

The Politics of Noise Control in São Paulo

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Abstract. In this article, I discuss São Paulo's legal apparatus in respect of environmental noise. I begin by situating my analysis within broader citizenship issues. I then focus on three debates on noise control in the city. The first two debates involve noise ordinances created in the 1990s and enforced by São Paulo's Programa de Silêncio Urbano (Urban Silence Programme, PSIU). The first revolves around the evangelical law-makers' attempts to exclude, minimize or hinder the impact of a noise ordinance on religious services. The second debate focuses on an ordinance that required bars without acoustic insulation to close at 1 am – a demand that faced strong opposition from businesses involved in the night-time economy. The third debate describes the recent attempt of a group of acoustic engineers to lobby the city administration for the systematic mapping of traffic noise. I contend that environmental noise is a fruitful point of entry to investigate how the state mediates universal equality and individual freedom, welfare principles and economic gain.

Keywords: noise, sound studies, São Paulo, citizenship

The Chamber's Ear

29 April 2014. 2 pm. It is a sunny afternoon in downtown São Paulo as I walk into a giant ear. Passing through the ear canal, I see the eardrum and the small bones responsible for transmitting and amplifying sound waves. As I arrive at the inner ear to observe the cochlea in its magnified detail, two people walk towards me. They ask if I would be interested in learning more about the ear. Walking me through it, they explain that the human ear is a delicate instrument, capable of detecting the widest range of stimuli of any of the senses. Noisy environments make us susceptible not only to hearing loss (the destruction of irreplaceable hair cells), but also to cardiovascular disease and sleep disturbance. To remedy this invisible threat, the two specialists argue, we need efficient laws and a broad public campaign to raise awareness

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- * I am grateful to the anonymous reviewers and to the editors of this journal for their excellent feedback.
- ¹ World Health Organization, *Burden of Disease from Environmental Noise* (Copenhagen: WHO Regional Office for Europe, 2011), p. v.

among city residents. As we walk out of the ear canal, I notice a sound level meter on a tripod connected to a laptop. The experts explain that the device is measuring environmental noise and sending data in real time to a website so that *Paulistanos* can monitor the noise levels they are exposed to on a daily basis.

I leave the giant ear and walk towards the São Paulo Municipal Chamber (henceforth the Chamber), where the '1st Municipal Conference on Noise, Vibration, and Sound Disruption' is taking place. Created as a response to pressure from a councillor and with the sponsorship of several public and private institutions, this three-day conference promises to raise awareness about noise pollution in São Paulo with informed discussions about noise-control technology, legislation, and quality of life issues.

While the specialists prefer to focus on scientific, technological and legal aspects of noise, many members of the audience take the opportunity to complain about the inefficacy of São Paulo's Programa de Silêncio Urbano (Urban Silence Programme, PSIU) and the lack of conviviality among some Paulistanos. One elderly man vents his frustration by listing the nuisances he has to experience every day, especially the 'nerve-racking' explosive sounds of motorbikes with modified exhausts. Others are interested in the relationship between noise and crime. Are noisier cities more violent? Does noise stimulate crime? Although the panellists deny any direct causal relation between noise and violence, all seem to agree on the influence of environmental noise on stress, which in turn can trigger violent behaviour. Many in the room recall a 2013 incident in an upmarket gated community, in which a businessman shot and killed his neighbours over disagreements about TV volume.²

As the event progresses, sounds of drumming and shouting start to penetrate the conference room. Members of the Movimento dos Trabalhadores sem Teto (Homeless Workers' Movement, MTST), camped out in front of the Chamber, are pushing the councillors to vote for approval of a new master plan. For weeks, the press, politicians, non-profit organisations and scholars have been discussing this plan, an ambitious project that promises to tame real-estate speculation and increase public housing close to central areas. The noise created by protesters outside the Chamber is a political instrument. Although hours earlier they were removed from the Chamber's benches for disturbing the proceedings, they can still make their presence known through sound.

For these protesters, the new master plan is an opportunity to change the city's well-known spatial segregation, where residents of the few modern, wealthy and car-centric districts with good infrastructure experience the city

² G1 São Paulo, 'Briga entre vizinhos resulta em 3 mortes em condomínio de Alphaville', *G1 São Paulo* (23 May 2013), http://g1.globo.com/sao-paulo/noticia/2013/05/briga-entre-vizinhos-resulta-em-3-mortes-em-condominio-de-alphaville.html (accessed 16 Sept. 2016).

very differently from the majority living in poor, non-regulated and mostly non-white peripheries. The protesters are aware that a group of councillors who disagree over some items on the bill are threatening to block the vote. Around 5 pm, the Chamber leadership decides to postpone the vote because internal review commissions have failed to submit their assessment in time. Frustrated, some protesters burn tyres and try to gain access to the Chamber. In a few minutes, the soundscape changes when the police's stun grenades replace the protesters' noise. The silence that follows, accurately registered by the sound level meter next to the giant ear, is a sign of the relationship between noise, space and citizenship in Brazil.

Environmental Noise in Cities

A complex institutional network mediates the generation, perception and discussion of environmental noise in cities. Its components include physiological explanations (the way the human ear functions), public health initiatives (antinoise campaigns), technological innovation (measuring and mapping noise), localised conventions (definitions of noise) and urban planning (zoning laws). As documents that codify the actions necessary for tackling urban noise, noise ordinances have become an important node in this network. Rather than being neutral controversies that can be solved solely on scientific and technocratic grounds, debates on noise control can easily become a resource for political bargaining.

In this article, I discuss São Paulo's legal apparatus related to environmental noise. I begin by situating my analysis within broader citizenship issues. I then move to a brief description of Brazil's federal legislation. Similar to countries in Europe, Latin America and North America, Brazil's legislature understands that environmental noise is a local issue more properly addressed at the city level.3 For this reason, groups invested in this issue know that it is to the Chamber that they must turn their attention.

In the following sections, I return to the Chamber to examine three noise debates in São Paulo, the first two of which involve noise ordinances created in the 1990s,4 and enforced by the PSIU. Entering the public sphere at a moment of transnational anxieties about city violence and the effects of human activity on the environment,5 both ordinances introduced changes in São Paulo's everyday social relations and generated heated discussions about urban noise. The first debate revolves around the evangelical lawmakers' attempts to exclude, minimise, or hinder the impact of a noise ordinance on religious

³ One exception to this is aircraft noise.

⁴ Laws 11.501/94 and 12.879/99.

⁵ The Rio de Janeiro Earth Summit (1992) and the Kyoto Protocol (1997) point to the growing transnational concern with environmental issues in the 1990s.

services. The second debate focuses on an ordinance that requires bars without acoustic insulation to close at 1 am: a demand that faced strong opposition from businesses involved in nightlife. The third debate circles back to the beginning of this article. I describe the recent attempt of a group of acoustic engineers to lobby the city administration for the systematic mapping of traffic noise. For the sound specialists, it is only with such an acoustic map that the municipal government can plan a truly sustainable city.

I contend that, as an omnipresent aspect of city life, environmental noise is a fruitful point of entry to investigate how the state mediates universal equality and individual freedom, welfare principles and economic gain at the micro (i.e., municipal) level. Debates on environmental noise can also help us understand how techno-scientific ideals of a North American and European urbanity continue to inform notions of civility in a global region marked by relatively high rates of violent crime, economic inequality, corruption, clientelism, environmental degradation and conflicts over land ownership.⁶

This article also dialogues with sound studies, an interdisciplinary field that has grown dramatically in the last fifteen years. Exploring the epistemological and ontological potential of sound and hearing, sound studies scholars have offered insightful approaches to modernity and the organisation of space, race, religion, violence and nationalism. With notable exceptions, however, few scholars have published (in English) at the intersection of Latin American studies and sound studies. I argue that debates on urban noise within the city's lawmaking sphere are one possible line of inquiry to discuss citizenship in Latin America. More specifically, I show how this problem, which entails both culturally localised practices and universalistic assumptions about public life and the human body, surfaces in the Chamber as a political asset or as the manifestation of the unequal right to the city — where religious, economic and public security issues mediate the regulation of certain sounds while turning a deaf ear to others.

⁶ See, for corruption, Kurt Weyland, 'The Politics of Corruption in Latin America', Journal of Democracy, 9: 2 (1998), pp. 108–21; for clientelism, Gretchen Helmke and Steven Levitsky (eds.), Informal Institutions & Democracy: Lessons from Latin America (Baltimore, MD: Johns Hopkins University Press, 2006); for environmental degradation, Diana M. Liverman and Silvina Vilas, 'Neoliberalism and the Environment in Latin America', Annual Review of Environment and Resources, 31 (2006), pp. 327–63; for conflicts over land ownership, William Mangin, 'Latin American Squatter Settlements: A Problem and a Solution', Latin American Research Review, 2:3 (1967), pp. 65–98; Roque Roldán Ortega, Models for Recognizing Indigenous Land Rights in Latin America (Washington, DC: The World Bank, 2004).

