpful to recall an eerily similar

event that had occurred in Rio de Janeiro 19 years earlier (Mammi and Corsalette, 2019). In June 2000, Sandro Barbosa Do Nascimento, a young homeless black man (who, coincidentally, also originally hailed from São Gonçalo), had hijacked a bus in an upmarket Rio neighbourhood. Armed with a handgun, he detained his ten hostages for four hours, before eventually stepping off the bus using one of them as a human shield. At that point, acting without orders, a police officer attempted to shoot Do Nascimento, prompting him to fire back. In the exchange of fire, the hostage was killed.⁷ The entire incident had played out live on national television, which appeared to embolden Do Nascimento to act aggressively and performatively. The police had been widely condemned for their handling of the ‘Bus 174’ incident – in particular the failure to seal off the area (including from the media), negotiate effectively with the hijacker and avert an uncontrolled armed engagement (Mammi and Corsalette, 2019). Lessons were subsequently learned, however, and in over 170 kidnapping incidents in Rio de Janeiro between 2000 and 2015 no hostages were killed (Mammi and Corsalette, 2019).

The 2019 police response suggests they had developed a high degree of *preparedness* for responding to incidents of this kind, incorporating institutional, cultural and techno-material elements. The response was executed via a series of steps: the securing and monitoring of the area with vehicles, cameras and personnel; the positioning of highly armed and trained teams prepared to carry out different types of intervention; negotiation and psychological profiling of the hijacker; and, eventually, the activation of the elite snipers. *Two temporalities were at play simultaneously in these processes.* While the establishment of protocols and the training and equipping of public security professionals were the product of long-term interventions, preparedness had also produced in-built capacities for ongoing assessment and rapid decisionmaking, enabled by communication devices, within the compressed time of the event. The ability to evaluate the threat posed by the hijacker allowed commanding officers to reach timely decisions about which of the varied options available they would pursue. The effective combination of institutional, cultural and techno-material capacities gave the police a huge advantage over the unpredictable but amateurish threat posed by Da Silva. Although the eventual outcome may have seemed far from certain, the asymmetry of forces raises the question of whether a non-lethal engagement might have been possible.

Moving to the second key moment of the scene, we can contrast the tragedy of Da Silva’s killing with the farce of Witzel’s celebrations. The governor evidently sensed the process of *eventization* underway and opportunistically believed he could place himself at the centre of the event and apply his own political spin to it. At first view, his conduct appears largely ‘performative’ – a deliberate attempt to turn an emergency into a stage-managed spectacle. However, attempts to produce political spectacle during contingent events can be quickly undermined by both human and non-human actors. In the case of Witzel’s celebration, his crude use of mobile technology and social media made his cynicism widely legible to regular users of these devices, generating a largely negative online reaction. According to *AP Exata*, a big-data analyst, among 13,000 tweets posted in the 36 hours following the incident mentioning the governor, some 40% were negative, 40% neutral and only 20% positive (Mello, 2019a). Meanwhile, Witzel’s lack of mastery of the technical grounds on which decisions had been made meant his attempt to link the incident to ‘narco-terrorists’ – in his own words, based on little more than ‘conviction’ – could be quickly rebutted by police experts. The preparedness of the police had allowed them not only to act with lethal violence but also to simultaneously gather evidence that could retrospectively be used to justify these actions against alternative, more politically contentious, interpretations.

The basis on which the police claimed to have exercised sovereign decisions was, in this case, supported by a detailed assessment of the hijacker’s immediate threat to the public. However, this should not merely be understood as the victory of a ‘technocratic’ bureaucracy, built on procedure and expertise, over an irresponsible ‘populist’ politician. Claims to sovereignty do not rest only on

