Sound-Politics in São Paulo

Noise Control and Administrative Flows

by Leonardo Cardoso

In this article, I discuss community noise in São Paulo, Brazil's wealthiest, largest, and most emblematic modern metropolis. I draw on ethnographic research conducted between 2012 and 2015 with the antinoise agency and the police, the two main institutions responsible for dealing with community noise in the city. I present law enforcement assemblages as both unstable and heterogeneous, managed by people with different (and often diverging) expectations regarding how the city should sound. I expand on Bijsterveld's notion of "paradox of control" and show that the heterogeneity of "noise" as an umbrella concept, the complexity of its scientific mensuration, and the unsteadiness of its legal encoding make this a particularly difficult object for the state to grasp. After describing the institutional flows inside the antinoise agency, I examine the troublesome ordeal of community noise for the São Paulo police department. The third section of the article introduces the concept of sound-politics, which I define as the ways in which sounds enter (and leave) the sphere of state control. I am particularly interested in how sounds turn into objects susceptible to state intervention through the establishment of specific regulatory, disciplinary, and punishing mechanisms.

The past 15 years have been particularly stimulating for scholars interested in sound. With the publication of edited volumes (Bijsterveld and Pinch 2012; Bull and Back 2003; Erlmann 2004; Novak and Sakakeeny 2015; Smith 2004; Sterne 2012b), special journal issues (Bijsterveld and Pinch 2004; Keeling and Kun 2011), and a dedicated journal (Bull and Erlmann 2015), sound studies has built substantial academic momentum. Contributions to the field have shown special interest in the materiality of sound (re)production, opening lines of inquiry at the intersections of space, technology, and auditory practices. Scholars have questioned, for instance, the premise that music and speech are the exclusive routes for understanding cultural practices. They also question vision-centric historical (Sterne 2003) and ethnographic (Erlmann 2004) accounts, the naturalization of hearing as somehow outside of modernity (Erlmann 2010; Sterne 2003), and sensory determinisms.1

Emily Thompson (2002) and Karin Bijsterveld (2008) have offered important historical accounts on the emergence of noise as a cultural, scientific, and legal object within American and European modernity. In *The Soundscape of Modernity*, Thompson shows how, in the first decades of the twentieth century, a plethora of new techniques and instruments for controlling sound, including Wallace Sabine's reverberation formula, the sound meter, and the decibel unit, helped to establish the modern soundscape (or aural landscape) as one

Leonardo Cardoso is Assistant Professor in the Department of Performance Studies at Texas A&M University (Liberal Arts and Humanities Building, MS 4240, College Station, Texas 77843, USA [cardoso@tamu.edu]). This paper was submitted 25 VIII 16, accepted 22 XII 16, and electronically published 7 III 18.

where "sound was gradually dissociated from space until the relationship ceased to exist" (Thompson 2002:2). In her examination of neighborly, traffic, and aircraft noise as public problems with localized causes, solutions, consequences, victims, culprits, and owners (those who frame the problem), Bijsterveld argues that European and North American legislature on noise has been entangled in a "paradox of control": lawmakers are deeply invested in measuring and controlling sounds that can easily fall into the noise-as-waste category (such as aircraft noise) but evade the more controversial community noise from neighbors, bars, restaurants, and so on. As a consequence, "Citizens have . . . been made responsible for dealing with the most slippery forms of noise abatement and distanced from the most tangible ones" (Bijsterveld 2008:3–4).

Contributions by Steve Feld (1990), Charles Hirschkind (2006), and Brian Larkin (2014), among others, have established fruitful connections between sound studies and cultural anthropology. Feld's study in Papua New Guinea combines phenomenology, structuralism, linguistic anthropology, and extensive ethnographic research to describe the ways in which the Kaluli connect with the natural and spiritual worlds by establishing social ethos and pathos through environmental sounds. Drawing on the investigation of the sonic world as a nexus "for making sense out of the Kaluli world" (1990:84), Feld later coined the term acoustemology (acoustics plus epistemology) as a means to theorize about "sounding and listening as a knowing-in-action: a knowing-with and knowing-

1. As Sterne notes, the theological premise that "hearing leads a soul to spirit, sight leads a soul to the letter" (Sterne 2003:16) stretches from Plato to Walter Ong.

through the audible" (2015:12). Together with Paul Stoller (1989), David Howes (2003), Constance Classen (1993), and Veit Erlmann (2004), to name a few, Feld has stimulated a sensory turn in cultural anthropology.

Between the growing historical research on the scientific objectification of sound in the global north and ethnographic studies of sound-based epistemologies in the global south, analysis of the administrative and the legal-scientific seizure of the acoustic register outside Europe and North America has been scarce.2 On the one hand, as Jonathan Sterne stated recently, "The West is still the epistemic center for much work in sound studies, and a truly transnational, translational, or global sound studies will need to recover or produce a proliferating set of natures and histories to work with" (Sterne 2015:73). On the other hand, anthropologists with an "ethnographic ear," an expression alluded to by James Clifford (1986:12) to condemn "Western visualism" and revisited by Veit Erlmann (2004) to critique the anthropological approach to the senses as "texts" to be read, have rarely entered modern institutions to examine how the state listens.

In this article, I discuss community noise in São Paulo, Brazil's wealthiest, largest, and most emblematic modern metropolis. I draw on ethnographic research conducted between 2012 and 2015 with the antinoise agency and the police, the two main institutions responsible for dealing with community noise in the city. I present law enforcement assemblages as both unstable and heterogeneous, managed by people with different (and often diverging) expectations regarding how the city should sound. I expand on Bijsterveld's notion of "paradox of control" and show that the heterogeneity of "noise" as an umbrella concept, the complexity of its scientific mensuration, and the unsteadiness of its legal encoding make this a particularly difficult object for the state to grasp. After describing the institutional flows inside the antinoise agency, I examine the troublesome ordeal of community noise for the São Paulo police department. Due to external pressure and internal initiative, the police have attempted to tackle this problem by strengthening the links between community noise and public order.

This article advances three main questions. First, it asks how the state and its legal apparatus (not only science or culture) can mediate sensory expectations through spectrum issues that become more or less political according to their level of normalization. Second, drawing on ethnographic accounts, it questions a popular reading of Foucault that examines the state through the linear progression from juridical to biopolitical power (Lenke 2013). Finally, this article shows how a sound-centered study of the state can permeate a wide range of topics (from taste to religion, from party politics to public security, and from legal hermeneutics to econometrics)—topics that I only touch upon here and that deserve further ethnographic research.

Controversies surrounding urban noise tend to operate across spatial and ontological axes. Noise, to echo Mary Douglas, is matter out of place. From preventing coppersmiths from working near intellectual activity in ancient Rome (Bijsterveld 2008:56) to prohibiting iron-wheeled horse carriages from entering cities during the night in Medieval Europe (Berglund, Lindvall, and Schwela 1999:iii), to regulating airport operating hours (Ashford et al. 2012:63-87), city governments have tried to tackle noise problems by controlling space through mechanisms such as nuisance and zoning laws. But noise often disrupts these rules, permeating the intricate urban patchwork of private and public spaces and raising concerns about property use. On the opposite side of the spectrum, citizens with a more liberal attitude demand that the state refrain from interfering with their right to enjoy property by, for instance, engaging in the cathartic pleasures of loud music. This is particularly important for groups invested in sonic abundance, such as nightclubs, bars, restaurants, sports organizations, and religious leaders.3 Noise controversies as diverging ideals of space use can easily resonate with class (Radovac 2011), racial (Smith 2006), religious (Weiner 2014), and ethnic (Boutin 2015) differences.

The second axis of noise control, the ontological, relates to the question of why, what, how, and when one is expected to hear. In his soundscape research, R. Murray Schafer describes modern life as permeated by signals (foreground sounds, such as sirens), soundmarks (unique sounds that "make the acoustic life of the community"; Schafer 1994:10), and keynote sounds (constant background sounds, such as the air conditioner hum); a world where "audioanalgesia" ("the use of sound as a pain-killer, a distraction to dispel distractions"; Schafer 1994:94) and schizophonia ("the splitting of sounds from their original contexts"; Schafer 1994:88) have drastically changed the way we engage with sounds. As Larkin argues, auditory practices in urban centers require the constant management of attention, a "quintessentially modern phenomenon defined as an activity of exclusion" (Larkin 2014:996).

If the spatial axis can challenge state regulation by disrupting distinctions between private and public, the ontological axis does so by blending "subjective" (noise as an auditory attitude) and "objective" (noise as legal-scientific fact) conventions. While the democratic premise would treat all noises objectively as harmful sounds, local groups are constantly intervening in legal procedures to call attention to the cultural signals embedded in their sounds, separating "good" from "bad" decibels. As I show elsewhere (Cardoso, forthcoming), like the spatial axis, the ontological axis entails processes of legal encoding that are deeply entangled with class, racial, religious, and ethnic differences. Some consider the subjective component of the ontological axis more important than the quantitative to understand noise. "By its very definition," his-

torian Hillel Schwartz argues, "noise is an issue less of tone or decibel than of social temperament, class background, and cultural desire" (2004:52). In this article, I argue that both the quantifiable decibel and the more ambiguous nuisance are important mechanisms for defining and controlling noise.

The third section of the article introduces the concept of sound-politics, which I define as the ways in which sounds enter (and leave) the sphere of state control. I am particularly interested in how sounds turn into objects susceptible to state intervention through the establishment of specific regulatory, disciplinary, and punishing mechanisms. In a country permeated by violence and social inequality, where the most recent repressive dictatorial regime (1964–1985) has amplified the institutionalization of power asymmetries and the suppression of civil, social, and political rights, it seems crucial to investigate administrative practices in current neoliberal Brazil.

By examining how noise control takes part in spatial arrangements, the mobilization of public institutions, and the establishment of auditory parameters, sound-politics unearths citizenship issues as multiple forms of belonging to and becoming (a citizen) in the city. As Henri Lefebvre argues, space is a social product rather than a neutral given. His views on the right to the city as a demand for participation, as the "right of users to make known their ideas on the space and time of their activities in the urban area" (Lefebvre 1996;34), have been influential among geographers (Harvey 1990; Soja 1996) and anthropologists (Centner 2012; Low 1996).

From the ontological end, sound-politics tackles the series of institutionalized and noninstitutionalized noise technologies that turn individuals into modern citizens. This relates, for instance, to the audile techniques that come into play when one tries to ignore aircraft or traffic noise but considers leisure noise unacceptable, because the former is perceived within the limits of the city's work ethic and the latter in terms of the less relevant bohemian culture of "jobless" and "lazy" people. As Toby Miller argues, such an ontological process of civility through training in subjectivity exists as a connection between state and civil society and is centered on the "formation of cultural citizens, docile but efficient participants in [the] economysociety mix" (1993:xii). More broadly, sound-politics approaches noise as ontological politics, examining noise controversies not as different perspectives about a fixed and immutable (sonic) object but rather as multiple versions of it-all of which can stabilize or change its reality (Mol 1999).