⁷ See Ana Maria Ochoa Gautier, Aurality: Listening and Knowledge in Nineteenth-Century Colombia (Durham, NC: Duke University Press, 2014); 'Social Transculturation, Epistemologies of Purification and the Aural Public Sphere in Latin America, Social Identities, 12: 6 (2006), pp. 803–25; Alejandra Bronfman and Andrew Grant Wood (eds.), Media, Sound, and Culture in Latin America and the Caribbean (Pittsburgh, PA: University of Pittsburgh Press, 2012).

Citizenship in Brazil

Analyses of citizenship in Brazil tend to focus on the emergence of the nationstate and the gradual and uneven provision of social, civil and political rights. José Murilo de Carvalho asserts that, differently from the United States and the United Kingdom, in Brazil social rights (education, housing, fair wages, etc.) have been strategically used to overshadow political and civil rights. The centralisation of power around authoritative figures and the prominence of the executive branch in the country were sustained with a 'ruling by decree' doctrine: localised and scattered provision of social rights and legitimised authority to keep political opponents in check.⁸ Roberto DaMatta argues that Brazil differs radically from the United States because the former frames individualism in negative terms, as something that threatens the totality - a totality marked by heterogeneous and relational citizenship. For DaMatta, two powerful structures of social interaction mediate citizenship in Brazil: one based on the democratic discourse that valorises anonymity, the public sphere, individuality and deference to the law; the other, centred on family relations, 'godfatherhood', friendship and patronage, where laws and rights are modified or circumvented according to personal interests.9

As James Holston notes, although this 'differentiated citizenship' (where social groups use social qualifications to regulate the distributions of power) is blatant in Brazil, a clear-cut distinction between the two structures cited by DaMatta risks conceiving of law and lawmaking as somewhat neutral and immune to private interests. For Holston, 'Brazilian law is already personalized, developing since colonial times with personalization. No special pleading is required. The individual is the seat of rights that are distributed to him or her because s/he is a certain kind of social person.'10 Holston defines as 'insurgent citizenship' a new paradigm of social demands that emerged in Brazil in the late 1970s, when the country was returning to representative democracy after decades of military dictatorship. In this model of citizenship, working classes and other disenfranchised communities disrupt the established differentiated citizenship by co-opting the democratic game and bargaining with politicians to improve their life conditions. This process is not unique to Brazil, but present across Latin America. As Evelina Dagnino explains, in the region 'the building of citizenship was seen at the same time as a general struggle - for the broadening of democracy - which was able to

⁸ José Murilo de Carvalho, *Cidadania no Brasil: o longo caminho* (Rio de Janeiro: Civilização Brasileira, 2001).

⁹ Roberto DaMatta, Carnivals, Rogues, and Heroes: an Interpretation of the Brazilian Dilemma (Notre Dame, IN: University of Notre Dame Press, 1991); A casa e a rua: espaço, cidadania, mulher e morte no Brasil (São Paulo: Brasiliense, 1995).

¹⁰ James Holston, Insurgent Citizenship: Disjunctions of Democracy and Modernity in Brazil (Princeton, NJ: Princeton University Press, 2008), p. 20.

incorporate a plurality of demands, and as a set of specific struggles for substantive rights (housing, education, health, etc.) whose success would deepen democracy in society'. According to Dagnino, the inclusion of minorities in decision-making spaces through citizenship in 1980s Latin America is linked to the sharp growth of non-profit organisations and political activism at a moment of political instability and economic crisis.

In the 1980s and 1990s, the dissemination of French post-structuralism¹² and its reading of urban space as socially produced (and thus open to political negotiation), together with intense urban migration and gentrification processes, stimulated a shift of focus in citizenship studies from the nation-state towards the city. Following Henri Lefebvre's ideas on the right to the city, scholars suggested that issues taking place at the city level, including public housing, transportation and security, were crucial for understanding broader discussions about citizenship and collective rights.¹³

Holston's notion of insurgent citizenship is directly related to his analysis of urban segregation and land rights in Brazil.¹⁴ Similarly, Ryan Walker's research on urban citizenship in Canada and Ryan Centner's analysis of 'microcitizenships' in Argentina focus on inequality at the city level.¹⁵ Walker shows how the shift of housing policy from the national to the local level led to the emergence of an urban citizenship that negatively affected Aboriginal groups' access to low-cost housing.¹⁶ Focusing on Argentina's economic landscape after the economic and political crisis of 2001–2, Centner describes how new forms of urban belonging have created 'group-specific quasi-legal relationships with the local state'.¹⁷

Brazil's 1988 Constitution is celebrated as a landmark for its attempt to relate urban development and citizenship issues. As Leonardo Avritzer

See, for instance, Henri Lefebvre's *The Production of Space* (Oxford: Basil Blackwell, 1991); Writings on Cities (Oxford: Basil Blackwell, 1996).

¹⁴ See also James Holston, 'Urban Citizenship and Globalization', in Allen J. Scott (ed.), Global City-Regions: Trends, Theory, Policy (Oxford: Oxford University Press, 2001), pp. 325–48.

15 'Microcitizenship' refers to a fractious citizenship, when certain groups have exclusive rights to particularized legitimate uses of urban space.

Ryan C. Walker, 'Searching for Aboriginal/Indigenous Self-Determination: Urban Citizenship in the Winnipeg Low-Cost-Housing Sector, Canada', *Environment and Planning A* (2006), pp. 2345–63.

¹⁷ Ryan Centner, 'Microcitizenships: Fractious Forms of Urban Belonging after Argentine Neoliberalism', *International Journal of Urban and Regional Research*, 36: 2 (2012), p. 339.

¹¹ Evelina Dagnino, *Meanings of Citizenship in Latin America* (Brighton: Institute of Development, 2005), p. 2.

¹³ See Neil Brenner, Peter Marcuse and Margit Mayer (eds.), Cities for People, Not for Profit: Critical Urban Theory and the Right to the City (New York: Routledge, 2012); Neil Brenner, Bob Jessop, Martin Jones and Gordon MacLeod (eds.), State/Space: a Reader (Malden, MA: Blackwell, 2003); David Harvey, The Condition of Postmodernity: an Enquiry into the origins of cultural change (Cambridge, MA: Blackwell, 1989); Sharon Zukin, The Cultures of Cities (Cambridge, MA: Blackwell, 1995).

describes, new political parties (such as the Workers' Party and the Brazilian Communist Party), non-governmental organisations (NGOs) and other civil groups such as the National Movement for Urban Reform were deeply active in the National Constituent Assembly, demanding more participative models of city organisation.¹⁸ The Constitution requires all cities with more than 20,000 inhabitants to have a city master plan with full participation by city residents. In 2001, urban citizenship gained new impetus in Brazil when the Statute of the City was enacted. The Statute requires cities to create urban policies in order to 'guarantee the right to sustainable cities, understood as the right to urban land, housing, environmental sanitation, urban infrastructure, transportation and public services, to work and leisure for current and future generations'. 19 Such policies include requiring owners to use their property according to its social function, allowing 'residents of small urban housing lots to obtain original ownership title if they can prove five years of continuous residence without legitimate opposition',20 raising property taxation for owners of underutilised land, and selling additional building rights to private landowners to generate revenue for public housing projects.

Besides the insurgence of marginalised inhabitants and the political articulation of the working classes, the impressive growth of evangelical organisations was equally important for the configuration of a new citizenship paradigm in Brazil. Brazil's evangelical population has grown from 6.6 per cent in 1980 to 22.2 per cent in 2010,²¹ and is today one of the largest in the world. The Universal Church of the Kingdom of God (founded in 1977) and the Church of the Grace of God (1980) are the most influential groups, operating at all levels of political administration. The Evangelical Front (or Evangelical Caucus) entered the political landscape during the National Constituent Assembly to ensure religious freedom and keep a check on the historical intimacy between the state and the Catholic Church. Since then, the defence of evangelical interests and values 'is supported not with the Bible, but with the Federal Constitution'.22 Through their emotional fervour and religious devotion, evangelical cults have imprinted an ethos of collective life away from 'the pure and simple struggle for daily material survival'.23

¹⁸ Leonardo Avritzer, Urban Reform, Participation and the Right to the City in Brazil (Sussex: Institute of Development Studies, 2007).

¹⁹ Article 2 of the Statute of the City, Law 10.257/2001.

²⁰ Holston, Insurgent Citizenship, p. 292.

²¹ G1 Brasil, 'Número de evangélicos aumenta 61% em 10 anos, aponta IBGE,' G1 Brasil (29 June 2012), http://g1.globo.com/brasil/noticia/2012/06/numero-de-evangelicos-aumenta-61-em-10-anos-aponta-ibge.html (accessed 16 Sept.2016).

²² Janine Trevisan, 'A frente parlamentar evangélica: força política no estado laico brasileiro', Numen 16: 1 (2013), p. 36.

²³ André Corten, Pentecostalism in Brazil: Emotion of the Poor and Theological Romanticism (New York: St. Martin's Press, 1999), p. 57.