the detached communication of evidence-based procedure to the public, but also on the performance of violence against particular targets. Alves (2014), building on the work of Giorgio Agamben and Achille Mbembe, has highlighted the role of racial (and spatial) hierarchies in Brazil in separating out potential bearers of citizenship from disposable 'bare life'. By acting to protect vulnerable citizens from a poor, black and, therefore, potentially dangerous individual, the police were acting within a societal context that had rendered Da Silva killable. He did not need to be a 'narco-terrorist' to earn this status: his blackness and threatening behaviour were more than sufficient grounds. Indeed, being subject to such prior societal suspicion, the assessment that he was suffering a psychotic episode became an aggravating, rather than a mitigating, factor. This may help to explain the lack of criticism for the six bullets that ended Da Silva's life, seemingly fired with the aim of killing rather than merely immobilizing him. Unlike the negative reaction to Witzel's behaviour, *AP Exata* found that Twitter users overwhelmingly believed the police had acted correctly in summarily executing Da Silva, whom they regarded as an unacceptable threat to public security (Mello, 2019a).

Technopolitics and agency

In the above example, a particular security 'event' threw together heterogeneous human and non-human actors. The effects and constraints they imposed on one another, and the adaptations in behaviour and objectives they forced, can all be understood to have conditioned the range of possible eventual outcomes. While the case focused on the micro-scene of a transitory event, such an insight can be applied to different kinds of 'case' at larger spatio-temporal scales, such as security policies, institutions or even whole societies. A key theoretical challenge, then, is to conceptualize what kind and degree of *agency* – the capacity to act, producing effects for other entities – such different kinds of actors can exercise (Leese and Hoijsink, 2019). As our reference to 'non-human actors' already implies, we understand material 'things' as possessing a certain kind of agency. However, is it the same kind that can be attributed to conscious, purposive humans? Much recent treatment of non-human agency in security studies has focused on 'smart', algorithmic or robotic technologies that can act (semi-)autonomously and thus appear to blur the binary opposition between human and non-human agency (Amoore, 2013; Leese and Hoijsink, 2019). However, agentic qualities can also be investigated in relation to more conventional techno-material 'things' like those that appeared in the example (e.g. rudimentary or more advanced weaponry, communication devices, vehicles, urban infrastructures) (Salter, 2015a, 2016). This section outlines our approach to technopolitics, arguing that it allows us to conceive of distributed, but also differentiated and asymmetric, relations of agency between human and non-human (techno-material) actors.

The term 'technopolitics' has been in circulation in the social sciences for at least two decades (Kurban et al., 2017; Tsekeris, 2008), but has been used across different disciplines and applied to diverse themes with little overarching dialogue. As a result, there is currently no widely agreed definition of this potentially powerful concept. Some key early uses of the term focused on the role of technologies as either the *medium* (Kellner, 2001) or *object* (Hughes, 2006) of political contestation, in both cases highlighting how rapid technological developments were disrupting established arrangements. The approach adopted here, however, views these as partial elements of a broader notion of technopolitics that is concerned in a more fundamental way with the 'politics of materiality' (Mayer, 2014; Pilo and Jaffe, 2020). This approach is concerned with how diverse material objects are mobilized by human actors in pursuit of political goals, as well as how these objects, in turn, can reshape social and political dynamics. Such a view on the role of objects pushes us to further reveal how 'human and nonhuman actants demonstrate their capacity for agency' in 'making' international politics and processes – from war to diplomacy (Salter, 2015b: vii).

Gabrielle Hecht (2011: 3) has defined ‘technopolitics’, in the first instance, as representing the ‘strategic practice of designing or using technology to enact political goals’. According to her, this produces a ‘hybrid’ form of power embedded in ‘systems whose design features mattered fundamentally to their success and shaped the ways in which those systems acted upon the world’ (Hecht, 2011: 3). Artefacts and infrastructures are therefore not neutral but political, or, as McFarlane and Rutherford (2008: 370), put it, citing from Latour, ‘politics pursued by other means’. This definition echoes Winner’s (1980) observation that material artefacts can have ‘political qualities’. The artefacts’ technical features overdetermine the kinds of uses they will be put to and the kinds of social and political organization needed to use and maintain them. Whereas a nuclear power plant requires centralized and rigidly hierarchical management to operate safely and effectively, it might be possible (though not *necessary*) for the capture and distribution of solar energy to be organized in more decentralized and horizontal ways (Winner, 1980: 130).