In approaching noise and the state as an unstable series of associations through the creation and enforcement of laws, I draw on actor-network theory (ANT). As a method of social inquiry that "slows down" the narrative to get a better sense of how social assemblages are stabilized, ANT has stimulated nuanced approaches to science (Latour 1987), law (Latour 2010), economics (Callon 1998), and the modern project more broadly (Latour 2013). In that sense, whatever we understand as "noise" or "state" entails a wide range of human and non-human actors, disciplinary techniques, institutional trajectories, and bureaucratic modi operandi.

I also take into account Foucault's work on governmentality. Rather than seeing ANT and governmentality studies as divergent approaches, I believe the former can contribute with the specificity and heterogeneity of the ethnographic investigation, while the latter can help us locate state power less as constraints upon citizens than as the effect of the mobilization and stabilization of actors through which citizens become "capable of bearing a kind of regulated freedom" (Rose and Miller 1992:174). Here I follow scholars like Nikolas Rose, Peter Miller (1992), and Thomas Lenke (2013) and approach governmentality through the "humble and mundane mechanisms by which authorities seek to instantiate government" (Rose and Miller 1992:183). Such an approach includes, for instance, a close look at the materiality of bureaucracy—the "artifacts entangled in . . . prosaic documentary practices" (Hull 2012:4).

PSIU

In April 1994, a new comprehensive noise ordinance for the city of São Paulo came into effect. The ordinance, known as the "noise law," was created in response to noise complaints against bars, restaurants, gas stations, churches, and construction sites. The ordinance establishes a fine of 300 UFM, or US\$12,000,4 to commercial venues without a proper license. A venue that continues to operate without a license after the first fine receives a second fine (plus one third of the first fine). A third inspection of the place leads to administrative closure. Venues with a valid license making noise above the limits established by the zoning law receive a fine between US\$2,000 and US\$12,000 (depending on the capacity of the space), also followed by a second fine and administrative closure.⁵

The noise law delegated responsibility to the executive branch for creating an agency equipped with the "mechanisms to manage complaints and . . . inspect and measure noise levels." In 1994, the mayor of São Paulo, Paulo Maluf, issued a decree creating the PSIU (*Programa de Silêncio Urbano*, or Urban Silence Program), São Paulo's first antinoise agency. The administration established that the PSIU would operate across departments, one of which should oversee its activities. Maluf initially gave the coordinating role to the Municipal Environmental Agency.

Already in its first years of existence, PSIU's trajectory started to shift. In 1996, Maluf issued another decree moving the coordinating role to the Department of Food Supply, arguing that the "[the Department] already inspects the hygiene of the kitchens in commercial establishments." This shift re-

- 4. The UFM (Unidade Fiscal Municipal) is a unit used for local taxes and fines; its value fluctuates according to the average of daily or monthly interests negotiated by banks. Taking the conversion rate of March 2016 (US\$1 = BR\$3.60), 1 UFM equals approximately BR\$144, or US\$40. Fine values shown in this article use this currency conversion rate.
 - 5. See Cardoso 2017.
 - 6. Prefeitura de São Paulo. Decreto N. 35.928/1996.

duced the number of inspection engineers and strengthened the links between the PSIU and the service sector. According to Regina Sobral, an environmentalist involved in the creation of the noise law, Maluf's decision was an attempt to avoid problems with construction projects, the mayor's main political asset (Regina Sobral, personal communication, 2013).⁷

In 1999, the city passed another ordinance. Known as the "1 a.m. law," it prohibits bars from staying open after 1 a.m. without proper soundproofing. Offenders receive a fine of US \$12,000, with administrative closure in case of repeat offenses. In 2001, Mayor Marta Suplicy, from the center-left Workers' Party (*Partido dos Trabalhadores*, or PT), issued a decree assigning enforcement of the 1 a.m. law to the PSIU. In 2003, she decentralized the agency's operations by moving them to the city's newly created subprefectures. According to Suplicy's decree, the shift was necessary in order to "standardize and unify the criteria, methods, and procedures concerning the control, licensing, monitoring, and inspection of activities that generate noise pollution in São Paulo."8

In 2005, when the city administration shifted from the PT to the center-right Brazilian Social Democracy Party (PSDB), the elected mayor appointed Moacir Rosado, known as "Major Rosado" due to his police background, to direct the PSIU. Following Rosado's request, the mayor issued a decree recentralizing the PSIU, arguing that "decentralizing of the control and inspection of the activities that generate noise pollution . . . did not achieve the expected results."

With privileged access to the mayor's office, Major Rosado was able to secure a large office space in downtown São Paulo, buy new equipment, hire new people, train the staff, and have dedicated vehicles for the inspections. In addition, rather than responding to complaints, he used his connections with the police to expand the agency's operations, organizing large inspection blitzes in neighborhoods with a high incidence of noise complaints. As infractors continued to ignore the agency's actions, Major Rosado articulated a heavier reading of the law.

I researched the legal definition of "administrative sealing," and it includes putting large stone blocks in front of the establishment to keep the owner from opening it. The block is city property, so people are not allowed to remove it. If you remove the block, you are damaging public property, and then you are in trouble. We also started to wall up the entrance. (Moacir Rosado, personal communication, 2012)

In 2012, when I conducted fieldwork at the agency, much of Rosado's rewiring remained—it was still centralized, but the staff had shrunk and the large inspection blitzes had been discontinued. The director was Wanderley Pereira, a retired police officer known inside the agency as "the Colonel" (the new mayor followed his predecessor in placing someone with a

- 7. Maluf, a controversial right-leaning politician, overbilled several construction projects and diverted public funds to his accounts overseas.
 - 8. Prefeitura de São Paulo. Decreto N. 43.799/2003.
 - 9. Prefeitura de São Paulo. Decreto N. 45.729/2005.

police background to direct the agency). The Colonel explained that the PSIU was receiving about 2,000 complaints every month. Sixty percent of complaints were related to leisure venues (bars, restaurants, and nightclubs). Most of the other complaints had to do with religious services and construction sites.

The PSIU headquarters is divided into five main sections. At the front desk, an officer orients people and answers calls from complainants wanting to know where their cases stand. The front desk officer also orients people who have received a notification that a complaint has been made against them. The other rooms are the director's office, the fine sector, the juridical sector, and a large central room with partitions separating human resources, the ombudsman, the archivist, the scheduling coordinator, and the programmers.

Each programmer is responsible for one of the city's five regional sectors (center, west, east, north, and south). Ms. Teodoro is the programmer responsible for the east sector, which comprises roughly four million people in 33 districts. Early in the week, Teodoro updates the system with data about recent inspections. Each new activity must be carefully linked to past actions in order to keep the administrative flow as smooth as possible, so that the inspectors know what has been done and what needs to be done—levy a fine, implement an administrative closure, and so on. After updating the system, Teodoro then puts together a list of inspections to be conducted later that week. Once the programmers finish compiling the lists, the scheduling coordinator organizes the inspections into blocks of around 10, puts the lists in sealed envelopes, and determines which inspection agents will be responsible for each list. What routes, then, would a noise complaint follow inside the PSIU? The following narrative is a description of events observed during fieldwork.

Ms. Freire is fed up with Bar da Esquina playing loud music every weekend night. The music rattles her bedroom window and deprives her of quality sleep, which she considers a right after a week of hard work. Unwilling to talk with the bar owner and tired of having the police come and "do nothing," Ms. Freire decides to seek help from the PSIU. She accesses the municipal public system online and fills out the complaint form

The PSIU programmer accesses Ms. Freire's complaint. The programmer includes Bar da Esquina in the list of places to be inspected on the following weekend at the time indicated by Ms. Freire in the form. Again, it is important to keep the flow smooth: if the agents arrive either too early or too late, that can compromise their technical report—Bar da Esquina might claim it was not playing loud music at the time indicated by the complainer, or Ms. Freire might argue that the agents did not find any wrongdoing because they failed to arrive at the right time. The scheduling coordinator then assembles the inspection lists and sends requirements to the municipal guard, which will provide security backup to the agents. The scheduling coordinator randomly selects a crew of two inspection agents and a driver for each list—ideally 10, one for each law in the city's five regions.

The agents arrive at the PSIU around 7 p.m. They receive the envelopes and examine the addresses to figure out the best routes to optimize time in traffic-intense São Paulo. Unlike the 1 a.m. law agents, the noise law agents (who will inspect the Bar da Esquina) need to make measurements with a sound level meter. Again, every point of passage separates a smooth from a bumpy flow: if an agent forgets to bring enough forms (which happened once during fieldwork) or forgets to check the battery of the sound level meter, the inspection will be cut short and the administrative flow compromised.

The crew arrives at the metropolitan civil guard station, where they meet the guards who will accompany them. The first three places on the list are closed. The fourth place is a bar located on a busy avenue. Although the sound level meter marks 72 dB (above the zone limits), the environmental noise on the street is too close to that value, preventing the agent from issuing a fine.

They finally advance towards the Bar da Esquina. A few blocks before arriving, the agent measures the environmental noise: 55 dB. This value will be the point of reference to establish how much noise the bar is projecting into the public space. At the Bar da Esquina, the agent measures the sound 2 m away from the façade and 1.2 m away from the ground: 72 dB. Not only is the value above zoning law limits, but the difference between environmental (55 dB) and specific noise is wide enough. The agents go inside and ask for the bar license. Everything is in order. The agent then explains that the Bar da Esquina is making noise above the limits, which is 45 dB for a mixed zone of medium to high density between 10 p.m. and 7 a.m. The fine, based on the maximum capacity of the venue, is US\$4,000. After visiting all 12 scheduled places, the inspection agents return to the PSIU, where they deliver the envelope. On the following days, the programmer adds this data into the system. The fine sector registers the fine. Ms. Freire is able to see on her computer screen that "an action has been taken."

Bar da Esquina's owner owes the city US\$4,000 for making too much noise. The PSIU will allow the bar to stay open (without any loud music, of course) as long as it provides, within 60 days, a technical report from a credited acoustic engineer explaining how the bar is going to correct the problem. As mentioned above, if the owner does nothing and continues with the loud music, the PSIU will issue another fine and eventually shut down his bar.

In a matter of weeks, the bar owner receives the fine by mail. Unwilling to pay US\$4,000 and outraged that only his bar (out of many on that street) is being punished, the owner decides to fight the city. His lawyer submits an appeal that tries to break the links between the PSIU's report and the noise law.

The appellant recognizes that the inspection of noise emission measured 72 dB at maximum value. He argues that the object of the complaint was the bar located on the other corner on the same block. He questions the validity of the fine, asserting that the inspector did not follow the technical

standards for noise measurement. For instance, the Inspecting Agent measured the noise *inside* the establishment. Additionally, the noise produced by the global environment was not taken into account.

The Department of Environmental Quality Control, which decides this type of appeals, requests more information from the agency regarding the circumstances of the inspection. The case goes back to the PSIU and is handed to the inspection agents. After reading the lawyer's arguments, the agent writes his response: he did not measure the sound inside the bar. It may appear that he did so, but when he entered the bar to talk with the manager, he had already made the measurement. He explains that the complaint was made specifically against Bar da Esquina. Also, he did measure the environmental noise, as indicated in the technical report. He concludes by suggesting that the City of São Paulo sustain the fine. The Department of Environmental Quality Control concurs, and the fine is maintained.