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In the following sections I come back to these issues. For now, two points need to be stressed. First, the 'noise' of the MTST in front of the Chamber described above is one instantiation in a long process of urban citizenship in post-dictatorship Brazil, marked by demands for popular participation and political accountability. As Gabriel Feltran notes, 'This nascent public sphere offered a fundamental resonance box [i.e., sounding board] for the new social movements, particularly those of popular inclination, which could then be seen as the "new actors" in the Brazilian political scene.' ²⁴ Second, although discussions about housing, public transportation, land rights and religious practices may seem unrelated to urban noise, the simple fact that these matters are mediated by municipal policymakers converts them into forces within a local field of political bargaining. In Brazil (and Latin America more broadly) public urban problems such as noise tend to traverse DaMatta's differentiated citizenship and galvanise political action via insurgent citizenship (struggles for access) and microcitizenship (struggles for privileges) claims.

City Noise

Citizenship debates do not raise problems of environmental noise as often as they do those of housing, land ownership and public transportation. Often considered to be either a non-issue or just an unsolvable problem, noise is more easily influenced by local conventions.²⁵ The sounds considered improper by governments indicate less often 'pure' concerns with public health than social conceptions about how city residents should behave. For Karin Bijsterveld, noise pollution became a public problem in the last quarter of the 19th century with the emergence of new technologies of sound recording, reproduction, measurement and amplification. Bijsterveld claims that European and North American legislation on noise is entangled in a 'paradox of control'; that is to say, lawmakers and specialists have been deeply invested in measuring and controlling sounds that easily fall into the 'noise' category (such as aircraft noise), but have avoided dealing with more culturally charged 'neighbourhood noise', sounds coming from bars, neighbours, restaurants, churches and night-

²⁴ Gabriel Feltran, 'Vinte anos depois: a construção democrática brasileira vista da periferia de São Paulo', *Lua Nova* 72 (2007), p. 85.

²⁵ As Murray R. Schafer notices, 'The study of noise legislation [...] provides us with a concrete register of acoustic phobias and nuisances. Changes in legislation give us clues to changing social attitudes and perceptions, and these are important for the accurate treatment of sound symbolism.' Murray R. Schafer, *The Soundscape: Our Sonic Environment and the Tuning of the World* (Rochester, VT: Destiny, 1994), p. 67.

clubs. 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.'26

In a recent study, Hartmut Ising and Barbara Kruppa argue 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.'27 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 and 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 how the neighbourhood is perceived.²⁸

Noise legislation ensures that citizens can enjoy certain rights, including the right to rest and the right to leisure. Lawmakers establish noise limits based on scientific understanding of the human body, following studies conducted and articulated by accredited centres and international agencies such as the World Health Organization. Acoustic engineers and audiologists are often recruited to engage in debates on noise pollution and to assist in the creation and revision of specific laws. Together with lawyers and politicians, they provide the framework and vocabulary for defining, measuring, debating and legislating environmental noise as a public health issue.

Translated into federal, state and municipal laws, this scientific-legal network establishes the limits and parameters for a sustainable collective life. Once in place, this legislation stabilises a field of expectations: what the state expects from its citizens, what citizens expect from each other, and what they can expect from the state when it comes to taking disciplinary action against infringements. According to this normalising discourse, people break the law whenever they put at risk the health and quality of life of their fellow urbanites. As citizens recognise that the noise they are exposed to is someone else's fault, the challenge becomes finding the best way to generate effective legal evidence. Until they frame that specific noise as an infringement of the law, the state's disciplinary apparatus cannot be deployed. It is to this apparatus that I now turn.

²⁶ Karin Bijsterveld, Mechanical Sound: Technology, Culture, and Public Problems of Noise in the Twentieth Century (Cambridge, MA: MIT Press, 2008), pp. 3-4.

²⁷ Hartmut Ising and Barbara Kruppa, 'Health Effects Caused by Noise: Evidence in the Literature from the Past 25 Years', Noise Health 6: 5 (2004), pp. 8-9. ²⁸ Jian Kang, *Urban Sound Environment* (London: Taylor & Francis, 2007), p. 22.

Noise Control in Brazil

Three main pieces of legislation address environmental noise in Brazil at the federal level. Article 42 from the 1941 Penal Contravention Laws (PCLs) establishes as a misdemeanour 'disturbing someone's peace or work by (I) shouting or causing uproar, (II) conducting noisy or annoying activity, in contravention of the legal prescription, (III) using sonic instruments or acoustic signals abusively, (IV) provoking or not preventing noise made by animals under one's guardianship'. The Article does not specify the duration, location or intensity necessary to characterise these infractions, which makes the document difficult to use. Similarly to when dealing with a misdemeanour in the United States, citizens rely on the police to enforce Article 42, which generates another problem. When a disturbed noise complainant calls the police to get rid of an unwanted sound, he or she needs to go to the Police Department to fill out a police report. Residents are usually unwilling to do this for fear of exposing themselves to the noisemakers' possible retaliation. Once the police officers leave, they feel unprotected. Second, within the sphere of civil litigation, the Brazilian Civil Code (2002) includes a section on neighbourhood law. It protects property owners against 'interferences that are harmful to the safety, peace and health of the inhabitants, caused by the use of neighbouring property',29 in which case 'the neighbour may require their reduction or elimination whenever possible'.30

The third federal protection against noise is the more serious Environmental Crime Law. Submitted by the executive branch in 1991, one year before the United Nations Conference on the Environment and Development in Rio de Janeiro (the 1992 'Earth Summit'), the bill languished for seven years in the House of Representatives and Senate before arriving on President Fernando Henrique Cardoso's desk for approval. Article 54 of the law establishes as a crime 'To cause pollution of any kind at levels that result or may result in damage to human health, or cause the death of animals or significant destruction of flora'.31 This is the closest connection to noise pollution in the document. Interestingly, the bill that was voted and approved by the Senate did include a clause prohibiting the production of 'sounds, noises or vibrations at odds with the legal or regulatory provisions, or disregarding the norms on emission of noise resulting from any activity', with a punishment of three months to one year in jail. In 1998, Cardoso vetoed this clause, arguing that the PCLs had already tackled the problem. The veto was the result of powerful lobbying by the evangelical caucus in

²⁹ Código Civil Brasileiro (2002), 'Artigo 1277'.

³⁰ Ibid., 'Artigo 1279'.

³¹ Lei dos Crimes Ambientais, Artigo 54.

the Senate, and Cardoso later admitted that his decision was made 'out of respect for religious freedom'.³²

From Noise to Noise Pollution in São Paulo

Whereas many Brazilian municipalities rely on the PCLs and the Environmental Crime Law to tackle noise complaints, major urban centres like São Paulo have developed specific laws and institutions to fight noise, often attaching them to zoning laws. In 1972, the city passed its first comprehensive zoning law, establishing eight different zones, ranging from strictly residential to strictly industrial.³³ The law followed pre-existing trends in land use and real-estate expansion. Historic downtown and business districts were allowed to have maximum building capacity, whereas upper-class districts in the East/Southwest area were framed as dense mixed zones. The rest of the city was conceived as an 'immense and undifferentiated zone'³⁴ of strictly residential zones with local commerce.

The 1972 zoning laws provided the blueprint for the creation of a noise ordinance in the city. Approved in 1974, the ordinance defined noise limits in decibels for each of the eight zones. Because of their 'unavoidable' presence in such a dynamic city, the ordinance excluded traffic and civil construction noise. By the late 1990s, the number of zoning categories in São Paulo's zoning laws had increased from eight to 53. But while the number of zone categories increased, the noise ordinance did not keep up with these changes, leaving environmental noise unregulated in several areas of the city. Besides, the law did not specify which agency should be accountable for enforcing the ordinance.

In the early 1990s the city administration, together with councillor Roberto Tripoli (one of the founders of the Brazilian Green Party in the 1980s), created a new noise ordinance for the city. According to Regina Macedo, Tripoli's longtime assistant, the councillor suggested to the newly elected Mayor Luiza Erundina, from the Worker's Party, the creation of a task force to outline a new noise ordinance.³⁵ The mayor accepted the suggestion and assembled a group of specialists in 1991, nominating Tripoli as the coordinator. After analysing the data to hand, the specialists suggested four major strategies for tackling the issue. First, they argued that it would be necessary to create regular campaigns to raise awareness about the 'physical and

³² Quoted in William França, 'Lei Ambiental é sancionada com 10 vetos', Folha de São Paulo (Brasil) (13 Feb. 1998), p. 6.

³³ Law 7.805/72.

³⁴ Candido Malta Campos and Nadia Somekh, 'Regulando a desigualdade: a Lei de Zoneamento em São Paulo', Seminário de História da Cidade e do Urbanismo, 10: 2 (2008), p. 8.

³⁵ Interview with Regina Macedo, 16 Oct. 2012.

psychological harm that noise pollution causes to human beings'. ³⁶ Second, it would be necessary to create an agency to centralise noise complaints and conduct regular inspections, measuring noise levels and fining those who did not respect the law. Third, the executive branch should create a mechanism to require 'sensitive' public buildings (such as elementary schools and hospitals) to be properly soundproofed. Finally, the municipal government should focus on 'localised' problems, especially noise complaints related to neighbourhood noise, including bars, restaurants, churches, fitness centres and other commercial establishments.