However, this observation raises the fundamental question of how far human actors are actually capable of embedding their political objectives into the design of technologies. This question relates to longstanding debates about whether technological innovation largely follows an instrumental scientific rationality – indifferent to designer aims and societal values – or, rather, reflects the priorities and inequalities of the societies in which it occurs and the interests of state hierarchies and ruling elites (Feenberg, 1991; Jasanoff, 2004). As Hecht (2011: 3) argues, technologies may ‘exceed or escape the intentions of system designers. Material things can be more flexible – and more unpredictable – than their builders realize.’ Although they are developed within particular social and institutional contexts and with political objectives that overdetermine their likely eventual uses, the real-world impacts of new technologies cannot be fully known in advance or controlled for. Their technical features may permit uses very different from those originally intended.

This would seem to support the claim, central to actor-network theory (Latour, 2005; Müller, 2015) and ‘new materialist’ (Bennett, 2010) approaches, that agency should be understood as radically distributed between humans and non-human actors. In her vital-matter framework, Bennett (2010) has argued that material objects and systems fail to conform to the idea of passivity usually ascribed to them. As she powerfully describes, these ‘things’ trouble the anthropocentric assumption of human (free) will by actively extending networks, building collective effects, and assembling human and non-human entities together in new and unexpected ways. However, as Lemke (2018) has argued, such a radical turn towards the things themselves has troubling implications for how we locate ethical responsibility in sociotechnical systems where agency is widely distributed, and risks enacting a post-political obfuscation of structures of power and inequality. A ‘smart’ surveillance system or algorithm that learns to target particular ethnic minorities does not exculpate its programmers or overseers of ethical responsibility simply because it partially escapes their control.

A radically distributed notion of agency also risks eliding the important differences in the *kinds* of agency exercised by human and non-human actors. As highlighted by Mitchell (2002), these differences revolve around the distinctive human trait of intentionality. In technopolitical terms, this can be understood as steering technopolitical projects in particular directions even as, in practice, non-human things regularly defy and divert those intentions:

Techno-politics is always a technical body, an alloy that must emerge from a process of manufacture whose ingredients are both human and nonhuman, both intentional and not, and in which the intentional or the human is always somewhat overrun by the unintended. But it is a particular form of manufacturing, a certain way of organizing the amalgam of human and nonhuman, things and ideas, so that the human, the intellectual, the realm of intentions and ideas seems to come first and to control and organize the nonhuman (Mitchell, 2002: 42–43).

In line with this, we understand technopolitics as a process whereby (at least initially) human actors assemble institutions, procedures and 'things' in pursuit of particular ends. Later, if the resulting assemblages escape human control or fail to produce the desired results, human actors again seek to reassemble them in line with their evolving objectives. In other words, there are two asymmetric logics that unfold in a parallel development: (1) a networked, distributed and potentially unpredictable development of human and non-human assemblages; and (2) intentional human projects, underpinned by particular interests and ethical commitments, that continually seek to adapt, refine and steer these assemblages in particular directions. Jaffe and Pilo' (this issue) offer an original way of thinking about such dynamics with the notion of 'prototyping', suggesting that in some contexts the very expectation of technological failure has been incorporated into security governance. In the three security projects they analyse in Kingston, Jamaica, technologies were mobilized in apparently experimental ways, with the expectation that they might need to be quickly refined or withdrawn if they did not deliver the desired results.

However, it is not only human and non-human agency that must be differentiated, but also the agency of different kinds of human actors. While states and corporations may launch technopolitical projects, the technologies they design are always liable to be 're-appropriated for political ends in ways that were unintended by their designers' (Mayer, 2014). Mitchell (2011) offers an illuminating account of such a process, tracing how energy systems co-evolved with democratization processes in different settings. The system for coal extraction that drove industrialization in Europe, he argues, also helped lay the foundations for democracy, because its physical infrastructure was highly susceptible to sabotage by workers and social movements, providing leverage for collective bargaining and demands for enfranchisement. By contrast, the shift to an oil-based economy had the opposite effect. Because the sociotechnical systems that enabled the extraction and distribution of oil could be much more effectively insulated from worker organization and political pressure, they served to stifle embryonic democratic movements in oil-producing nations in the Middle East. Both projects were pursued by Western state and capitalist interests seeking to expand energy production for profit and to preserve domestic order by ensuring a steady energy supply. But whereas one system created opportunities that could be exploited by opposition movements, the other permitted these objectives to be largely realized at the cost of poverty and conflict in the producer countries.