The bar owner lost the battle in the administrative sphere. He can now either pay the fine or move the case to the state level. He chooses to keep fighting, and the case is sent to São Paulo State Court. The Lawyer provides the arguments once again, calling into question the agent's inspection procedures. The attorney general of the city recruits the PSIU's juridical sector to make sure the links between law and law enforcement are strong enough.

The state court's rapporteur writes a summary of the case, analyzing both the lawyer's and the attorney general's arguments. After tying together legal codes, municipal laws, Brazil's constitution, previous cases, legal doctrines, and scientific standards, the rapporteur concludes her decision defending the maintenance of the fine. The three appellate judges discuss the case based on the rapporteur's deliberation. Following her analysis, the court rejects the appeal and sustains the fine.

Note that, at this point, it is hard to know whether Ms. Freire's problem was solved or not. While this extensive assemblage of actors, spread across documents and offices, is deployed to stabilize the fine and solve her problem, Ms. Freire might come to the conclusion that the PSIU is either corrupt or inefficient—perhaps both! The temporal gap between the moment a PSIU officer tells Ms. Freire that "an action has been taken" and the night she has a quiet night of sleep depends entirely on this administrative ordeal, on the gradual addition of layers, the careful inscription of administrative actions and, eventually, on the effective distinction between legal or illegal sounds.

The state's administrative engine is relatively slow and traceable, because it needs to avoid falling into legal embroilments, which could damage this bureaucratic machine and the role of the state itself. At the same time, as Bruno Latour reminds us, this slowness "precisely form[s] the primary material of justice, the material of that which will perhaps one day protect [us or our loved ones] when they are, alas, faced with fighting the coldest of cold monsters, the State" (Latour 2010:91).

São Paulo Police

It is another Friday evening at the Centro de Operações da Polícia Militar, the Military Police Operations Center (COPOM). Throughout the night, the roughly 90 officers working in this large room will process thousands of requests and inquiries from callers across São Paulo state. In the corner of the room, six officers answer calls related to the Serviço de Orientação ao Público, or Public Orientation Service, responsible for nonemergency issues. On weekends, the majority of the calls are related to community noise, a nonemergency case placed within the larger legal category of "peace disturbance." Article 42 from the penal contravention laws establishes as a misdemeanor disturbing someone's peace or work by (1) shouting or causing uproar, (2) conducting noisy or annoying activity in disagreement with the legal prescription, (3) using sonic instruments or acoustic signals abusively, or (4) provoking or not preventing noise made by animals under one's guardianship.

After entering the information provided by the caller into the categories available on the police database (a first step in the gradual transformation of events into infractions), the call operator sends the information to the dispatch center, which forwards the request to the police battalions of the area. Once the information gets to the battalion, the commandant will decide, depending on available resources, whether to send a patrol car to the noise scene. If the patrol officers take on the request, they will decide whether to engage with the incident—this will depend on the resources that they have to cope with it. Every decision by every individual in this network is entered into the system in order to terminate the request. The information travels quickly and wirelessly, allowing officers to check each other's actions.

While this process often turns into a police report in cases of theft or physical violence, it often stops short of doing so in cases of noise complaints. Although the police continue to improve procedures for accurately classifying, mapping out, and preventing public security problems, community noise not only continues to grow but insists on remaining unsolved. Instead of being eliminated from the streets, community noise is entering the police infrastructure and clogging their system. COPOM's director, Major Carlos Tenorio, whom I interviewed in 2012, explains the institution's challenge.

We answer roughly 40,000 calls every day. On weekends, due to peace disturbance incidents, we have roughly 60,000 calls per day. Of every 10 calls we receive on weekends, six are related to peace disturbances. We dispatch a police officer for two out of these six calls. The officer goes to the place, but usually neither incident turns into a police report. (Major Tenorio, personal communication, 2012)

With very few residents willing to go to the police station to file a report, complaints become institutional noise rather than community silence. "If the complainant doesn't want to go to a police station file a report, all we can do is ask the noisy residents to turn the volume down," Major Tenorio explains. Although the police receive a large number of peace disturbance complaints, these are not taken into account when determining the allocation of police resources, precisely because they do not generate reports. Although the São Paulo state military police have recently tried to create alternative channels to unclog the system, complainants still prefer to avoid filing a report for fear of being exposed or because of distrust in the administrative process. Dealing with noise without actually eliminating it risks damaging public opinion toward the police, and some officers told me that tackling this problem was a major obstacle for the police in trying to gain respect in communities. Brazilians have high expectations regarding the police's ability to solve problems of peace disturbance, because they see the police as the only public institution with the infrastructure and disciplinary authority to effectively quiet noisy residents

In contrast with police in the United States, Brazilian police are organized at the state level, with a military police (polícia militar) responsible for ostensive policing and a civil police (policia civil) in charge of investigative work. Cases of police indiscipline or illegal activity are investigated and decided by an internal military court—a procedure that continues to raise concerns about impunity and corruption. This suggests that residents expect the police to solve their community noise problems not only due to the institution's resources but also because of its long history of "coercive methods." Fear of crime increased when Brazil transitioned back to democracy in the 1980s, which led to support of illegal and undemocratic responses by the state (Caldeira and Holston 1999). A 1999 survey conducted by the University of São Paulo showed that 61% of Paulistanos agreed with the statement "it is difficult to feel protected by the laws" (Cardia 1999:55).

In 1997, in response to an already shaky relationship with civil society, which had worsened after violent abuse scandals, 10 the São Paulo state military police adopted community policy strategies, "an amalgam of previous Brazilian practices and the 'original American concept' of community policing" (Ferragi 2010:33). The São Paulo police trained thousands of police officers in community policing and installed community-based substations across the city. A central rationale in American community policing has been the "broken windows" approach. Put forward by James Wilson and George Kelling in an influential 1982 article (Wilson and Kelling 1982), the theory maintains that there is direct relationship between crime and the environment in which it takes place. As the authors explain, "One unrepaired broken window is a signal that no one cares, and so breaking more windows costs nothing" (Wilson

10. In 1992, following a riot in Carandiru (then the largest prison in Latin America), the São Paulo police killed 102 defenseless prisoners after they had already been surrounded. In 1997, Brazil's main television network broadcast footage of police officers engaging in brutally violent acts (including one execution) against residents of a favela in greater São Paulo.

and Kelling 1982). For Wilson and Kelling, suspicious "strangers" in the community who needed to be neutralized included drug dealers, prostitutes, robbers, panhandlers, the "mentally disturbed," and "rowdy teenagers." Community policing stimulates a closer relationship between residents and police officers, and it stimulates the discussion of a wide range of neighborhood problems (beyond strictly public security issues). It also gives police officers a more direct environmental grasp of social interactions and facilitates their perception of disorder as an avenue to crime. In both cases, residents and police officers frame community noise as a broken window that needs to be identified and fixed right away to prevent the occurrence of more serious crime.

Another point of contact between community noise and public security in São Paulo has been the "zero tolerance" approach. Zero tolerance became popular during Rudolph Giuliani's administration in New York City (1993–2001). William Bratton, appointed by Giuliani as the New York police commissioner, drew on a specific reading of broken windows theory to establish zero tolerance measures. Bratton's zero tolerance policing relied less on increasing proximity between police and civil society than on Wilson and Kelling's argument that "disorder and crime are usually inextricably linked, in a kind of developmental sequence" (1982). Under Bratton, the NYPD became invested in removing homeless people from the subways, "squeegee pests" from stoplights, and panhandlers, drunks, and "noisy" teenagers from the sidewalks (Bratton 1998:33).

Although aspects of the zero tolerance approach had been present in Brazil's military police before Giuliani popularized it, it was particularly central for Colonel Álvaro Camilo. Camilo, who led the São Paulo state military police between 2009 and 2012, argues that community noise is part of a "culture of disorder" and is therefore a public security issue. The zero tolerance approach is tangible, for instance, in recent police attempts to eliminate "noisy" youth street parties in the city's poor peripheries. As Camilo explains, "To allow the youth to commit some types of offenses is an incentive to impunity. Crime must be fought from side to side" (quoted in Rabelo 2015).

The community security councils provide a third link between noise and security in São Paulo. The councils, established in the state of São Paulo in 1985, encourage the cooperation between the police and civil society. In the city of São Paulo, these meetings take place monthly and are organized by district. Each council is presided over by a citizen (who must live or work in the area) and is attended by the area commissioner (from the civil police) and captain (from the military police). Officers from the subprefecture, municipal transit agency, and the metropolitan civil guard are also usually present to answer and clarify questions. I attended several community security council meetings between 2012 and 2013. One of the most frequent complaints at many council meetings related to youth street parties known as *pancadões* (literally

"big thump," in reference to the music genre and the loudness of the event). 11

Police officers told me in private conversations that community security council participants often include more serious acts in their descriptions of environmental complaints (e.g., a dark park or a loud bar) to persuade the police to take action. One police captain I interviewed explained that residents often talk about "loiterers with some type of weapon or teenagers using some type of drug. They most certainly can't tell if someone is armed just by looking from a distance, from their windows. But if it is just a guy hanging out in the plaza, we won't go because there is nothing wrong with that" (personal communication, 2012). As a result, what could be seen as simply dirt, lack of public lighting, or loud music is gradually linked to "suspicious" activities. Similar to what Benjamin Chesluk observed in his ethnography of security council meetings in New York City in the early 2000s, citizens request police intervention by learning how to describe their problems from the police's perspective, what the author calls "broken windows stories" (Chesluk 2004:254).

These three connections between the police and local residents are part of a continuum that establish what David Matless calls the "moral vocabulary of landscape": "a language for harmonious human-environment relations" (Matless 1995:88). In criminalizing space and spatializing crime activities, purifying the police as an institution and stimulating the purge and shared surveillance of disorderly acts, the police use their disciplinary power to maneuver the public opinion and circumvent legal obstacles that prevent them from quieting noisy people.

Sound-Politics in São Paulo

Bruno Latour identifies five meanings of the word "political." First, there is politics whenever new associations between humans and nonhumans are established, such as sound meters or new instruments for observing the impact of loud sounds on the inner ear. Second, politics emerge whenever an issue becomes a public problem—for example, campaigns against noise pollution. Third, the political comes forth "when the machinery of government tries to turn the problem of the public into a clearly articulated question of common good and general will" (Latour 2007:816). An example would be lawmaking and the administrative practices designed for noise control discussed here, all of which take ethical values of collective life (whether encoded into law or not) as a building block. Another possible meaning of politics refers to the process in which wellbehaved citizens discuss in the public sphere to deliberate on possible outcomes. In São Paulo, an example of this politics is the revision of the city master plan, which requires public meetings between citizens and public officials. The final possible facet of politics, one that includes Foucault's work on gov-

11. For a discussion of the pancadões, see Cardoso, forthcoming

ernmentality, is the stage in which an issue has been "black boxed" and has thus ceased (momentarily at least) to be seen as "political." We could include the relationship between sound exposure, decibels, and hearing loss as virtually apolitical nowadays, with thousands of noise ordinances confirming these relationships as stabilized facts.