In 1992, Tripoli marched to the Chamber with 40 residents directly affected by neighbourhood noise to give visibility to the issue and pressure his colleagues in the Chamber to recognise its importance. Wearing earplugs, the protesters handed over 300 noise complaints to the Municipal Secretary. On International Noise Awareness Day, Tripoli installed a soundproofed booth in downtown São Paulo. For two weeks, curious Paulistanos were invited to enter the booth and hear silence in the middle of the downtown hubbub and become aware of the amount of noise they were exposed to regularly. At that point, the councillor had already collected more than 400 noise complaints from residents.

According to Helena Sobral, Erundina's environmental advisor, the group looked at other noise ordinances, especially the New York City Noise Code. 'I remember that the New York City noise ordinance required dog owners to submit their dog to devocalisation', recounts Sobral, 'and drivers were allowed to honk only in emergency situations. We didn't want to go that far.'³⁷ According to Sobral, the idea of creating a project to tackle noise pollution in the city came not from the councillor, but from the mayor, as a manoeuvre to give visibility to her political allies in the Chamber. As Sobral explains,

The mayor was having some trouble getting support from the environmentalist sector in the Chamber, and that was why Tripoli was invited as a coordinator. In a certain way, behind the scenes, this bill was a way for the mayor to approach the Green Party. There was a movement in the Workers' Party that argued that there should be stronger control of environmental issues — that there should be some kind of agency taking care of that. The issue was sensitive because Rio 92 [the 'Earth Summit'] was getting close.³⁸

Political opponents portrayed Luiza Erundina as an inexperienced socialist unfit for managing Latin America's largest metropolis. As a member of the Workers' Party whose election represented a significant victory, and facing

³⁶ Regina Macedo, 'Poluição sonora: histórico de uma luta de seis anos do vereador Roberto Tripoli', unpubl. dossier (n.d.).

³⁷ Interview with Helena Sobral, 31 July 2013.

³⁸ Ibid.

the enormous challenge of putting into practice the demands of lower-class citizens, Erundina encountered a hostile Chamber. Contentious issues between her administration and council members included the regularisation of squatters, progressive property taxation, approval of the yearly budget and public transportation fares. In 1991, with only 21 out of 53 council members on her side, the mayor began to seek alliances with other parties.

In the rationale for the bill, Tripoli stated that: 'Noise pollution, which according to the World Health Organization is already the third mostserious type of pollution affecting humanity (behind air and water pollution), has grown at an alarming rate in São Paulo.'39 The document argued that localised noise from bars and churches kept residents from sleeping and resting properly. It also provided a list of physiological and psychological problems related to noise pollution, and mentioned its economic downsides, since 'the individual affected by noise pollution has less capacity to concentrate and less motivation to work'.40 Clause 3 of the bill proposed that:

Venues intended for leisure, cultural activities, lodging, recreation or religious services, which can be adjusted to standards similar to residential standards or which can allow the setting of special noise and vibration standards, will have to provide acoustic treatment that limits the passage of sound to the exterior, if these activities use sound sources with live transmission via amplifiers.⁴¹

Such commercial venues would need to get a specific licence based on the type of activity, sound equipment used, zone where the property was located, opening hours and the maximum noise levels allowed. Noisy venues would need to provide a technical report signed by at least two accredited acoustic engineers, showing that the venue had been properly soundproofed. The licence would have to be renewed every two years. Venues without a licence or with an expired licence would: a) receive a fine of US\$8,000 (or 200 UFMs⁴²) for the first offence; b) face administrative closure, followed by the sealing off of all entrances and confiscation of sound equipment in the case of repeat offences. Venues with a valid licence caught making noise above the legal limits would: a) receive a fine of US\$1,900 (venues with capacity for up to 50 people), US\$4,000 (up to 100 people), US\$6,000 (up to 200

³⁹ Roberto Tripoli, 'Projeto de Lei 707, Justificativa' (1993), in Archives of São Paulo Municipal Chamber, available at http://www2.camara.sp.gov.br/projetos/1993/00/00/07/ Ro/000007RoQ.PDF (accessed 16 Sept. 2016).

⁴¹ Lei no. 11501 de 11 de Abril de 1994 (Projeto de Lei no. 707/93 do Vereador Roberto Tripoli), in Archives of São Paulo Municipal Chamber, available at http://www2.camara. sp.gov.br/projetos/2012/00/00/0H/1B/00000H1B6.pdf (accessed 16 Sept. 2016).

⁴² The UFM ('Municipal Fiscal Unit') is a unit used for local taxes and fines; its value fluctuates according to the average of daily or monthly interest rates negotiated by banks. Taking the conversion rate of March 2016 (US\$1 = BR\$3.60), 1 UFM = approx. BR\$144, or US\$40. Values of fines shown in this article use this currency conversion rate.

people) and US\$8,000 (more than 200 people); b) be subject to the same procedure as venues with no licence for second offences (administrative closure, sealing off of all entrances, etc.). If the commercial establishment continued to fail to abide by the law, the police would help inspectors to close it again. If they continued not to abide by the law, the fines would increase to US\$11,400 per month.

In 1993, Tripoli submitted a bill to the Chamber. At this point Erundina and the Workers' Party had passed on the administration to Paulo Maluf.⁴³ Still, the passage of the bill was smooth sailing. The bill got 76 per cent approval in the first voting session and 83 per cent in the second. In March 1994, the Chamber sent the document to Maluf, and in April it was signed into law. Clauses in Tripoli's law delegated responsibility to the municipal government for creating an anti-noise agency resourced with the 'mechanisms to manage complaints and [...] inspect and measure noise levels'.⁴⁴ In that same year, São Paulo's Urban Silence Programme, the PSIU, was created.

Religious Noise

The most contentious issue in Tripoli's noise ordinance was the inclusion of religious services. Merely two months after it passed into law, evangelical councillor Gilberto Nascimento submitted a change to the document, arguing that the reference to 'religious services' went against Article 5 of the Constitution, which establishes that 'Freedom of conscience and creed are inviolable, and the free exercise of religious cults is granted with the guaranteed protection, in the form of law, of the places of worship and their rites.' Nascimento also argued that the acoustic measures required by the ordinance would have a detrimental effect on the churches' architectonic design, part of São Paulo's cultural heritage. Still, although the amendment was successfully approved, it did not prevent the PSIU from fining churches.

Councillors Celso Cardoso and Dito Salim, in 1997 and 1998 respectively, were less successful in their attempts. The former proposed explicitly removing churches from the scope of the ordinance in order to 'protect [...] a highly needed right of those that congregate to externalise the most diverse liturgy-related manifestations in our country'.⁴⁵ The latter submitted a bill that

⁴³ Maluf, a controversial right-leaning politician, was known as a planner of large-scale urban projects. Maluf over-invoiced several construction projects and diverted public funds to his accounts overseas. In 2007, the Manhattan district attorney's office indicted Maluf, claiming that US\$140 million had passed through his secret account at Safra National Bank in New York between 1997 and 1999. In 2012, a court on the Island of Jersey found him guilty of stealing US\$10.5 million by issuing over-inflated invoices for the construction of an eight-lane highway during his administration.

⁴⁴ Lei Municipal 11.501/1994, São Paulo.

⁴⁵ Celso Cardoso, 'Projeto de Lei 1010, Exposição de Motivos' (1997).

added obstacles to enforcing the ordinance against churches: from 10 pm on, the sound of religious services could be measured only after ten residents (from different households) had complained. The complainants' full names, addresses and identities would have to be provided. As Salim explained:

According to the will of the majority of the population and all evangelical and Catholic communities, it is necessary to give flexibility to the municipal legislation that addresses urban noise, in order to allow religious temples of any nature to practise their worship or religious services with singing, praising, clapping, and other characteristic noises, without applying the sanctions of this law. [...] Specialists in urban noise unanimously claim that constant uninterrupted noise is the type of noise harmful to health. This is not what happens in religious temples. [...] Establishing a minimum of 10 complainants prevents one or two people opposed to a given religious creed activating the municipal policing machine and its harsh fines for personal reasons, against the will of hundreds or even thousands of people. [...] In the world we live in today, I am positive that the more prayers, worshipping, and praising there are, the less pain and anguish there will be among the suffering population of this immense metropolis.46

After failing to get both bills approved by the Chamber's internal review commissions, evangelical lawmakers decided to try another strategy. In 2001, Marta Suplicy, from the Workers' Party,⁴⁷ was elected mayor in a tight run-off. Suplicy, who during the elections had claimed that 35 of the 55 councillors were nothing but thieves,⁴⁸ would later encounter difficulties in the Chamber as mayor. She wanted to pass a bundle of eleven bills that would allow her to, among other things, create new offices, open new cargos de confiança ('positions of trust') and increase property taxation.