While Mitchell's account provides examples of both the heroic resistance and tragic crushing of democratizing forces by sociotechnical systems, technopolitical projects often have far more mundane political effects. Von Schnitzler (2016), for example, describes how urban infrastructure was enrolled into efforts to build democracy and citizenship in post-Apartheid South Africa, with the installation of water-metering systems in marginalized communities, designed to strengthen state-citizen relations. These efforts achieved partial success in the form of micro-political relationships, as government officials used these systems to normalize state presence and push citizens into making formal demands and consumer participation. Jaffe and Pilo' (this issue) also show more everyday forms of politicization in their examples from Kingston. Even as technologies 'fail', as when a surveillance camera or electricity meter breaks, they may still succeed politically. A local government's promise to guarantee a transparent measurement of water usage encounters communities' resistance, decline or sabotage, yet nevertheless caters to the promising body's (political or economic) benefit.

Technopolitical projects can also have ambivalent results, fulfilling some objectives for some actors while failing in other respects. Fromm (this issue), for example, presents the concept of 'insurance technopolitics' to capture the combined use of risk calculations and technologies like tracking devices by insurance companies in São Paulo in their efforts to recover stolen vehicles. While these companies are highly successful in their primary aim of protecting their profit

margins, by operating in lucrative resale markets they also continue to fuel the stolen car market. At the same time, at the ‘street level’ the technologies they deploy reshape, but do not replace, underlying informal relationships between the frontline recovery agents, police and criminal actors. Also in São Paulo, Altenhain (this issue) identifies how the underwhelming results of a surveillance system installed in an upmarket neighbourhood did not fundamentally damage the political and community actors who installed it. Owing to a shared conception of the security threats faced and techno-solutionist stance, these actors legitimized themselves by investing in technical improvements even as the system failed to deliver on its promises. As this suggests, technopolitical projects can persist in time even as they fail according to their own stated aims.

Temporalities of technopolitics: Anticipation and eventization

Conceiving of technopolitics as projects that assemble and reassemble human and non-human actors around particular political objectives raises important questions about *temporality*. As has already been discussed, technologies and objects can break down or fail to work effectively alongside the other (human or non-human) components with which they have been assembled (Jaffe and Pilo, this issue). This suggests we must understand technopolitical projects as inherently *dynamic*, requiring constant maintenance, adaptation and, perhaps, changes to strategies or objectives. However, the technopolitics framework also raises questions about the temporal horizons of imagination and action within which projects are formulated and executed. In this respect, the approach connects with and contributes to key debates in critical security studies regarding both how security threats can be *anticipated* (Anderson, 2010) and how security actors can respond to *events*. Accordingly, we adopt two central concepts – *anticipation* and *eventization* – to think through the temporal logics of security technopolitics.

Aradau and Van Munster (2012) show how in political and media discourse protective measures designed to achieve a heightened state of ‘preparedness’ in the face of the ‘next terrorist attack’ are mobilized to manage urban space. Such interventions might include the establishment of socio-technical infrastructures designed to detect and prevent security threats before they occur, such as surveillance and warning systems (Aradau, 2015; Aradau and Blanke, 2015; Bruno et al., 2018; Lyon, 2006; Murakami Wood, 2013). Hochmüller (this issue), for example, examines the guiding logics and impacts of a future-oriented ‘prevention assemblage’, combining social and technopolitical interventions, that was implemented in Guatemala under the guidance of internationally mobile security experts.