As it moves across the state machinery, sound-politics entails multiple forms of institutional encoding, including regulating, disciplining, and punishing noisy infractors. As the state attempts to control the environment by filtering acceptable and unacceptable sounds, these same sounds infiltrate and (re)shape state institutions. It is this double movement that makes city residents (and thus the state as well) increasingly sensitive to sounds as objects susceptible to state intervention. Why does noise continue to slip through the administrative cracks and clog administrative flows?

Sound-politics entails the translation of increasingly precise scientific data into legal practice. This process, which calls for the simplification of complex and unstable scientific variables to make possible distinctions between legal and illegal acts, is further undermined by the complexity of sound perception and analysis. The human inner ear is a highly specialized organ. Fragile and shielded by a thick layer of skull bone, it is one of the most difficult parts of the human body to observe, which has made the study of the effects of noise on human health particularly challenging. The decibel, the logarithmic unit used to quantify sound pressure values, is difficult to apprehend (unlike, say, degrees Fahrenheit or weight in pounds) and hence remains distant from practical use. The sound level meter, which emulates the human ear, is an expensive piece of technology that local governments are often reluctant to buy. There is also little consensus on the best way to measure sounds. (Next to the person making the noise or the person receiving the noise? Inside or outside the property?) The human ear, decibel, sound level meter, sound measurement, and sound monitoring all contribute to making sound-politics considerably unstable.

Nuisance and decibels have become the two main channels through which sound-politics operate within the state. Of the two, nuisance is the most difficult to stabilize. As "antisocial" behavior, from barbarism to madness and vulgarity, nuisance has been the tactic that different technologies of power (e.g., colonialism, medicine, and aesthetics) seize in order to quiet "rowdy" groups. The decibel, on the other hand, is more closely related to biopolitics. As the building block of noise pollution, the decibel allows both science and law to define the "average" or "normal" conditions for the hearing body. While noise-asnuisance is the channel to discipline based on notions of civility and public order, noise-as-decibel is part of a "set of

12. Decibel-based norms and regulatory measures rely on the statistical study of auditory perception conducted in the 1950s by D. W. Robinson and R. S. Dadson (Robinson and Dadson 1956), which established hearing sensitivity thresholds according to frequency.

mechanisms through which the basic biological features of the human species became the object of a political strategy" (Foucault 2007:16).

Although they are endowed with unique disciplinary power, the São Paulo police lack the necessary resources to monitor spaces in search of excessive noise. The COPOM has 270 surveillance cameras across the city—"electronic eyes that work 24 hours a day, seven days a week, [with] a range of up to 3 km" (APMDFESP 2011)—but no microphones. The São Paulo police also lack the legal support to punish noise infractions. Complaints continue to stop short of becoming reports, preventing the institution from taking noise into consideration when allocating resources. As we saw earlier, the environment-crime paradigm is partly an effort by the police and residents to bypass the instability of nuisance by fixing noise more firmly within security matters.

The PSIU, on the other hand, has a much more limited disciplinary infrastructure but a larger judiciary authority. This authority is not fully within biopower, because the agency does not conduct statistical analysis of the frequency and distribution of noise in the city to assess the quality of the environment or the wellbeing of the population ahead of time, in an attempt to "achieve the right relationship between the population and the state's resources and possibilities (Foucault 2007:100). Rather, the agency conducts measurements in decibels in order to give stability to the fine as a legal device. If the police have often tried to compensate for their lack of judiciary authority by bringing noise closer to crime, we saw that (under Major Rosado) the PSIU can also compensate for legal obstacles, increasing its disciplinary force by bringing crime closer to noise control. In following the administrative steps necessary for activating the PSIU against the Bar da Esquina, I suggested that the agency moves slowly, reluctantly, and cautiously. However, we saw that the rift separating Ms. Freire's urgency in solving her problem and the PSIU's administrative pace puts into question the nature and quality of such judiciary power—citizens know it is there, but they just do not hear it.

To discuss sound-politics as they relate to community noise also requires taking into account economic stakeholders, such as beer companies, the so-called creative class, the service sector, and the soundproofing and audio technology industries. For instance, when the bill that would eventually become the 1 a.m. law was first proposed in the São Paulo Municipal Chamber, one of the internal reviewing commissions opposed it on the grounds that it was unconstitutional to "prohibit or prevent licit economic activities" (Câmara Municipal de São Paulo 1996). The Bars and Restaurants Union claimed that the ordinance would eliminate up to 120,000 jobs in the city (Folha de São Paulo 1999). A noise ordinance that interferes with licit economic activities thus needs a strong argument to prevail. With the 1 a.m. law, the argument was the compelling crimeenvironment paradigm (Cardoso 2017).

Economic concerns take part in the state's conduct as well. In neoliberal democracies, public institutions have to function

not only according to legal parameters but also through the constant analysis of capital gains and losses. This makes it possible to "test governmental action, gauge its validity, and to object to activities of the public authorities on the grounds of their abuses, excesses, futility, and wasteful expenditure" (Foucault 2008:246). In full operation, the PSIU started to turn community noise into financial gain. In 2005, it issued a total of US\$2.3 million in fines. By 2012 that number had more than doubled.

PSIU's erratic trajectory suggests how politicians approach sound-politics. Although, as Scott Mainwaring notes, Brazil has been marked by "considerable instability in patterns of party competition, weak party roots in society, comparatively low legitimacy of parties, and weak party organizations" (Mainwaring 1999:3), we can still distinguish two major stances associated with the Workers' Party (PT) and the Brazilian Social Democracy Party (PSDB)—parties that were created and remain highly influential in São Paulo.

The center-leftist PT emerged in the late 1970s as a grassroots movement among union leaders, activists, and intellectuals. The party leans toward welfare capitalism and tries to establish multiple zones of contact between the government and civil society as a strategy to infuse a sense of demos into the citizenry (e.g., cultural citizenship, affirmative action, and federal assistance programs). The party has attempted to decenter participatory decision-making channels, which helped to galvanize support from poor urban peripheries. In São Paulo, the PT formalized the subprefecture system in the city and decentralized the PSIU. PT mayors have nominated technocrats to direct the agency, who were willing to follow the mayor's broader welfare agenda away from zero tolerance.13 The PSDB is more closely connected to the private sector, property rights, and individual liberty. It has embraced zero tolerance and relied more often on centralized disciplinary mechanisms to punish noisy behavior, appointing people with extensive police backgrounds to direct the antinoise agency.

The PT-PSDB dispute indicates broader tensions between democracy and liberty, the former based on equality and popular sovereignty and the latter on individual rights and the rule of law. As Chantal Mouffe argues, that both are manifested in current governmental frameworks does not mean they are smoothly integrated. On the contrary, the two are intrinsically irreconcilable: "What cannot be contestable in a liberal democracy is the idea that it is legitimate to establish limits to popular sovereignty in the name of liberty. Hence its paradoxical nature" (Mouffe 2000:4). As it mediates individual rights and public interests, the polis (and its investment in demarcating who and what belongs to the acoustic demos) and the cosmopolis (multicultural and multiacoustic), the state threads through the spatial and ontological axes in attempts to anchor

13. This has caused much political tension, as the military and civil police work for the governor.

sound-politics within its regulatory domain. In so doing, it intensifies the enduring tensions of the democratic paradox.

Conclusion

In this article, I examined the administrative flows in two state institutions in São Paulo as both attempt to tackle community noise. Rather than approach this type of noise as either a cultural token or a physical phenomenon, I discussed both the material and symbolic as elements in localized assemblage. I drew on ANT to describe community noise control as the amplification of spatial and ontological tensions that call for the constant mobilization of certain actors (sound level meters, administrative networks, documents, and laws). In following institutional circuitries, I suggested how encoding noise into law, laws into administrative courses of action, and state policy into steadier social assemblages entails not only defining the normal (hearing) body but also performing a model of governmentality that moves across and disrupts group interests inside and outside of public institutions. The concept of soundpolitics introduced here is an attempt to grasp the ways in which the state acts in deploying disciplinary, judiciary, and biopolitical mechanisms to stabilize social associations. I suggested some attributes related to sound-politics, from the complexity of hearing and sound measurement to party politics, as these have played out in enforcing the law in São Paulo.

Laws operate through discrete boundaries. The ethnographic material suggested a juxtaposition of different paradigms of noise control. One relies on property rights and subjective and ontological hearing (in which citizens can accuse each other of being noisy but only if they are willing to enter into the public sphere); the other relies on spatial and temporal elements, is expressed in measurable decibels, and is linked to licenses that can be granted or revoked. The logic of the legal system in a liberal democracy requires workable, science-based forms of objectivity. Here we see elements of judiciary, disciplinary, and biopolitical technologies of power in a disjunctive condition. This is the main reason why, although citizens still believe in the government's ability to eliminate unwanted sounds (as the high number of calls received by both institutions indicate), most complaints end up in administrative limbo. As mentioned above, many of the parameters and discrete boundaries of noise ordinances are not easily graspable by the

However, we saw that both the government (the PSIU and the military police) and the citizens are constantly putting these boundaries up for discussion with help from lawyers. As soon as actors understand the disjunctive nature of noise control in the city, they attempt to either circumvent these discrete boundaries or reassociate the issue of noise with other (more stabilized) problems, such as public security. The instability of noise problems is further reinforced by the instability of the administrative flows through which these problems run. In that sense, sound-politics provides a theoretical nexus to un-

derstand how environmental noise is able to penetrate a range of political milieus.

Comments

Karin Bijsterveld

Department of Technology and Society Studies, Faculty of Arts and Social Sciences, Maastricht University, PO Box 616, 6200 MD Maastricht, The Netherlands (k.bijsterveld@maastrichtuniversity.nl). 21 VI 17

Sensation, Discretion, and Complaining with Style

"With very few residents willing to go to the police station to file a report, complaints become institutional noise rather than community silence." This is one of the many insightful and elegantly formulated claims in Leonardo Cardoso's article on sound politics in São Paulo, Brazil. His paper is timely in every respect. Sound studies, and the sociology of noise in particular, have long been waiting for work that makes the West the rest and centers instead on how states across the globe deal with noise. Cardoso's anthropological work is especially valuable because it uniquely studies São Paulo's noise control bureaucracy from within. He has done so by shadowing desk officers, inspectors, and policemen in their attempts to come to terms with a public problem that their superiors have co-defined but which slips through the "cracks" of the regulatory assemblages they uphold.