To get the bundle approved, Suplicy's allies in the Chamber started to reach out for support. The Workers' Party leader in the Chamber openly stated that those who supported Suplicy's bundle would be able to 'suggest bills of interest to them'.49 The group of ten evangelical councillors in the Chamber saw this as a unique opportunity to create a legal shield for their churches against noise control. 'I have to help the Workers' Party so they can help me',50 evangelical councillor Carlos Apolinário stated bluntly. Indeed, his vote was decisive for passing Suplicy's bills in a divided Chamber. Shortly afterwards, Apolinário submitted a bill establishing that the PSIU would be able to measure the sound of churches only from inside the complainant's property, with proper identification from the complainant plus three external witnesses, who would accompany the measurement in the complainant's house (remember

⁴⁶ Dito Salim, 'Projeto de Lei 740, Justificativa' (1998).

⁴⁷ The party would elect Luiz Inácio 'Lula' da Silva to the presidency two years later.

⁴⁸ Quoted in Roberto Cosso, "Câmara tem 35 bandidos", diz Marta', Folha de São Paulo (27 Aug. 2000), p. A20.

⁴⁹ Quoted in João Carlos Silva, 'Acordo garante apoio a projetos de Marta', *Folha de São Paulo* (26 June 2001), p. C7. 5° İbid.

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that residents are usually unwilling to expose themselves to potential retaliation). In case of irregularities, the churches would have 90 days to comply with the law and soundproof the building. Additionally, fines could not exceed US\$140 (BR\$500), even in the case of repeated infractions.

A few months later Apolinário changed his bill, replacing the fixed US\$140 fine with a proportional penalty: fine of US\$250 for places with capacity of up to 500 people, up to US\$2,222 for churches with a capacity of 5,000 or more. In practical terms, since it completely excluded the threat of administrative closure, the bill would allow churches to make noise above the limits if they wanted as long as they paid the fine – much more affordable than under Tripoli's law. Apolinário argued that his bill was based on the Constitutional guarantee of the 'free exercise of worship' and was a response to the necessity of 'regularising the inspections which are often conducted in a scathing and discretionary manner'.51

The Chamber's commissions quickly reviewed the bill and issued a collective one-page document supporting it. The bill caused much dissent inside and outside the Chamber, starting with Suplicy's own party. Many Workers' Party councillors accused the bill of being discriminatory and openly stated that they would vote against it. During discussion of the bill, Apolinário and Tripoli had to be held back by colleagues to avoid physical aggression.⁵² Pressured by partisans, the mayor indicated that she would veto the bill – a move that, according to Apolinário, would turn Suplicy into an 'enemy of the evangelicals'.⁵³ In the end, the mayor approved the document, and Apolinário's controversial bill passed into law.

A few years later, São Paulo State's Attorney General filed an injunction to suspend Apolinário's law, on the basis that the Constitution considered *all* noises equal before the law. Apolinário then proposed another bill, simply transferring the content from his now defunct law. However, to avoid problems of constitutionality, he replaced the word 'church' with 'meeting places for 100 people or more'. The bill maintained that measurements would be carried out from inside the complainant's property, accompanied by witnesses; fines would range from US\$140 to US\$2,222 (depending on the building capacity); the PSIU would have to wait 30 days to register a new complaint; and venues would have 90 days to comply. Once again, Apolinário drew on the Constitution, explaining that 'any exorbitant

⁵¹ Carlos Apolinário, 'Projeto de Lei 203, Justificativa' (2001).

⁵² Gilmar Penteado, "Favor" pode reduzir multa por ruído', Folha de São Paulo (18 Sept. 2001).

⁵³ Quoted in Folha de São Paulo, 'Marta vetará projeto que beneficia templos', Folha de São Paulo (27 Sept. 2001), p. C6.

economic sanction would inhibit the social activity inserted in and inherent to meeting places, thus conflicting with the Federal Constitution'.54

Again, the municipal chamber quickly approved the bill and sent it to the mayor's office. In 2008, however, Mayor Gilberto Kassab vetoed the bill, arguing that it contradicted the zoning laws, which established limits of noise levels in the city to be measured in front of the venue and not in the complainant's property. Besides, Kassab stated, Tripoli's law already tackled the problem of noise pollution in the city. The mayor also drew on the Constitution, claiming that all places are equal before the law: bills should not make a distinction between meeting places and other types of places. In 2010, the Chamber voted to reject Kassab's veto and passed the bill without his approval. The press suggested that such disregard for the mayor's authority was a strategy of some Chamber members to pressure the administration to offer more positions to politicians affiliated to the evangelical churches. In 2010, the State Attorney General once again intervened and suspended Apolinário's law.

This analysis of noise control debates in the Chamber suggests how evangelical lawmakers have attempted to exempt church services from noise control measures. Tensions between religious practices and noise control are of course not particular to Brazil or to evangelical churches. In his analysis of legal decisions concerning sounds of worship in the United States in the 19th and 20th centuries, Isaac Weiner shows the intricate ways in which Protestant and Episcopal church bells, Jehovah Witnesses' preaching and Muslims' calls to prayers have been contested in court. Weiner argues that framing such sounds as nuisance and 'acoustic seizure' draws on post-Enlightenment notions of 'immature faith, overly concerned with external behavior rather than interiorized commitment and insufficiently respectful of the rights of others'.55 Besides showing how religious groups embed moral values in the public sphere, these case studies unveil how lawyers and judges articulate legal documents to shift the soundscape of cities.

Like other Pentecostal congregations around the world, Brazilian evangelical churches deploy sonic 'excess' as part of a cathartic experience. Contrasting with Catholic services (still dominant in Brazil), salvation is here conceived of more as a process than as a state. As Corten notes, full and complete membership in Pentecostalism involves 'declaring in a loud voice, in the heart of the neighbourhood community, that one "accepts Jesus" (as Saviour)'. 56 Fervour is sustained, guilt externalised and evil expelled

⁵⁴ Carlos Apolinário, 'Projeto de Lei 399, Justificativa' (2007).

⁵⁵ Isaac Weiner, Religion Out Loud: Religious Sound, Public Space, and American Pluralism (New York: New York University Press, 2013), p. 6.

⁵⁶ Corten, Pentecostalism in Brazil, p. 27.

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throughout the service with praising, hand-clapping, foot-tapping and stomping. Glossolalia, the verbal utterance of incomprehensible words pervasive in Pentecostalism, 'represents a mysticism in which one has knowledge of, a revelation of, and an immediate contact with God, in noise instead of in silence'. 57

Evangelical religious practices in Brazil rely on what Martijn Oosterbaan refers to as 'sonic supremacy' across the urban fabric.58 This supremacy involves as many as five daily services (amplified to the limit of the speakers' power) and extensive use of radio and TV. As sensory submersion sustains the edifice of religious devotion, it has been crucial for the politicians affiliated with the evangelical churches to protect them against noise control. In following the tortuous journey of Tripoli's bill, we can observe how the balance between sound and politics shifted as the document passed through different hands, attaching itself to discourses and legal documents as actors tried to reframe what place (if any) religious 'noise' should have in the document. Evangelical politicians have used a wide range of strategies to allow their churches to resonate in the city, changing or making new laws, closing political deals and ignoring the executive's right to veto. However, despite their prominence in the legislative debates, religious sounds are not the primary source of noise complaints in the city. For the majority of Paulistanos, the problem has been bars. Of the 496 noise complaints Tripoli collected between 1992 and 1997, 252 (50.8 per cent) were related to nightlife noise.

Nightlife Noise

Physician Jooji Hato was a member of the Chamber from 1982 to 2011. In 1996, he proposed a bill to prohibit bars from staying open after 1 am. Similar to Tripoli's law, he established the punishment of US\$12,000 (300 UFMs) for the first offence, administrative closure for the second, and use of judicial force if the bar defied the administrative closure. As Hato explains,

Bars here operate differently from those in Europe. When London pubs toll those bells at 11 pm, that's it – no more alcohol. 59 Here youths drink all night long, often ending up in a coma from alcoholic intoxication, and bar owners see that and don't do anything. That's what I was seeing when working in the Emergency Room. 60

⁵⁸ Martijn Oosterbaan, 'Sonic Supremacy: Sound, Space and Charisma in a Favela in Rio de Janeiro', *Critique of Anthropology*, 29: 1 (2009), pp. 81–104.

⁵⁷ Ibid., p. 100.

⁵⁹ Many venues in British cities have special permits that allow them to operate after 11 pm. For a discussion of debates on laws related to nightlife activity in the UK, see Phil Hadfield, *Bar Wars: Contesting the Night in Contemporary British Cities* (Oxford: Oxford University Press, 2007).

⁶⁰ Interview with Jooji Hato, 20 Dec. 2012.