However, as a particular type of anticipatory practice, preparedness should be understood more specifically as the strengthening of state capacity to respond rapidly to emergencies *as they unfold*. By preparing for ‘the aftermath of the event’ (Anderson, 2010: 791), possible or probable events are incorporated into planning procedures on the assumption that sooner or later such threats will materialize (Amoore, 2013; Collier, 2008). As Adey and Anderson (2012: 101) have argued, societies ‘made up of populations and property (infrastructure, buildings, stuff)’ are by themselves ‘breeding grounds’ for ‘endemic’ security crises. Governing through emergencies, then, means preparing, on the one hand, templates of behaviour and tactical manoeuvres, and, on the other, technologies and devices, in order to react quickly to disruptive events once they have begun.

Technical devices have been understood as playing a crucial role in preparing to respond to lurking threats beyond the discursive realm (Ceyhan, 2008). Indeed, it is partly through the development, testing and implementation of security devices that diverse security actors, including non-state actors, are understood as becoming ‘prepared’ (Bourne et al., 2015). As Fromm (this issue) discusses, this includes insurance companies – actors that, by definition, operate according to future-oriented calculations. Private insurers can at times act as collaborators or competitors of

public security actors, and might deploy technological devices to pursue adverse goals and to assess risks to the insured properties' value. This way, their use of technologies like GPS-based tracking devices, for instance, influences state regulatory policy, while (il)legal deployments of privatized preparedness can challenge state competence.

While the notion of *anticipatory* forms of security governance, including prevention and preparedness, evokes the long-term strengthening of state capacities to either avert or respond dynamically to future threats, *eventization* refers to the real-time response to particular security events. Ever more time-compressed response strategies have been developed, by speeding up communication technologies to enable faster reactions by security forces (Zebrowski, 2019). These approaches fit with the general conceptualization in critical security studies of events having a 'performative' nature (Balzacq et al., 2016). This is the case both in the speech acts that demarcate and localize threats, merging with the threat itself as the luring incident to be prepared for, and in the way these are communicated so as to attract the attention of the intended audience(s) (Balzacq, 2005: 187). Commenting on such communicative effects of highly mediatized events, some argue that these help to cover up, or 'camouflage' (Pauschinger, 2020), structural shortcomings of security politics (Larkins, 2013, 2018).

However, the eventization of security politics should not be viewed primarily in terms of deliberate attempts to turn threatening events (or non-events) into spectacles for political purposes. Our understanding of eventization differs from such a reading in two ways. First, as our earlier case study indicated, we suggest that eventization is a process that brings together diverse sets of actors around and through events that are 'unpredictable and contingent' (Adey and Anderson, 2012: 103). This places limits on the ability of actors to reduce events to spectacle alone, and suggests we should understand events as unpredictable *sociomaterial encounters*. Acknowledging the inherent uncertainty of events has pushed researchers to locate the sovereign act of decisionmaking in 'distributed' emergency response procedures (Collier and Lakoff, 2008). Further development in this direction has examined the nature of the unforeseeable event as something to be rendered predictable through 'non-rule-based machines' storing and processing big data (Amoore and Raley, 2017: 6). Distribution of decisionmaking then becomes a time-space that produces 'new forms of political authority' (Amoore and Raley, 2017: 6), whose novelty conditions the limited ability of security analysts, both public and private, to claim authority over the speech act or performance of security (as implied by the above-mentioned classical critical security studies approaches).

Second, following Didier Fassin's (2011) anthropological work on urban policing and security, events do not need to be of a spectacular character. Eventization can occur in more everyday scenarios as non-spectacular ruptures to routines. As an analytical strategy, events come to be seen as disruptive of a normal order of things (Walters, 2014), drawing analysts' attention to the role of 'ordinary stuff' (Nyers, 2003). Eventization can serve as an analytical lens through which to look at how antagonistic and/or collaborating actors, as well as 'things of all kinds, come to act, interact, enact and alter each other in the course of intensive transformations' (Ingram, 2019: 166). This suggests a need to examine the performative and contested rendering of events' security relevance – eventization – at micro-scales of interaction. In particular, we wish to focus on the ways in which these interactions, and the role of technologies within them, underpin ordinary political decisions and the exercise of political authority.