One such assemblage is the antinoise agency PSIU and its regulations, forms, and sound level meters. On paper, this organization protects São Paulo's 12 million citizens against noise by prohibiting commercial venues such as bars and restaurants from staying open after 1 a.m. if such venues do not have sound insulation that brings their sound level below the standard allowed in their zone. If the agency can prove, after complaints and inspections, that the venues breach these rules, their owners will be fined and may ultimately lose their license if they continue creating trouble. To get there, however, officials have to find their way through the legal system with care: measurements and notifications need to be executed systematically, cautiously, and with patience. And although citizens are able to track the administrative actions to some extent, they may not hear any news from the agency for months. "Citizens know it is there, but they just do not hear it." The other option they have is to call the police with reference to "peace disturbance." Yet even if police officers are able to surprise the noise maker at exactly the right, offending moment, their procedures may end in limbo if citizens do not file an official complaint.

Cardoso adopts Bruno Latour's take on politics to show how networks of humans and nonhumans, such as measurement instruments, expand until particular dimensions of noise politics are black boxed—like the sound levels considered to damage hearing or those appropriate for certain areas. He shows how the normalization of average sensation behind these state interventions is captured best by Michel Foucault's notion of biopolitics. And he refers to my "paradox of control" to understand why regulations such as those employed by the PSIU easily fail. These regulations seek to control some public problems of noise by casting means in perception in terms of discrete and feasible boundaries between punishable and nonpunishable levels of decibels. Although such regulatory discretion seems highly tangible, the legal requirements, the measurement conditions, and the decibel unit itself are usually hard for citizens to understand. Moreover, not all forms of noise are covered by strictly defined laws, as has often been the case for noise produced by residential neighbors—leaving citizens to their own resources. Remarkably, São Paulo dwellers can knock on the doors of the PSUI for noise created by commercial venues and on those of the police for community noise, because police officers consider noise as "broken windows," inviting carelessness and crime. But in the PSUI case, the time lag between complaint and solution is too long, whereas in the police actions, citizens themselves often fail to take the last step.

Cardoso is rather brief when it comes to the causes of not filing complaints, but he does suggest that citizens distrust administrations or fear repercussions by the accused once their names are public. This last issue is as old as nineteenth-century continental European nuisance law. Who openly dares to bereave his neighbors of their income? But if so, what can be done? Are their ways out from the "tragedies" Cardoso and I have narrated?

In *Mechanical Sound* (2008), I suggested to empower citizens by assisting them to "complain with style," meaning to dramatize their problem in such a way that it links up effectively with existing noise and other regulations. Cardoso's paper includes an intriguing example of such skills, when he explains how citizens bothered by loud street parties rarely call the police just about noise but instead suggest links with weapons or drugs. Unjustly accusing others is a dangerous strategy, however, even though it fits with the broken window approach. Helping citizens to correctly file a complaint with a couple of neighbors together or underlining that a bar may get more community customers if its owners go for soundproof walls might be stylish alternatives.

The problem of the time lag might be solved by offering citizens forms of temporary refuge. Giving them high-quality earplugs for the moment is one option. A more structural solution would be to take R. Murray Schafer's "soniferous garden" (1994:246) seriously: acoustically enjoyable spaces, either natural or designed, that can provide relief from noise. Schafer had gardens with meditation temples in mind, but why not situate sound-designed housing in it and create islands of silence?

Yet a third option might be most helpful, and that is to create islands of noise rather than silence. Just as many countries separated industrial zones from residential areas in the twentieth century, let us now create entertainment zones. The first wave of noise abatement (1900–1930s) defined the city as a place people could not escape from. The second (1950s–

1970s) considered the city as a place to leave in favor of the village. In the third (1990s–present), the city is the place to be—a vibrant place that should sonically cater for all. ¹⁴ Zones of entertainment with sophisticated noise-cancelling walls would match this ideal: within reach of the city—but not within its auditory horizon.

Veit Erlmann

Butler School of Music and Department of Anthropology, University of Texas at Austin, Austin, Texas 78712, USA (erlmann@utexas .edu). 19 VII 17

Cardoso raises a number of important questions about the relationship between sound, state power, politics, and law in one of the world's most populous urban agglomerations. Readers familiar with ANT will readily recognize his deft appropriation of some of ANT's basic tenets, such as the notion that the stability of any institution or set of rules and practices does not derive from an overarching political or social framework but from a never-ending series of attempts at translating, encoding, standardizing, and disciplining what are inherently incompatible and unstable domains. But Cardoso also adroitly enriches this analytic by invoking a fundamental discontinuity or "paradox of control," as he calls it, quoting Karin Bijsterveld, at the heart of sound: its ontologically ambiguous status of simultaneously being an objective fact of nature that is amenable to scientific treatment and state regulation, on the one hand, and a subjective "attitude" that affords divergent, culturally contingent interpretations and that, hence, eludes the state's grasp on the other hand.

The example of the PSIU is particularly well chosen, I believe, because to grasp the complexity of this "paradox" in the context of postcolonial urban governance, it no longer suffices to examine questions of authoritative order, legality, and oppositional cultural practice from a monolithic perspective, be it that of sociology, urban geography, or anthropology. Rather, the networks that emerge when legal norms, state discretionary power, and private-sector commercial interests form a variety of attachments defy any type of analysis rooted in some variety or other of social, legal, or technological determinism. As Cardoso points out, the controversies that arise from the discordant private and public interests at stake in the production and control of "noise" cannot be properly analyzed by presupposing a homogeneous social space that is organized by legally mandated and state-controlled rules and regulations. Regulatory agencies are not merely instruments of state power that translate policy into felt, lived reality. They are, at best, black boxes that depoliticize the fraught relationship between law, science, and the social by temporarily rendering it in the lingua franca of the numerical—that is, of decibels and fines (see Faulkner, Lange, and Lawless 2012).

That is also the reason why Cardoso—rightly, I think resists the temptation to use the legal, social, and moral imaginaries clustering around the sense of disorder and disturbance ascribed to Paulistanos' sonic practices as a way, as Comaroff and Comaroff suggest with regard to crime more broadly, to "yield ethnosociological truths about a universe that appears to be growing increasingly inscrutable" (2016:xiii-xiv). Rather than thinking of disobedience and illegality as a matter of epistemology or of "perspective"—as a single, homogenous object upon which different representations with different claims to truth can be brought to bear—he is more interested in what would happen if we were to make such unruly behavior messy. Instead of assuming that "noise" is messy because different actors have different perspectives on it, Cardoso echoes Anita Lam's claim that "multiple interpretations exist only because there are multiple objects" (Lam 2015:52).

At the same time, I would have liked to learn more about another dimension of the mensuration-noise nexus: the larger issue of the growing significance of data and quantification in postcolonial and perhaps, more generally, liberal forms of governance. As a growing body of anthropological scholarship on indicators, crime, and health statistics has shown, processes and technologies of quantification do not merely encode the material conditions and cultural understandings of what can be named and counted; they also convert otherwise incommensurable social worlds into commensurable arrangements "without rendering them homogeneous" (Asad 1994:78; see also Rottenburg et al. 2015:4) Thus, the number of complaints received by the antinoise agency might best be seen as the currency through which the reproduction of meaningful social categories is being negotiated between the local state and the citizenry. How do statistical data circulate? By what routes? In what way do negotiations or "conventions," as Alain Desrosières (1998) calls it, over the criteria under which data are generated, weighted, and aggregated shape the institutions in which they occur and to whose mandates they are said to respond? And what exactly is it in the material and symbolic power of data that is being generated in the shadow of the more or less visible world of public policy making that enables an agency such as the PSIU to claim what sociologist sociologist Andrew Abbott (1988) calls "jurisdiction?"

Marina Peterson

Department of Anthropology, University of Texas at Austin, 2201 Speedway, Stop C3200, Austin, Texas, USA (marina.peterson@austin .utexas.edu). 12 VII 17

Listening Like a State

"Sound-politics" is a suggestive term, the hyphen indicating an assemblage, a dynamic entanglement (Tsing 2015), a monster perhaps (Haraway 1992), in which divergent fields are drawn together, neither losing its own meaning but each transform-

ing the other in some way. This is not "sound politics," in which "politics" is a modifier of "sound"—the "politics of sound," as it were. Neither is it a "sonic politics," which might be an analysis of the sonic dimensions of politics—the sounds of public speeches and their technologies of transmission and amplification, whether radio, megaphone, or loudspeaker. Rather, "sound-politics" refers to "the ways in which sounds enter (and leave) the sphere of state control" and, as such, become "objects susceptible to state intervention."

Hillel Schwartz insists that "noise is always relational" (2011)—marking social relationships, it is also relative to that which is not-noise. As such, noise is always already a concept more than it is an identifiable "thing." In Cardoso's account, noise is likewise a particular formulation of sound, sound turned to "object" through "regulatory, disciplinary, and punishing mechanisms." As object, noise becomes "actant," something that "modif[ies] other actors through a series of" actions (Latour 2004:75). Though Cardoso does not use the term "actant," in São Paulo noise generates law, regulation, systems of measurement, bureaucratic divisions, citizen engagement and complaints, and more. And as his ethnographic material shows, it crafts a pathway through state bureaucracy whose relative smoothness or bumpiness is, Cardoso argues, related to the particularity of noise.

Cardoso's ethnographic account of how the state listens is a welcome extension of what Steven Feld has coined "acoustemology," or "local conditions of acoustic sensation, knowledge, and imagination" (Feld 1996:91). Rather than listen with ears, the state listens with noise measurement devices, decibel level limits, noise complaint forms, noise ordinances, and bureaucratic offices. Perceived noise becomes inscription, a way of drawing things together that, as Latour writes, are newly mobile, immutable, and flat; easily reproducible, they can be recombined in various ways and "made part of a written text" (Latour 1983). The "inscription" of noise is principally in the form of a visual document, a mode of simplifying and making legible that shifts listening into the sensory register of seeing, such that the listening state is also seeing like a state (Scott 1998). Like the seeing state, the listening state simplifies and makes legible, constrains and inscribes something that, even as it is produced in these terms, seems to also evade such manipulation.

According to Cardoso, this evasion has to do with the heterogeneity of the concept of noise: its status in both a disciplinary regime (noise as nuisance) and biopolitical regime (noise as decibel). Yet something else seeps in, something of the unwieldiness of sound—sound as sensible, sound as energy perceived (principally) by the ear, sound as immaterial and subjective. For though it is an inscription of noise that moves through the government offices, Cardoso concludes that the smoothness of this movement is ultimately undermined by the "complexity of sound perception and analysis"—the structure of the human ear and the decibel, "difficult to apprehend" and "distant from practical use." Having arrived at the ear, the seeming basis for nuisance complaints, one wonders about its absence otherwise and, conversely, the way in which ear and sound haunt the logics and law of municipal noise control in

more phenomenal ways. I wonder, as I do with Latour, about something of the quality, the texture, and the liveliness of the interaction between inscription and institution, or what is also an intra-action—with noise being formed or composed as much as bureaucracy and law. And, in being formed, existing not just as object but subject—bleating, whispering, buzzing, and whirring in ways that both afford and exceed control.