One Chamber review commission approved Hato's bill owing to the wide support it had received from the population. Since cities in Europe and the United States closed bars early to reduce alcohol-related crime and accidents, cosmopolitan São Paulo should follow their example. Another commission, however, did not support the bill because it would have detrimental effects on the city's economy. The commission explained that closing bars at 1 am was unconstitutional since the state should not 'prohibit or prevent licit economic activities'. 61 The Bar and Restaurant Union claimed that, if it passed, the ordinance would lead to the loss of up to 120,000 jobs in the city.⁶² Bar owners explained that Brazilians go out late, so half of the profits made during a night occurred between midnight and 3 am. The Chamber commission also argued that 'Happiness needs to be externalised. São Paulo is a city where people work a lot, much more than in any other city in the country. Where would the leisure of our citizens take place? How can we remove our citizens' right to chat until the time they want?'63 The commission thus resorted to a well-known modernist discourse about São Paulo to highlight the importance of leisure (noise) to counterbalance the city's strong work ethos. A major point of contention was Vila Madalena, a historically residential neighbourhood that in the last decades had become a bohemian nightlife centre among middle-class youth.

Realising that the original document was too draconian in the country's current cultural and economic climate, and yielding to external pressures, Hato decided in 1998 to revise the bill. Venues would be able to stay open after 1 am as long as they followed three rules: had proper acoustic insulation, operated with completely closed doors, and provided parking lot and security personnel. The Bar and Restaurant Union's director estimated that less than 1 per cent of the 40,000 venues potentially affected by the bill were soundproofed.⁶⁴ The press suggested that the bill was in fact introduced in the Chamber to generate 'political noise', taking attention away from the series of corruption charges brought against Mayor Celso Pitta.

Pitta took office having the majority in the Chamber, but his term was anything but tranquil. Pitta, the first black mayor to be democratically elected in São Paulo, was Maluf's protégé and was elected thanks to the support of his political godfather. Already in his first year as mayor he faced a parliamentary inquiry commission concerning his involvement, as Paulo Maluf's finance secretary, in influence peddling and embezzlement of public funds. The scandal

⁶¹ Comissão de Finanças e Orçamento, 'Projeto de Lei 396, 1996' (1997).

⁶² João Carlos Silva, 'Toque de recolher começa na madrugada', Folha de São Paulo (14 July, 1999), p. 4.

⁶³ Comissão, 'Projeto de Lei 396, 1996'.

⁶⁴ Andréa Portella and Jobson Lemos, 'Pitta vê "com simpatia" projeto sobre bares', Estado de São Paulo (24 June 1999), p. C4.

increased when the mayor severed relations and exchanged spiteful accusations with Maluf. In four years in office, Pitta had his personal bank account blocked and was removed from office twice. To avoid having the Chamber open yet another parliamentary inquiry commission, the mayor proposed to 'open a new communication channel'⁶⁵ with a group of 'rebellious' councillors. The group was part of Pitta's political coalition in the Chamber but threatened to vote against him if the mayor continued to ignore their demands – Pitta's estranged wife claimed that the mayor bribed the councillors to get the necessary support. Hato, himself mentioned in a bribery scheme investigation, ⁶⁶ was one of the rebels.

In 1999, notwithstanding the controversies and thanks in part to Pitta's backers in the Chamber and a survey showing that 67 per cent of Paulistanos approved the document,⁶⁷ Hato's bar bill passed into law with 38 votes in favour and 13 against. After being signed into law, the document continued to generate controversy, particularly because the ordinance did not provide a definition of 'bar'. Restaurants, nightclubs, and even bakeries have bar areas selling mostly alcohol. Should they be included in the law? When pushed for a definition of bar, the São Paulo secretary of supply and sanitation told reporters to ask an engineer, who would have 'better technical skill' to give a precise definition of a bar.⁶⁸ A few weeks later, the Hotels, Restaurants and Bars Union were granted an injunction establishing that the law would apply only to 'bars, excluding those venues that do not commercialise solely alcoholic beverages'.69 Following that, and to make matters even more confusing, bars started to include food and non-alcoholic beverages on their menus to circumvent the law. In 2001, councillor João Antônio submitted a bill to get restaurants and cafes off the hook, arguing that it would prevent an increase in unemployment and keep São Paulo a culturally vibrant city. After going through public hearings, it passed into law in 2004.

As indicated above, and as he would later explain in a book about this law,⁷⁰ Hato's main concern was to limit alcohol consumption to reduce the number of accidents.⁷¹ He also maintained that the law would lead to a reduction in

66 Flávio Mello, 'Polícia investiga 8 vereadores que derrubaram CPI', *Estado de São Paulo* (1 Oct. 1999), p. C3.

⁶⁹ Quoted in Rodrigo Vergara and João Carlos Silva, 'Liminar derruba lei dos bares em SP', Folha de São Paulo (16 July 1999), p. 3.

⁷⁰ Jooji Hato, *Alcool: vetor da violência* (São Paulo: Ekilibrio, 2010).

⁶⁵ Flávio Mello, "Rebeldes promovem outra CPI [Comissão Parlamentar de Inquérito, Parliamentary Inquiry Commission] contra Pitta', *Estado de São Paulo* (16 April 1998), p. C7."

 ⁶⁷ Folha de São Paulo, 'Sanção foi um evento político', *Folha de São Paulo* (14 July 1999), p. 4.
⁶⁸ Quoted in Folha de São Paulo, 'Bar é o que vende bebida, diz secretário', *Folha de São Paulo* (16 July 1999), p. 3.

⁷¹ According to the councillor, Brazil's powerful beer industry lobbied aggressively against the bill (personal communication).

serious crime such as homicide, particularly in the suburbs. According to the councillor, a study conducted by the University of São Paulo in 1996 had shown that 48 per cent of crimes in São Paulo took place in and near bars, motivated by impulsive behaviour.⁷² By establishing a strong causal link between urban disorder and crime, Hato was following the zero-tolerance premise. A controversial public security policy, zero tolerance became popular in the 1990s during Rudolph ('Rudy') Giuliani's administration in New York City, which Hato often referred to when promoting his bill⁷³ – although New York has a zone-based ordinance for bar closures rather than a city-wide one. William Bratton, Commissioner of the New York Police Department (NYPD) under Giuliani, removed homeless people from the subways, 'infamous squeegee pests'74 from traffic lights, and beggars, drunks and 'noisy' teenagers from the pavements. Giving more autonomy to precinct commanders, Bratton justified such actions as part of the NYPD's 'dual emphasis on quality-of-life signs of crime as well as on serious crime'.75 According to the Commissioner, zero-tolerance policies contributed to the city's economic development by creating safer urban spaces and helping the city to revitalise. Critiques of zero tolerance have pointed out that such approaches have overpopulated the prison system, over-militarised the police and antagonised minority groups.⁷⁶

Between 1999 and 2006, the homicide rate per 100,000 inhabitants in São Paulo dropped from 69.1 per cent to 23.7 per cent, more than in any other city in the country. The most impressive difference observed in homicide rates took place in the city's poor suburbs. Some argued that, like 'dry laws' in other places, Hato's law had a positive role in decreasing homicide. Others, including councillor João Antônio, insisted that the law had negative effects because it increased unemployment and, consequently, the city's jobless population. Still others, such as criminologist Paula Miraglia, contended that 'there is no consensus about what could have motivated the reduction of homicide [...] in the city'.⁷⁷

⁷⁶ Charles Pollard, 'Zero Tolerance: Short-Term Fix, Long-Term Liability?', in Dennis (ed.), Zero Tolerance, pp. 44-61.

⁷² Flávio Mello, 'Câmara aprova fechamento de bares à 1h', Estado de São Paulo (23 June 1999), p. C1.

⁷⁴ William Bratton, 'Crime is Down in New York City: Blame the Police', in Norman Dennis (ed.), Zero Tolerance: Policing a Free Society (West Sussex: IEA Health and Welfare Unit, 1998), p. 36. 'Squeegee pests' were people who, uninvited, washed car windscreens at traffic lights and demanded payment.

⁷⁷ Paula Miraglia, 'Homicídios: guias para a interpretação da violência na cidade', in Lúcio Kowarick and Eduardo Marques (eds.), São Paulo: novos percursos e atores (São Paulo: Editora 34, 2011), p. 339. Some authors suggest that the decrease in homicides in the late 1990s is directly related to the rise of the Primeiro Comando da Capital (First Command of the Capital, PCC), a highly organised crime faction that has been able to regulate

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Hato's emphasis on alcohol consumption and violence reduction might suggest that environmental noise was only incidentally related to this debate. This is not the case, however. Already before it became law, São Paulo state's adjunct-secretary of public security stated that the police (which in Brazil is organised at state level) would not interfere with its enforcement because most supporters of the bill had mentioned nightlife noise and not public security issues.⁷⁸ There was also some contradiction between the law and available data. The same 1996 University of São Paulo study used by Hato to defend the bill showed that the majority of homicide incidents occurred between 10 pm and midnight rather than after 1 am.⁷⁹ Shortly before sanctioning it into law, Pitta conceded that the bill's scope had changed, as nightlife noise became the major justification for its existence.⁸⁰ In 2001, Mayor Suplicy issued a decree making the PSIU responsible for enforcing Hato's 1 am law.⁸¹

Whereas the first debate went from a noise issue to a question of religious freedom, the second debate started by focusing on violence and moved on to noise. The indiscriminate location of bars in the city with disregard for zoning laws, and the wide popular support against such venues, made the specificity of noise less of an issue than the religious sounds in Tripoli's law. In debating the latter, many evangelicals refused to accept a noise ordinance that put together nightlife noise and religious sounds. The former was part of a hedonistic cult of spiritual weakness, a generator of dysfunctional families populated by evil forces ready to turn into selfish addicts those who frequented bars. Hato, who endorsed Apolinário's bill, argued that religious sounds are better than nightlife noise because they represented something positive in the community.⁸² Yet, beneath the hubbub of religious services, bars and other community noise, traffic noise continued to resound, heard by all but opposed by few.

crime and violence in the city suburbs. See, for instance, Graham Willis, 'Deadly Symbiosis? The PCC, the State, and the Institutionalization of Violence in São Paulo, Brazil', in G. Jones (ed.), *Youth Violence in Latin America* (New York: Palgrave Macmillan, 2009), pp. 167–81.