While we have counterposed temporal logics of anticipation and eventization, critical approaches in the field of security studies have long demonstrated the close functional links between them. For example, Aradau and Van Munster (2007) highlight the importance of particular events that heighten media and public awareness of possible threats in drumming up support for the use of anticipatory risk-management techniques. In this sense, as Pauschinger details in this issue, events – in this case, Rio de Janeiro's hosting of the Olympics – can provide anticipatory justifications for

security reforms and the implementation of new technologies with very real effects. Meanwhile, the notion of preparedness implies a logic of anticipation that is geared towards responding dynamically to events as they unfold. Such insights help us to conceive security technopolitics as operating according to multiple and uneven temporal logics. Technopolitical security projects may be future-oriented, but the inherent contingency of sociomaterial encounters, which may escape the imaginations of designers, plays a key role in reorienting them. Technologies may be designed to prevent or respond to imagined security events, but their ability to do so can only be fully assessed if and when the expected (or, indeed, unexpected) events do occur. When they do, lessons are learned and projected into new imagined futures.

Decentring and materializing sovereignty

As we have demonstrated, a technopolitical approach to security encourages us to conceive of diverse human actors pursuing distinct, in some cases antagonistic, projects or political goals through the strategic design, use or appropriation of technologies. In the encounters this engenders, material things come to exercise agentic qualities, producing unintended effects that potentially alter the logics through which political contestation subsequently occurs. This raises the question of how such security dynamics affect *state sovereignty* – that is, the state’s monopoly on the exercise of what is considered legitimate violence. While state power certainly rests to a significant degree on technologies that aim to effectively control a national territory, we do not conceive of sovereignty as being limited to territorialized ‘state infrastructural power’ (Mann, 2008: 358). Instead, we understand sovereignty as a *claim* that is complicated both by competing claims to authority by other security actors and by the contingent effects that technologies produce for these contestations. We thus propose that technopolitics contributes to recent attempts in the field to simultaneously *decentre* and *materialize* the notion of sovereignty.

To illustrate our point regarding the agentic, non-neutral, political character of technologies in supporting antagonistic claims to sovereignty, we wish to refer back to the incident on the Rio-Niterói Bridge. As we have argued, police were acting in a societal context that had rendered the hijacker ‘killable’. The police, as the state’s principal executive security actor, demonstrated the ability, and made use of their legal obligation, to protect the hostages and followed the sovereign command to kill. In cities of the Global North and South, police killings of suspects have often been discussed in relation to state sovereignty (Cooper-Knock, 2018; Hutta, 2019) and disproportionately victimize black and other minority populations (Alves, 2019). Since, from a legalistic standpoint, police decisionmaking involves procedures and regulatory frameworks that reach beyond the specific moment of deploying a lethal action, literature on policing and sovereignty has emphasized the importance of interpreting police killings not as individualized instances of police brutality, but rather as repetitive expressions of a societal ‘consensus’, ‘where the right to kill is a shared practice and lived experience for police and urban citizens’ (Denyer Willis, 2014: 5). This supports the argument, frequently made in analyses of state projects in the Global South, that claims to sovereignty involve a necropolitical form of violence (Alves, 2019; Mbembe, 2003).

While ‘preparedness’ can allow police to carry out killings and harness evidence to justify them within plausible interpretations of the law, as in our case study, it is also the imagery of killing bodies socially coded as a threat that at the same time affirms police claims to exercising sovereignty (Soleimani and Mohammadpour, forthcoming 2023). In this sense, our closer examination of the role of security technologies in institutionalized, discriminatory security practices is important. As our conceptual development of technopolitics suggests, the discriminatory effects are not determined in the ‘nature’ of things. Rather, when we look at cases of state attempts to exercise infrastructural power, technologies and infrastructures are deployed as part of strategies that base

political order on the discriminatory logics of racialized othering that support state projects and claims to state sovereignty. This is clear in Hochmüller's article (this issue). He shows how new security interventions in Guatemala have reproduced existing structures of social and racial exclusion, by subjecting marginalized populations to enhanced social control in the name of crime prevention.