I do not want to claim an ontological character of noise-I insist on its status as a designation, an unstable, slippery, evasive concept. But an ongoing challenge of an anthropology of sound is to bring together sonic phenomena with their social designations or acoustemologies, to make sense of (or draw out the nonsensical dimensions of) sound and its "complexity of . . . scientific mensuration" and "unsteadiness of . . . legal encoding"—those things that make it "a particularly difficult object" not only for "the state to grasp" but for its anthropological analysis as well. To attend, that is, to how noise is itself emergent, formed and formulated anew as it moves through regimes of governmentality, sense, and resonance, an immaterial force the objectification of which is always in process. To attend ethnographically to the practice of that objectification, of the movement from sense to sensible. And to investigate how a sonic quality of noise inflects its character as actant, considering whether noise—as both sound and concept—is perhaps also a form of "vibrant matter," amplifying dynamic human/nonhuman assemblages and entanglements (Barad 2007; Bennett 2010; Tsing 2015).

We can explore this in relation to noise metrics. Metrics may be (largely) static and unchanging, but modes of engagement with them are not. They are, first of all, animated by a noise complaint, 2,000 of which are made each month in São Paulo by a lively listening public that has been created through law and administration-2,000 complaints that are engagements with something heard, experienced, and perceived. And while metrics might not be challenged as such, as we learn, the location of their measurement can be. Although ultimately it is metrics, rather than noise per se, that circulate, the transduction of the production and experience of sound to metrics is built into the law, insofar as a noise complaint initiates the legal process. In this way, the governmental agency formed to administer a noise ordinance draws together a perceiving public, areas of sonic amplification, police power, and sound measurement devices—a throbbing, resonating assemblage, a city composed by noise.

Matt Sakakeeny

Music Department, Tulane University, 102 Dixon Hall, New Orleans, Louisiana 70118, USA (mattsak@tulane.edu). 16 VII 17

An Expansive "Sound-Politics" in New Orleans

From his study of noise regulation in São Paulo, Leonardo Cardoso has derived a general theory of "sound-politics" to

analyze "the ways in which sounds enter (and leave) the sphere of state control." Where Cardoso excels is in "studying up," focusing on the regulatory and disciplinary mechanisms of the state to scientifically yet selectively exert power. Subverting the classic anthropological attention to everyday subjects and culture-bearers, Cardoso situates his research in governmental agencies and pores over policy briefs to ask what it means to "listen like a state." This is a multisited ethnography, where complainants and defendants make appearances but are subservient to the whims of the state and its shifting and provisional legal structures.

In applying the concept of sound-politics to New Orleans, where I live and base my research, I found that focusing narrowly on state policy, enforcement, and juridical affairs led to incomplete results. What I have sketched here is a tiny case study that offers an expansive application of sound-politics in order to more fully accommodate the agency of citizens and the actions of nongovernmental organizations. In this city renowned for its local cultural traditions and live musical performances, the practice of noise regulation has arisen through complex negotiations between individuals, collectives, and government agencies. Only by attending to their multilayered interactions can we understand the myriad ways in which sound is (and is not) controllable.

New Orleans is celebrated for its many parading traditions, including neighborhood parades known as "second lines," where members of Social Aid and Pleasure Clubs (SAPCs) march to the beat of a brass band. SAPCs must apply for a permit with the city's Safety and Permits office and are required to hire a police detail to block streets and control crowds. In 2007, when the New Orleans Police Department (NOPD) attempted to triple their fee from \$1,250 to \$3,760, dozens of SAPCs formed a "task force" and partnered with the American Civil Liberties Union (ACLU) to file an injunction. The lawsuit noted that the fees for Mardi Gras parades sponsored by official "Krewes" with predominantly white membership were only \$750 and that the higher rates for parades organized by black club members and musicians were discriminatory. The NOPD backed down and reached a settlement that remains largely in place. This episode hints at the scale of the field of cultural production and the numerous factors that must be accounted for to accurately measure sound-politics in this assemblage. Notably, "sound" does not encompass the sphere that the state is attempting to control, which here includes the public assembly of racialized subjects, and "politics" must be broad enough to encompass the actions of citizens and nongovernmental organizations with disparate access to power.

Surveying the city's subsequent attempts to regulate livemusic entertainment introduces a host of other state offices, citizen groups, and social actors. Mayor Mitch Landrieu, who oversees the Office of Cultural Economy and is acutely aware of the economic impact of entertainment venues, worked to make the issuance of occupational licenses and mayoralty permits more transparent (City of New Orleans 2012). But in 2012, the city council sought to revise the outdated noise ordinance with increased regulation directed particularly at live-music venues. They welcomed input from Vieux Carre Property Owners, Residents, and Associates (VCPORA), a neighborhood organization made up of powerful constituents intent on abating noise levels and hours of operation. An insurgent group, the Music and Culture Coalition of New Orleans (MaCCNO), was founded by concerned musicians and activists to amplify complaints of "an unclear permitting process, inconsistent enforcement, an overly restrictive zoning ordinance, police harassment of brass bands and street musicians, [and] widespread economic instability and disenfranchisement of the cultural community."¹⁵

The city council hired Oxford Acoustics to provide scientific consultation on appropriate decibel levels and other sound issues, and when the firm recommended actually raising acceptable noise levels from 80 db to 95 db, MaCCNO came out in support of the report (Oxford Acoustics 2013). VCPORA, meanwhile, hired their own consultant, who suggested lowering acceptable noise levels and put forth a seven-point noise abatement plan that the council chose to adopt as the basis for their revised ordinance on December 19, 2013. As opposition mounted, the council attempted to rush a vote on the stricter ordinance, and MaCCNO organized a protest rally at city hall for January 17, 2014. Just before hundreds of musicians and activists marched into the council chambers playing the spiritual "I'll Fly Away," the ordinance was pulled. The following year, when the council attempted to import noise regulations into the Comprehensive Zoning Ordinance (CZO), MaCCNO director Ethan Ellestad was able to intervene, redefining "live entertainment" in the CZO to remove limits on amplification and the number of musicians.

If my synopsis of this hyperlocal case study seems to be overly detailed, my point is that all of this information is necessary for understanding the process of drafting, adopting, and enforcing sound-politics in this instance. At the bureaucratic level, listening like a state is not a uniform phenomenon because there are multiple entities—NOPD, city council, Mayor's Office of Cultural Economy, Safety and Permits office-with different and sometimes competing interests. Cardoso forcefully makes this point as he follows the many mutations of São Paulo's policies under changing political leadership. However, at least in New Orleans, policy is not shaped only by officers of the state. At the constituent level, there are social actors—black musicians, white property owners, diverse activists-whose social location partially determines their ability to influence bureaucracy. In between, there are organizations—VCPORA, MaCCNO, SAPC Task Force, ACLU—that deploy collective action to leverage power with the state. The outcome is determined by the complex interrelation of all these entities in a dynamic process of negotiation shaped by unpredictable events such as a protest march or a leaked memo. While I applaud Cardoso for working his way into the notoriously inaccessible

15. At the time, I was a board member of MaCCNO. Quote accessed July 16, 2017, at https://www.maccno.com/whoweare.

halls of power, I look forward to future publications that complement this focus to provide a more capacious diagnostic of power relations.

Felipe Trotta

Instituto de Arte e Comunicação Social, Departamento de Estudos Culturais e Mídia, Universidade Federal Fluminense, Rua Lara Vilela, 126, São Domingos, 24210590, Niterói, Rio de Janeiro, Brazil (trotta.felipe@gmail.com). 24 VII 17

Sound-Politics in São Paulo

In the last two or three decades, sound has become an important topic within the field of cultural studies. In different places of the world, scholars from various disciplines are increasingly aware of issues related to sound in society, and it is worth noting the huge amount of works worldwide that specifically address sound. As Jonathan Stern (2012a:3) argues, "to think sonically is to think conjuncturally about sound and culture," allowing researchers to "ask big questions about their cultural moments and the crises and problems of their time." In this sense, sound is an object of study that may open a short path to conflicts in society, raising issues of public relations, individual rights, and political debates.

The work of Cardoso goes in that direction, providing conceptual and empirical data to the debate about sound and society, regulations, state interventions, and legal problems. By following, step by step, the journey of a noise complaint inside the institutionalized department of noise control in a big city such as São Paulo, the author discusses several issues related to the official state action of sound regulation, to public order, and also to the role of the police in these cases. Two issues arise from his work.

First, the debate about sound is somehow entangled with the distinction between music and noise. These three concepts overlap each other in various ways. The rhetorical operation of sliding from one term to another reveals value judgement about the sound and the listening activity (Ochoa Gautier 2014). If "music" is a word used mostly in a positive sense, associated with wellbeing and socializing experiences, "noise" appears to be used in situations where the sound is thought to be inappropriate. In the case of Bar da Esquina, the agents of PSIU, as well as both the citizen who complained about the bar and the justice apparatus, were more likely to define the music as noise. Noise is the unpleasant music played by the bar at high volume. Noise is an undefined sound that annoys and needs to be disciplined. Noise is a nonartistic musical activity, split from the social and cultural environment in which it is produced. Once defined in such a way, the music-noise is detached from the people who enjoy the sound, from the customers of the bar, and from the whole economic entertainment system that moves the tourism and the cultural imaginary of a city like São Paulo. As noise, music becomes a problem that affects both the public order and the citizens' right to rest in a quiet neighborhood. As Cardoso describes, Ms. Freire was "fed up with Bar da Esquina playing loud music every weekend night," depriving "her of quality sleep," which she considered "a right after a week of hard work."

Here we face a second issue related to the idea of individual and collective "rights." In her speech (followed by the institutional repressive apparatus created to assure the "public order"), it very clearly became a conflictive situation in which the rights of the individual work in opposition to the collective rights. Ms. Freire claims her individual right to sleep in a quiet, intimate environment. Her private space is recognized as a place where she can rest, share her daily life with her beloved, listen to the music she wants, watch television, eat, have sex, and perform all other intimate activities. It is a personal space, protected from the outside world, safe and comfortable. It is somehow opposed to the labor universe, where she suffers during the week, which reinforces her right to the safety and quiet of her home.

On the other side, the customers and the owners (and, why not, the employees) of Bar da Esquina could also argue for their individual and collective right to listen to music inside the venue as an entertainment activity. The public space—the bar—is a place to socialize and have fun, a place of informal debate about life in society, a place to exchange ideas about behaviors and to share drinks, songs, and thoughts. However, the public space is sonorous, and the sound is not confined within the walls of the venues. On the contrary, its materiality implies its ability to leak, reaching physical spaces beyond the place where it is produced. In this sense, the music played inside the bar can be transformed into noise elsewhere. The public and the private blur into a semipublic sound space, where the conflicts emerge.

The article is successful in demonstrating that the official public institutions do not have adequate measures to effectively administrate this conflictive realm. The state's responses are superficial and supported by a simplified set of measures that aim to "control," "fine," and "forbid" the sound activity. Without tools to organize a more useful negotiation between the multiple actors of the sound conflict, the state is limited to its punitive role. Again, the work of Cardoso shows the need to go deeper in these debates, overlapping the superficial solutions in order to achieve a more complex and sophisticated debate that could produce a more useful conciliation in these extremely difficult sound conflicts in contemporary cities.