⁷⁸ Jobson Lemos, 'Pitta deve sancionar fechamento de bar à 1h', *Estado de São Paulo* (7 July 1999), p. C3.

⁷⁹ Estado de São Paulo, 'Pitta quer "cooperação" do Estado para fiscalizar bares', Estado de São Paulo (25 June 1999), p. C4.

⁸⁰ Lemos, 'Pitta deve sancionar fechamento de bar à 1h', p. C3.

Marta Suplicy, 'Decreto no. 40.798' (28 June 2001), http://www.leispaulistanas.com.br/sites/default/files/LicencaDeFuncionamento/HORARIO%20DE%20ABERTURA%20DE%20COMERCIO/DECRETO%2040798.PDF (accessed 4 Nov. 2016).

⁸² Interview with Jooji Hato, 20 Dec. 2012.

Traffic Noise

São Paulo became an important economic hub in the late 19th century, largely because of the expansion of its coffee industry. This helped to boost investment in infrastructure, which in turn stimulated the establishment of manufacturing industries. As rents in central districts went up and new public health laws prohibited dense agglomerations, poor residents gradually left the central districts and migrated to the peripheries. Using the argument that it would be too costly to expand the existing rail lines in order to provide public transportation to the relocated working classes, the municipal government opted to allow private bus companies to operate in those areas. By the mid-1960s, tens of thousands of bumpy roads connected suburbs to industrial zones and the city centre. As São Paulo embraced a sprawling modernity, traffic noise (from trams to buses and aircraft) became a constant problem. However, it has commonly been framed either as an unavoidable aspect of urban life or as a private issue,83 rather than a responsibility of the public administration.

Traffic noise is what those who mounted the giant inflatable ear in front of the Chamber in 2014 wanted the city administration to address. 'The municipal administration is rigorous with bars and restaurants [...], but it does not do anything to prevent the noise coming from the streets, particularly that generated by buses and trucks',84 explained acoustic engineer Davi Akkerman, then president of ProAcústica. Created in 2010, ProAcústica is non-profit organisation that lobbies for acoustic sustainability, bringing together acoustic engineers, audiologists, public health scholars, soundproofing suppliers and real-estate stakeholders - most of them based in São Paulo. The organisation found a point of entry to the Chamber with senior councillor Andrea Matarazzo, then president of the Chamber's urban policy commission. In 2013, Matarazzo passed a resolution instituting conferences on noise control and pollution in April (when International Noise Awareness Day is celebrated), to be organised and promoted by the Chamber. The purpose of the event was to bring together residents, academics, the private sector and politicians to discuss and raise awareness about environmental noise, and to 'create the guidelines for an effective legislative and administrative undertaking'.85

ProAcústica wanted lawmakers to include a section requiring the development of acoustic maps for the city in the new master plan, under discussion in the Chamber. They argued that only with this tool would it be possible for the government to establish a reliable diagnosis of the problem and to plan the city properly, according to the noise it generates. Noise maps took

⁸³ Since the 1990s, business in sound-proofing windows for residential and commercial buildings has boomed.

⁸⁴ Juliana Tourrucôo, "Rigor com bares não vale nas ruas", diz especialista em acústica', *Folha* de São Paulo (4 May 2014), p. 12.

off in the early 2000s in Europe, when European Commission Directive 49 (2002) determined that member states should harmonise permissible noise levels, paying special attention to 'road and rail vehicles and infrastructure'. Rember states would work to preserve quiet areas by using strategic noise mapping to orient the development of action plans. Noise maps require state-of-the-art software (most of which is developed in Europe) and provide a reliable visual representation of traffic noise levels across space. They indicate zones of excessive noise in the city and facilitate the development of strategies for mitigating noise pollution.

In Brazil, traffic noise is a crucial component of environmental noise because it is the background against which other noises are measured. NBR 10151, the Brazilian technical standard that both Tripoli's and Hato's ordinances and São Paulo's zoning laws refer to, establishes that 'If the background noise is higher than the values included [in the document] for the area and time considered, the evaluation reference level takes on the value of the background noise.'87 Thus, areas with intense traffic are less likely to have trouble with noise control regulation. According to Nicolas Isnard, manager of a French-based acoustic measurement company in São Paulo and one of the founding members of ProAcústica,

The moment Brazil is going through is similar to what happened in Europe ten years ago. It is a moment of mapping out and measuring urban environments so we can have an idea of what is actually going on. You only understand the problem when you know the sound sources and how the sounds propagate. If you focus on a specific sound source, you will remove that source but another one will appear. 88

In 2013, Matarazzo submitted a bill proposing the creation of a noise map in São Paulo within 12 months after its passing into law. It would follow the guidelines of zoning laws (sanctioned by Suplicy in 2004), include public hearings and be carried out by the city's environmental quality department. Arguing that the noise of airports, highways and railways has serious consequences for the city residents' health, the bill entrusts to the city administration responsibility for creating quiet zones, using new technology to reduce noise and setting deadlines for the reduction of sources above noise limits. As lobbied by ProAcústica, in 2014 Matarazzo also passed an amendment to the master plan requiring the creation of a noise map within 12 months. In common with the two debates discussed earlier, the issue raised controversies. Unlike in the case of Tripoli's and Hato's bills, however, resistance came not from civil society, but from the executive branch.

⁸⁶ European Union, 'Directive 2002/49/EC – 25 June 2002', *Official Journal of the European Communities* (18 July 2002), p. 12.

⁸⁷ Associação Brasileira de Normas Técnicas, NBR 10151 (2000), p. 3, available at http://www.semace.ce.gov.br/ (accessed 16 Sept. 2016).

⁸⁸ Interview with Nicolas Isnard, 24 June 2012.

In 2014, a few months after the events described at the beginning of the article took place in the Chamber, the city master plan was approved. Sympathetic to the demands from landless and working-class activists (who helped get him elected in 2012), Workers' Party Mayor Fernando Haddad doubled the area allocated for public housing and created mechanisms to expropriate idle land used for real-estate speculation. Haddad vetoed the noise map amendment, arguing that noise is 'intrinsically mutable and dynamic, which in itself denotes the infeasibility of such endeavours by the executive branch'. 89 Workers' Party councillors also argued that 12 months was not enough time to create the map, adding that the controversy could delay the creation of zoning laws, which are legally attached to the master plan. With this in mind, Matarazzo changed the timeline in his bill, giving the administration four to seven years (depending on the area) to generate the map.

In 2016, Haddad signed Matarazzo's Noise Map bill into law. In that same year, the mayor approved the controversial zoning laws, which will define for the next 13 years what can be built and what type of activity carried out in the city. Assuming Paulistanos abide by the document, São Paulo will have more commerce corridors in residential areas, more public housing and more people using public transportation, with higher buildings next to major thoroughfares. Some residents believe the city will get noisier; not (only) because it still lacks a noise map, but because the zoning laws turned several residential areas into mixed-use zones (which have higher noise limits) and gave churches laxer noise limits.90 Additionally, the law incorporates Hato's 1 am law (now revoked) but with a much smaller fine - reduced from US\$12,000 (300 UFMs) to US\$2,220 (BR\$8,000). As for traffic noise, its control 'will follow the provisions of specific legislation'.91 This specific legislation has not yet been created.

Conclusion

This article has shown how environmental noise can serve as a point of entry to understand citizenship. As residents call upon the city administration to regulate noise, the matter becomes entangled with political struggles and administrative skirmishes. Owing to its political heterogeneity and a culture of bargaining with the stronger executive branch, the São Paulo Chamber is a particularly advantageous point from which to examine the relations between city noise and citizenship. The three debates examined here suggest

⁸⁹ São Paulo, 'Lei no. 16.050' (2014).

^{9°} At weekends and during holidays, churches can operate between 6 pm and 10 pm with the highest noise limits (7 am - 7 pm) authorised for each zone.

⁹¹ São Paulo, 'Lei no. 16.403 – Artigo no. 146' (2016).

that the Chamber is a powerful mediator of sound production in the city. Like other public controversies, noise enters the Chamber not as a self-contained problem with reachable solutions, but as an asset feeding disputes for political visibility within and across the state apparatus. This is particularly noticeable in São Paulo, where parties tend to establish ad hoc alliances and politicians act with a certain degree of autonomy, often voting against the instructions of their own parties.