Such a focus on policing and other state-led interventions can risk wrongly universalizing a Weberian notion of sovereignty, whereby states are normatively understood as exercising a monopoly on violence over a defined national territory, and those that do not are defined, by default, as 'weak' or 'failed' states (Branović and Chojnacki, 2011). Nonetheless, it is important to note that the Weberian ideal itself influences state actors. While it has never been a *de facto* reality across much of the Global South, actually existing states regularly seek to make it so, or to create the appearance that it is. These efforts are very often technopolitical projects, in the sense that they claim new technologies will achieve the goal of recentring sovereignty on the state. Pauschinger's article (this issue) provides a clear example of this. He analyses technopolitical security reforms rolled out by the Rio de Janeiro authorities in preparation for the city's hosting of the 2016 Olympic Games, including an elaborate surveillance system connected by an 'Integrated Command and Control System'. While these interventions aimed to strengthen the efficiency of diverse security agencies and their capacity to manage security challenges in the city, Pauschinger argues that lethal 'necropolitical' state practices persisted and gained ever greater prominence in the post-Olympics period as police conflict with drug gangs intensified.

This understanding of the development of security technopolitics fits with broader calls to decentre Western-centric theorizations of security (Comaroff and Comaroff, 2007; Hönke and Müller, 2012) and to conceive of sovereignty as an ongoing project pursued by real-world actors in specific sites interconnected with broader global processes (Davis, 2010). Such a procedural understanding of sovereignty also applies to relationships between different security actors, both state and non-state, as they become interconnected in diverse ways. While these may range from more antagonistic to more collaborative dynamics in different local contexts (Richmond, 2019; Stepputat, 2015), future imaginings of security are ultimately expressed in competing claims to the exercise of territorial power and enactment of violence (Das and Poole, 2004; Hansen and Stepputat, 2006). As Hansen and Stepputat (2006: 297) put it, sovereignty represents 'a tentative and always emerging form of authority grounded in violence that is performed and designed to generate loyalty, fear, and legitimacy from the neighbourhood to the summit of the State'. Our approach, then, does not counterpose technopolitical projects pursued by and against the state *per se*, but rather looks beyond a normative assumption that state power can be neatly separated from other claims, expressions and contestations of power.

Pursuing such insights, authors have described sovereignty as 'variegated' (Ong, 2006), 'disaggregated' (Dean, 2010), 'waning' (Brown, 2010) or 'fragmented' (Davis, 2010) to capture the ways it is contested by diverse non-state actors across local, regional and global scales. Meanwhile, studies of the 'gray space' (Yiftachel, 2009), focused on hybrid arrangements between formal state and unregulated forms of (illicit) security governance, have challenged dominant views of the state as an authority whose sovereignty rests on its capacity to declare the 'state of exception' (Agamben, 2005). Bringing together these attempts to decentre understandings of sovereignty with analyses of the varying dynamics of 'hybrid' or 'gray' forms of security governance, Abrahamsen and Williams (2009: 2) argue for thinking in terms of 'global security assemblages', combining both state and non-state forms of security governance, in 'settings where a range of different global and local, public and private security agents and normativities interact, cooperate and compete to produce new institutions, practices, and forms of security governance'.

Technopolitics goes further, however, by helping us to both decentre and materialize our understandings of power and sovereignty. Claims to sovereignty are not only made by states, but also by non-state actors, whether private corporations, criminal groups or homeowner associations in gated condominiums. Conceived as authority exercised over subjects within a defined territory, the enactment of sovereignty is conditioned by the ‘things’ to be governed and that operate as tools of governance. Such a material and procedural approach to sovereignty, entailing analysis of social interactions as well as of technologies and objects, thus translates into ‘the spatial and and strategic arrangements of things and humans and the ordered possibilities of their involvement within a particular territory’ (Dean, 1999: 125). Emphasizing the irreducible techno-material dimension of sovereignty and the ways in which it is contested, Navaro-Yashin (2012: 43) suggests that ‘sovereignty appears as a field that is worked on through an agency distributed between human beings and material devices’. She pushes us to conceive of how people and instruments act as networked producers of sovereignty as an assemblage that combines symbolic, affective and physical qualities. A materialized notion of sovereignty foregrounds the long-term process of political contestation in particular built environments, rather than unique declarations of a state of exception (Müller, 2020). Such a technopolitical understanding of sovereignty invites further examination of how material objects accrue meaning in analyses of security beyond a state-centric focus and suggests the need to place more emphasis on studying the materiality of the built environment, such as gated communities with highly securitized architectures or surveillance infrastructures in public space (Altenhain, this issue), in contesting (implicitly or explicitly) the state’s monopoly on violence. Sovereignty, then, is a materially produced relationship, negotiated, stabilized and contested in everyday encounters, interactions and claims to political authority.