Reply

As I wrote this article, my initial concern was that the brief description of sound-politics would raise some eyebrows—do we really need yet another concept to talk about sound? To my pleasant surprise, it seems the commentators were on board. As Peterson notes, both "sound" and "politics" in sound-politics

are nouns, the hyphen serving as a device to express the instability each inserts into the other. As a marker of copresence to the hearing body, sound opens up the politics of shared existence. As a matter of defining and performing the collective, politics opens up the acoustics of human and nonhuman associations.

Rather than discussing sound within a self-enclosed "cultural field," I take sound as a point of entry to analyze the state. At the same time, rather than portraying the state as a self-enclosed "apparatus" with seemingly inexhaustible homogeneous power, I describe it as a collection of unstable—and often contradictory—sectors, personnel, strategies, discourses, documents, and agencies.

Peterson wonders how we can relate sound-politics to sound. The former, as she rightly notes, relates to the inscriptions designed to move across documents, forms, and offices. The latter "whispers, buzzes," and moves as a vibrational propagative force. By following sound as it circulates within administrative flows, I show that the major concern becomes not ontological or epistemological issues but rather legal and bureaucratic stability. The state delegates the challenges of sonic objectification to experts from the three professional groups that reign as the modern state's ultimate consultants: engineers, medical specialists, and lawyers or legal specialists.

The public institutions examined here do not deal with the conversion of sound into sound-politics as a matter of metrics, as this is the area of expertise of acoustic engineers and audiologists. Instead, they are the ones who have put forward a series of standardization processes that generated the decibel, the audiometer, the audiogram, and the sound level meter in the 1920s and 1930s. This should not mean that metrics are static, however. To give one example, in 2003, the International Organization for Standardization reshuffled the "average ear" when it revised ISO 226, a standard that "specifies combinations of sound pressure levels and frequencies of pure continuous tones which are perceived as equally loud by human listeners." As my analysis of Brazil's technical standards for noise measurement show (Cardoso, forthcoming), decisions regarding metrics occur in hybrid forums (Callon, Lascoumes, and Barthe 2009) that require delicate arrangements between economic, political, legal, and scientific interests.

As Peterson explains, public agencies mediate the conversion of sound into sound-politics through a different set of mechanisms, which are not noise metrics but do include modes of engagement with them. A more detailed ethnography of noise complainants would demonstrate how the state converts sound into sound-politics. It would show how citizens (1) conform, challenge, and expand the state's existent protocols—a concept I briefly hinted at with the crime-noise intersection—and (2) frame "noise" in their everyday acoustic environments. There is some study about the discrepancies between how people perceived "noise" and how governments frame it. Hartmut Ising and Barbara Kruppa have suggested that sound intensity, duration, and frequency range, the three most common attributes

for defining and measuring noise, cannot explain annoyance alone. Rather, "non-acoustical variables, such as situational and individual moderators, exert a considerable influence on noise processing while remaining unchanged under noise exposures" (Ising and Kruppa 2004:8–9). Along similar lines, Jian Kang argues that a combination of acoustic and temporal elements affect the perception of sound. These elements include the presence of tonal components, low frequencies, and the frequency and duration of quiet periods. Other aspects that influence the perception of a sound as noise include fear, type of activity during exposure, and perception of a given neighborhood.

Sakakeeny praises the initiative taken in studying these agencies but feels certain actors are missing. Where are lawmakers, the nongovernmental agencies, and the civil groups invested in noise regulation? Indeed, aside from legal and bureaucratic stability, political maneuvering is a major issue in sound-politics. But this article focuses on the former. In the book (Cardoso, forthcoming), I dedicate entire chapters to the legislative, judiciary, and scientific-technological sound-politics spheres.

Rather than addressing the usual suspects (politicians and interested groups), I decided to discuss, in as much detail as possible, how noise operates inside the city's law enforcement institutions. Be it in New Orleans or São Paulo, the fact remains that, once a city passes a bill into law, the job of the executive is to enforce it. The question I posit is, How do they do that? As happens in New Orleans (and in virtually every other urban agglomeration), certain organizations in São Paulo do pressure the local government to change the noise ordinances. But that discussion belongs to the lawmaking domain.

Debates of "politics" that focus only on politicians and policy making risk losing (not gaining!) a more expansive approach to politics. An ethnographic analysis of sound-politics does indeed need to consider how public officials, who rely on their electorate, deal with noise ordinances. However, as much as it is undeniable that governmental and nongovernmental groups constantly interfere with how the state acts, my approach draws on the premise that different governmental sectors establish different networks, mobilize different actors, and reason according to different parameters.

My intention is thus to consider each branch separately to more properly explain the ordeal of noise controversies within and between specific governmental institutions, each of which is expected to keep the others in check. The popular saying in Brazil, "for friends, everything; for enemies, the law," encapsulates the widespread notion that laws are less instruments to bring justice than tools for excluding some while privileging others. A law that is created but not enforced by the executive, or enforced but dismissed by the judiciary, seriously compromises the legitimacy of the state. In the last chapter of my book, where I discuss noise controversies related to the street parties in the poor districts of São Paulo, I make an explicit effort to show how each governmental branch approaches the problem differently.

Governmental agencies, together with support groups (the experts) and civil groups (nongovernmental organizations and less formalized collectives), tend to hear different objects, rather than hearing the same object differently. As Erlmann points out, ANT scholars (and they are certainly not alone here) have resisted perspectivism and constructionism and instead advanced a shift toward ontological inquiry. While perspectivism and constructivism assume a single object attached to a single reality approached from various angles, ANT's argue that different actor-networks enact different objects. There is no single "noise," because the object of sound-politics is not simply heterogeneous (aircraft, nightclub, church, and other sounds) but multiple. We do not have different "perspectives" of a single sound but rather various versions of it. This is not a pluralistic view, because, as Annemarie Mol puts it, "while realities may clash at some points, elsewhere the various performances of an object may collaborate and even depend on one another" (Mol 1999:83). If Ms. Freire's version does not collaborate with the PSIU's version, if the PSIU's noise does not align with the ordinance's specifications, and if the bar owner somehow manages to show the appellate judge a different object, we end up with an unsurpassable disjuncture (or "messiness") between the objects enacted by Ms. Freire (a stance toward the bar sound) and by the state (the result of administrative flows and legal channels). We are thus dealing with at least five objects: the sound, the noise complaint, the noise fine, the noise ordinance, and the consequent sentence.

Regarding the mensuration-noise nexus, this deserves more scrutiny than this space allows. As I suggest in the article, the PSIU's instability as an institution (even for Brazilian parameters!) has hindered any statistical approach to noise. The argument is circular: administration after administration has shifted its modus operandi because the agency was not structured according to extensive statistical analysis. This allowed the executive branch to decide the agency's targets and punishment potential, and negotiate with the legislature, particularly those groups that are closer to noise controversies (Cardoso 2017). On the other hand, descriptive and prescriptive approaches to statistics, ranging from number crunching to taxonomy (e.g., the lack of a specific "noise" category at the COPOM), is a major challenge for the São Paulo police. There are multiple reasons for that: the institution's history of violent abuse, a "sciencebased" policing strategy used for area monitoring, and demands for transparency as a precondition for budgetary allocation. Major Tenorio's frustration relates in part to the fact that noise prevents the São Paulo police from deploying its statistical apparatus (as Tenório effusively underlined during our interview). In that sense, sound-politics examines not only how the state circulates the notion of noise-as-incivility through its crime categories but also how it "fails" to reach the status of modernity by not utilizing statistical data. The continuous "failure" of São Paulo's statistical and biopolitical sound-politics hint at the growing polarization between welfare and neoliberal models of governability in the country.

Which brings me to Bijsterveld's comments. What are the possible solutions? She mentions "complaining with style" as an alternative. Rather than "just" complain, citizens could more effectively make their problems palpable to the other parts (the state agencies and their regulations, the bar owner and his appetite for profit). The other two suggestions relate to the spatial axis I mention in the article: to create either residential areas focused on acoustic comfort or noise zones—an expansion of the zoning laws currently in place in São Paulo and elsewhere. It seems clear that, as Trotta puts it, "the official public institutions do not have adequate measures to effectively administrate this conflictive realm." In my view, the first step is to have more data for quantifiable analysis. This includes making the PSIU's work more transparent to the citizenry (which would likely increase pressure on the administration to better fund and equip it) and creating acoustic maps as a way to address traffic noise. A statistical diagnosis combined with an ethnographic analysis is perhaps a good way to start moving sound-politics in São Paulo from particular interests toward a more heterogeneous collective.

-Leonardo Cardoso

References Cited

Abbott, Andrew. 1988. The system of professions: an essay on the division of expert labor. Chicago: University of Chicago Press. [VE]

APMDFESP (Associação dos Policiais Militares Deficientes do Estado de São Paulo). 2011. Polícia Militar investe em tecnologia no combate à criminalidade. April 25. http://apmdfesp.com.br/noticia_2011_04_25.html.

Asad, Talal. 1994. Ethnographic representation, statistics and modern power. Social Research 61(1):55–88. [VE]

Ashford, Norman, H. P. Martin Stanton, Clifton A. Moore, Pierre Coutu, and John Beasley. 2012. *Airport operations*. New York: McGraw Hill.

Barad, Karen. 2007. Meeting the universe halfway: quantum physics and the entanglement of matter and meaning. Durham, NC: Duke University Press. [MP]
 Bennett, Jane. 2010. Vibrant matter: a political ecology of things. Durham, NC: Duke University Press. [MP]

Berglund, Birgitta, Thomas Lindvall, and Dietrich H. Schwela, eds. 1999. Guidelines for community noise. Geneva: World Health Organization.

Bijsterveld, Karin. 2008. Mechanical sound: technology, culture, and public problems of noise in the 20th century. Cambridge, MA: MIT Press.

— Forthcoming. Sound waves of protest: noise abatement movements. In *Routledge companion of sound studies*. Michael Bull, ed. New York: Routledge. [KB]

Bijsterveld, Karin, and Trevor Pinch, eds. 2004. Sound studies: new technologies and music. Social Studies of Science 34(5):635–648.

———, eds. 2012. The Oxford handbook of sound studies. Oxford: Oxford University Press.

Boutin, Aimée. 2015. City of noise: sound and nineteenth-century Paris. Urbana: University of Illinois Press.

Bratton, William. 1998. Crime is down in New York City: blame the police. In *Zero tolerance: policing a free society.* Norman Dennis, ed. Pp. 29–43. London: IEA Health and Welfare Unit.

Bull, Michael, and Les Back, eds. 2003. *The auditory culture reader.* Oxford: Berg. Bull, Michael, and Veit Erlmann. 2015. Editorial. *Sound Studies* 1(1):1.

Caldeira, Teresa, and James Holston. 1999. Democracy and violence in Brazil. Comparative Studies in Society and History 41(4):691–729.