If the Chamber mediates city noise, it is also true that noise mediates the Chamber. By closely following the legislative processes of genesis, revision, voting, and vetoing according to the requests and interests of residents, sound specialists, evangelical leaders, lawmakers, mayors and bar owners, it is possible to see how noise intersects with conflicting citizenship ideals. As in other parts of Latin America, noise legislation, and the very definition of noise,⁹² is clearly entangled in various projects of social organisation, often at the interstices of micro- and insurgent citizenships.

In São Paulo, neoliberal real-estate power brokers, left-leaning labour unions, conservative evangelicals, bohemian youths and cosmopolitan intellectuals are all well represented. In this densely packed city it is not hard to observe how environmental noise can pitch liberal individualism against democratic collectivism. Whereas the democratic discourse treats all noises as potentially harmful to human health, using the sound level meter to get reliable values in decibels, local actors are constantly calling attention to the more subjective ear. For them, the signal embedded in noise is made of 'good', 'necessary', 'bad' and 'useless' decibels. Bar owners and evangelical leaders justify their loudness by emphasising either the relevance of their message or the importance of their activity in relation to its noise - framed as a trivial but inevitable by-product. Unlike other public controversies, the concept of environmental noise is itself complex. It emphasises potential 'pollution' in everyday auditory experience and puts together a range of sounds that exist for various reasons and that affect different ears differently - including, of course, the Chamber's giant ear. The variety of debates analysed here illustrate this issue.

The MTST's 'protest noise' in front of the Chamber is part of a more recent insurgent citizenship paradigm, in which noise becomes a political statement about the right to occupy, to be heard and to demand inclusion. Living in a city of microcitizenships, where laws are frequently deployed to keep the poor outside the rules of the game, the protesters know it is not wise to wait for the Chamber to decide their future. They are acutely aware that to be part of the city *as citizens* they need to infiltrate the law-making process as much as

⁹² On music/noise and law in the urban context, see Ochoa, *Aurality* and Timothy Rommen, *Funky Nassau* (Berkeley, CA: University of California Press, 2011).

possible.⁹³ The initial vignette is thus a reminder that, just as powerful groups have attempted to use noise to reshuffle the city margins through urban planning and policing approaches, the margins have also found ways to deploy noise to reshuffle the centre.

One could identify other 'noises' from the margins that also challenge São Paulo's policymakers. For instance, since the 2010s informal street parties known as pancadões (literally 'big thumps' in reference to the volume of the music beat), as well as the rolezinhos (from role, slang for 'hanging out') organised in shopping malls across the city, have raised concerns amongst the press, middle class and politicians regarding 'noise', youth behaviour and access to public and semi-public spaces.⁹⁴ The fact that both events are articulated by the city's non-white suburban youth, who have little access to leisure spaces and enjoy listening to funk carioca and funk da ostentação (popular music styles coming from Rio de Janeiro and São Paulo, respectively), suggests the multiple ways in which 'noise' debates intersect with race, sexuality, taste and class tensions. In this sense, the multifaceted emission of 'noises' from the margins, from the MTST's 'political noise' to the 'leisure noise' of the pancadão, makes São Paulo's soundscape into an important sphere for articulating insurgent citizenship practices.

The analysis of Tripoli's noise ordinance demonstrates how evangelical churches have penetrated lawmaking. I argue that this interest in noise control relates to the ways in which their services are deeply enmeshed in intense devotional affect. While non-evangelicals often conceive of such sonic presence as crass and inconsiderate, evangelical noise is also a strategy to expose nearby residents to the power of the evangelical message. In the last 20 years, the organised action of religious lawmakers (who can move across party lines) throughout Brazil has affected not only noise control, but also broadcast licensing, women's and Lesbian, Gay, Bisexual and Transgender (LGBT) rights, and tax exemption.

Hato's '1 am' law follows a premise popular since the 1990s, establishing a causal relationship between noise, alcohol consumption and crime. Although the law was criticised for its negative impact on the economy and imprecise wording, it prevailed thanks to the popular (and not entirely incorrect) perception of nightlife as a major source of violent activity in the city. When critics pointed out that the law did not close the bars for the reasons it was originally intended, it still had popular acceptance owing to its impact on nightlife noise. As I describe elsewhere,95 the ordinance's relatively heavy fines and the high costs of soundproofing have stimulated an increase in alternative social

⁹³ For a historical account of this 'noisy' citizenship, see Feltran, 'Vinte anos depois'.

⁹⁴ See Jordana Timerman, 'Rolezinhos: the flash mobs currently freaking out Brazilian authorities', The Atlantic (14 Jan. 2014).

⁹⁵ Leonardo Cardoso, Sound-Politics in São Paulo (Oxford University Press, forthcoming).

gatherings and the use of legal loopholes (e.g., having proxies as legal bar owners or tenants).

The last debate briefly discussed recent attempts to target noise traffic with the creation of a noise map. The very fact that traffic noise is virtually the background against which any other noise in the city is measured indicates its unique status. The Chamber has often turned a deaf ear this noise, and the few attempts to regulate it have been dismissed. Gontroversy around traffic noise is not limited to lawmakers, but common among sound specialists as well. The revision of Brazil's two most important technical standards for noise regulation, which most noise ordinances refer to, has been marked by disagreements over the inclusion of traffic noise. The standards for noise ordinances refer to, has been marked by disagreements over the inclusion of traffic noise.

Together, the debates discussed here indicate how noise relates to the right to the city. I suggested that rather than a homogeneous project that revolves around access (to land, transportation, sewage, public health, etc.), noise-related citizenship claims are highly heterogeneous. This is because environmental noise is itself relatively heterogeneous, difficult to measure and ephemeral. Oscillating between taste, civility and public health, it requires the constant monitoring of sound sources, which involves the challenging task of deciding which sounds can and should be controlled. It is not despite, but rather owing to the fact that environmental noise is such a constant, boundless, multifaceted and affective entity that it has proven to be a fertile area of dissent and political negotiation in large urban centres like São Paulo.

Spanish and Portuguese abstracts

Spanish abstract. En este artículo discuto el aparato legal de São Paulo relacionado con el ruido medioambiental. Empiezo situando mi análisis al interior de cuestiones más amplias de ciudadanía. Luego me centro en tres debates alrededor del control del ruido en la ciudad. Los dos primeros se refieren a legislaciones de ruido creadas en los años 90 y que fueron aplicadas por el Programa de Silencio Urbano (PSIU) de São Paulo. La primera se desarrolla alrededor de los intentos de legisladores evangélicos por excluir, minimizar u obstruir el impacto de una ley sobre ruido en los oficios religiosos. El segundo debate se enfoca en una regulación que requería que los bares sin aislamiento acústico cerraran a la 1 de la mañana — una demanda que enfrentó una fuerte oposición de parte de comercios funcionando en la vida nocturna. El tercer debate describe el intento reciente de un grupo de ingenieros acústicos de cabildear con la administración de la ciudad para el mapeo sistemático del ruido del tráfico. El artículo señala que el ruido medioambiental es un punto de entrada

⁹⁶ See, for instance, bills 853/1995 and 707/1997. Bill 853, by Adriano Diogo, establishes noise limits based on urban zones: http://cmspbdoc.inf.br/iah/fulltext/projeto/PL0853-1995.pdf; bill 707, by Osvaldo Enéas, mandates fines for noisy bikers: http://www.radarmunicipal.com. br/proposicoes/projeto-de-lei-707-1997 (both webpages accessed 4 Nov. 2016).

⁹⁷ Cardoso, Sound-Politics in São Paulo.

productivo para investigar cómo el estado media principios de igualdad universal y libertades individuales, bien-estar social y la lógica del mercado.

Spanish keywords: ruido, estudios de sonido, São Paulo, ciudadanía

Portuguese abstract. Neste artigo, discuto o aparato legal da cidade de São Paulo com relação aos ruídos ambientais. Começo situando minha análise dentro de questões mais amplas relacionadas à cidadania. Foco, então, em três debates acerca do controle de ruídos na cidade. Os primeiros dois debates envolvem as regulamentações relacionadas aos ruídos criadas na década de 1990 e aplicadas pelo Programa de Silêncio Urbano (PSIU) de São Paulo. O primeiro trata das tentativas de vereadores evangélicos de excluir, minimizar ou obstruir o impacto das regulamentações sobre ruídos nos cultos religiosos. O segundo debate foca em uma regulamentação que obriga bares sem isolamento acústico a fecharem a uma hora da madrugada, uma demanda que sofreu forte oposição por parte de estabelecimentos envolvidos na vida noturna. O terceiro debate descreve a tentativa recente de um grupo de engenheiros acústicos de influenciar a administração municipal a realizar o mapeamento sistemático dos ruídos causados pelo trânsito. Defendo que os ruídos ambientais constituem um ponto de entrada profícuo para investigar como o Estado media princípios de igualdade universal e liberdades individuais, bem-estar social e a lógica do mercado.

Portuguese keywords: ruídos, estudos de som, São Paulo, cidadania