Fromm (this issue) provides a clear example of the emergence of new technologically mediated state–non-state ‘security assemblages’, showing how insurance companies both collaborate and compete with the police in their efforts to recover stolen vehicles. The insurers develop their own tracking devices and supporting systems to trace stolen cars to compensate for a lack of police capacity to fulfil such functions, thus developing parallel institutions and assuming competencies traditionally monopolized by the state. However, the local knowledge of police officers and their networks, including private security firms set up by former officers, are able to assist where these technologies are absent or insufficient, creating a new market around rewards offered by the insurers for vehicle recovery. Jaffe and Pilo’ (this issue) also show how relationships between different security actors can be reorganized around technopolitical interventions or even cause those interventions to fail. For example, a proposal to connect the Kingston police to private security guards via a radio system was undermined when the guards, who lived in low-income neighbourhoods, came under the suspicion of local criminal ‘dons’. In the light of the threats against their employees, the private security firms ended up withdrawing from the scheme before it was implemented. Techno-materiality, then, must be considered an active ingredient in the ways in which claims to sovereignty are made and contested by different actors.

As mentioned at the start of this introduction, this special issue contains a rich and diverse set of articles focused on cases drawn from across the Latin America and Caribbean region, including the cities of São Paulo, Rio de Janeiro, Kingston and Guatemala City. All offer detailed and locally grounded accounts of particular technopolitical projects and encounters, encompassing a huge range of human and non-human actors assembled in different ways. The articles are also diverse in terms of the theoretical influences they draw upon. While we have adopted technopolitics as our overarching theoretical framework, we have encouraged the authors to develop their insights in the theoretical directions they felt would be most fertile. We view this diversity as a strength of the special issue and also of technopolitics as a concept, in its ability to cross-fertilize with different theoretical approaches that address the relationship between human and non-human actors.

Notwithstanding this diversity, the articles all contribute to developing the themes we have set out in this introduction: exploring how technopolitics operates in the security realm, the dynamics of agency and temporality it exhibits in different contexts, and the ways in which it relates to the contestation of sovereignty. In these ways, this special issue offers an innovative conceptual framework for studying how security dynamics are conditioned by technologies that often exceed the intentions of human agents.


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Notes

1. See also 'Atirador de elite fala sobre sequestro no Rio' ['Elite sniper speaks about hijacking'], *YouTube*, 21 August 2019; available at <https://www.youtube.com/watch?v=YjeMAN-5oWw> (accessed 16 January 2021).
2. Da Silva's family later informed police that he was depressed, had dropped out of school and spent most of his time on the internet (Seabra and Garcia, 2019b).
3. The governor's celebrations can be seen at <https://globoplay.globo.com/v/7856307/> (accessed 16 January 2021).
4. For example, see the livestreamed coverage of the channel Band News at https://www.youtube.com/watch?v=cs2SiVN_TW8 (accessed 16 January 2021).
5. See <https://mobile.twitter.com/wilsonwitzel/status/1163803888329416705> (accessed 31 October 2022).
6. Witzel was impeached in April 2021, following allegations of corruption in the purchase of medical supplies and services during the Covid-19 pandemic.
7. Do Nascimento also died shortly after, suffocated by three police officers in the police car on the way to the station. The officers were later cleared of murder charges by a jury. The story is told, with extensive footage, in the 2002 documentary *Bus 174* (directed by José Padilha and Felipe Lacerda, Zazen Produções).

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