Callon, Michel. 1998. The laws of the markets. Oxford: Blackwell

Callon, Michel, Pierre Lascoumes, and Yannick Barthe. 2009. Acting in an uncertain world: an essay on technical democracy. Cambridge, MA: MIT Press. Câmara Municipal de São Paulo. 1996. Projeto de Lei 396/1996. São Paulo,

Brazil: Comissão de Finanças e Orcamento.

Cardia, Nancy. 1999. Pesquisa sobre atitudes, normas culturais e valores em relação à violência em 10 capitais brasileiras. Brasília, Brazil: Ministério da Justiça, Secretaria de Estado dos Direitos Humanos.

- Cardoso, Leonardo. 2017. The politics of noise control in São Paulo. Journal of Latin American Studies 49(4):917–945.
- ———. Forthcoming. *Sound-politics in São Paulo*. Oxford: Oxford University Press.
- Centner, Ryan. 2012. Microcitizenships: fractious forms of urban belonging after Argentine neoliberalism. *International Journal of Urban and Regional Research* 36(2):336–362.
- Chesluk, Benjamin. 2004. "Visible signs of a city out of control": community policing in New York City. Cultural Anthropology 19(2):250–275.
- City of New Orleans. 2012. Zoning, permits, and licenses for cultural businesses. New Orleans: Mayor's Office of Cultural Economy. http://www.nola.gov/nola/media/Mayor-s-Office/Files/Press%20Releases/Zoning_Permits_and_Licenses_for_Cultural_Businesses_2012.pdf (accessed July 16, 2017). [MS]
- Classen, Constance. 1993. Worlds of sense: exploring the senses in history and across cultures. New York: Routledge.
- Clifford, James. 1986. Introduction: partial truths. In Writing culture: the poetics and politics of ethnography. James Clifford and George E. Marcus, eds. Pp. 1–26. Berkeley: University of California Press.
- Comaroff, John, and Jean Comaroff. 2016. The truth about crime: sovereignty, knowledge, social order. Chicago: University of Chicago Press. [VE]
- Desrosières, Alain. 1998. The politics of large numbers: a history of statistical reasoning. Cambridge, MA.: Harvard University Press. [VE]
- Erlmann, Veit, ed. 2004. But what of the ethnographic ear? anthropology, sound, and the senses. In: *Hearing cultures: essays on sound, listening, and modernity*. Veit Erlmann, ed. Pp. 1–20. Oxford: Berg.
- ———. 2010. Reason and resonance. New York: Zone.
- Faulkner, Alex, Bettina Lange, and Christopher Lawless. 2012. Introduction: material worlds: intersections of law, science, technology, and society. *Journal of Law and Society* 39(1):1–19. [VE]
- Feld, Steven. 1990. Sound and sentiment: birds, weeping, poetics, and song in Kaluli expression. Philadelphia: University of Pennsylvania Press.
- ——. 1996. Waterfalls of song: an acoustemology of place resounding in Bosavi, Papua New Guinea. In Senses of place. Steven Feld and Keith H. Basso, eds. Pp. 91–136. Santa Fe, NM: School of American Research Press. [MP]
- ———. 2015. Acoustemology. In Keywords in sound. David Novak and Matt Sakakeeny, eds. Pp. 12–21. Durham, NC: Duke University Press.
- Ferragi, Cesar Alves. 2010. Koban and the institutionalization of community policing in São Paulo. *Journal of Social Science* 70:25–51.
- Folha de São Paulo. 1999. Toque de recolher começa na madrugada. Folha de São Paulo, July 14.
- Foucault, Michel. 2007. Security, territory, population: lectures at the Collège de France, 1977–1978. New York: Palgrave Macmillan.
- 2008. The birth of biopolitics: lectures at the Collège de France, 1978–1979. New York: Palgrave Macmillan.
- Haraway, Donna. 1992. The promises of monsters: a regenerative politics for inappropriate/d others. In *Cultural studies*. P. A Treichler, C. Nelson, and L. Grossberg, eds. Pp. 295-337. New York: Routledge.
- Harvey, David. 1990. The condition of postmodernity: an enquiry into the origins of cultural change. Cambridge, MA: Blackwell.
- Hirschkind, Charles. 2006. The ethical soundscape: cassette sermons and Islamic counterpublics. New York: Columbia University Press.
- Howes, David. 2003. Sensual relations: engaging the senses in culture and social theory. Ann Arbor: University of Michigan Press.
- Hull, Matthew. 2012. Government of paper: the materiality of bureaucracy in urban Pakistan. Berkeley: University of California Press.
- Ising, Hartmut, and Barbara Kruppa, 2004. Health effects caused by noise: evidence in the literature from the past 25 years. Noise Health 6(5):5–13.
 Keeling, Kara, and Josh Kun. 2011. Introduction: listening to American stu-
- Keeling, Kara, and Josh Kun. 2011. Introduction: listening to American studies. American Quarterly 63(3):445–459.
- Lam, Anita. 2015. Making crime messy. In Actor-network theory and crime studies: explorations in science and technology. Dominique Robert and Martin Dufresne, eds. Pp. 51–65. Farnham, UK: Ashgate. [VE]
- Larkin, Brian. 2014. Techniques of inattention: the mediality of loudspeakers in Nigeria. Anthropological Quarterly 87(4):989–1015.
- Latour, Bruno. 1983. Visualisation and cognition: drawing things together. In Knowledge and society studies in the sociology of culture past and present, vol. 6. Henrika Kuklick, ed. Pp. 1–40. Bingley, UK: Jai. [MP]
- ——. 1987. Science in action: how to follow scientists and engineers through society. Cambridge, MA: Harvard University Press.
- ———. 2004. The politics of nature: how to bring the sciences into democracy. Cambridge, MA: Harvard University Press. [MP]
- 2007. Turning around politics: a note on Gerard de Vries' paper. Social Studies of Science 37(5):811–820.

- 2010. The making of law: an ethnography of the Conseil d'Etat. Malden, MA: Polity.
- 2013. An inquiry into modes of existence: an anthropology of the moderns. Cambridge, MA: Harvard University Press.
- Lefebvre, Henri. 1996. Writings on cities. Oxford: Basil Blackwell.
- Lenke, Thomas. 2013. Foucault, politics and failure. In *Foucault, biopolitics, and governmentality*. Jakob Nilsson and Sven-Olov Wallenstein, eds. Pp. 35–52. Huddinge, Sweden: Södertörn University.
- Low, Setha. 1996. Spatializing culture: the social production and social construction of public space in Costa Rica. American Ethnologist 23(4):861–879.
- Mainwaring, Scott. 1999. Rethinking party systems in the third wave of democratization: the case of Brazil. Stanford, CA: Stanford University Press.
- Matless, David. 1995. The art of right living: landscape and citizenship, 1918–39. In *Mapping the subject: geographies of cultural transformation*. Steve Pile and Nigel Thrift, eds. Pp. 85–113. New York: Routledge.
- Miller, Toby. 1993. The well-tempered self: citizenship, culture, and the postmodern subject. Baltimore: Johns Hopkins University Press.
- Mol, Annemarie. 1999. Ontological politics: a word and some questions. In Actor-network theory and after. John Law and John Hassard, eds. Pp. 74– 89. Oxford: Sociological Review.
- Mouffe, Chantal. 2000. The democratic paradox. New York: Verso.
- Novak, David, and Matt Sakakeeny, eds. 2015. *Keywords in sound*. Durham, NC: Duke University Press.
- Ochoa Gautier, Ana María. 2014. Aurality: listening and knowledge in nineteenth-century Colombia. Durham, NC: Duke University Press.
- Oxford Acoustics. 2013. New Orleans sound ordinance and soundscape evaluation and recommendations. New Orleans: New Orleans City Council. http://www.nolacitycouncil.com/docs/news/2013/Palmer%20NOLA%20Soundscape%20Report%20OA%2011-01883-01.pdf (accessed July 16, 2017). [MS]
- Rabelo, Carina. 2015. Criminalidade só diminui quando todos os delitos são punidos. Coronel Camilo, June 17. http://www.coronelcamilo.com.br/#!Criminali dade-só-diminui-quando-todos-os-delitos-são-punidos/cjds/5581dae50cf27a6b 7453d1d0 (accessed on May 20, 2016).
- Radovac, Lilian. 2011. The "war on noise": sound and space in La Guardia's New York. *American Quarterly* 63(3):733–760.
- Robinson, D. W., and R. S. Dadson. 1956. A re-determination of the equal-loudness relations for pure tones. *British Journal of Applied Physics* 7(5):166–181.
- Rose, Nikolas, and Peter Miller. 1992. Political power beyond the state: problematics of government. British Journal of Sociology 43(2):173–205.
- Rottenburg, Richard, Sally E. Merry, Sung-Joon Park, and Johanna Mugler, eds. 2015. The world of indicators: the making of governmental knowledge through quantification. Cambridge: Cambridge University Press. [VE]
- Schafer, R. Murray. 1994. The soundscape: our sonic environment and the tuning of the world. Rochester, VT: Destiny.
- Schwartz, Hillel. 2004. On noise. In *Hearing history: a reader*. Mark M. Smith, ed. Pp. 51–53. Athens: University of Georgia Press.
- . 2011. Making noise: from Babel to the Big Bang and beyond. Brooklyn, NY: Zone. [MP]
- Scott, James. 1998. Seeing like a state: how certain schemes to improve the human condition have failed. New Haven, CT: Yale University Press. [MP]
- Soja, Edward. 1996. Thirdspace: journeys to Los Angeles and other real-and Imagined places. Cambridge, MA: Blackwell.
- Smith, Mark, ed. 2004. *Hearing history: a reader*. Athens: University of Georgia Press.

 ———. 2006. *How race is made: slavery, segregation, and the senses*. Chapel Hill: University of North Carolina Press.
- Sterne, Jonathan. 2003. The audible past: cultural origins of sound reproduction. Durham, NC: Duke University Press.
- Sterne, Jonathan. 2012a. Sonic imaginations. In *The sound studies reader*. Jonathan Sterne, ed. Pp. 1–18. New York: Routledge.
- , ed. 2012b. The sound studies reader. New York: Routledge.
- ——. 2015. Hearing. In *Keywords in sound*. David Novak and Matt Sakakeeny, eds. Pp. 65–77. Durham, NC: Duke University Press.
- Stoller, Paul. 1989. The taste of ethnographic things: the senses in anthropology. Philadelphia: University of Pennsylvania Press.
- Thompson, Emily. 2002. Soundscapes of modernity: architectural acoustics and the culture of listening in America, 1900–1933. Cambridge, MA: MIT Press.
- Tsing, Anna. 2015. The mushroom at the end of the world: on the possibility of life in capitalist ruins. Princeton, NJ: Princeton University Press. [MP]
- Weiner, Isaac. 2014. Religious out loud: religious sound, public space, and American pluralism. New York: New York University Press.
- Wilson, James Q., and George L. Kelling. 1982. Broken windows: the police and neighborhood safety. *Atlantic*, March. http://www.theatlantic.com/past/docs/politics/crime/windows.htm (accessed May 12, 2016).