

Bonding

Infrastructure, affect, and the emergence of urban collectivity

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Tramspotting

Young people are jumping turnstiles underground. They squeeze past ticket controllers, crawl underneath fare gates, sit on top of the metal machines that guard the entry to the train platform. One level up, thousands of people have gathered on the city streets. High school students mix with health care workers and teachers, black activists from the peripheries walk together with white middle class associations, feminists and environmentalists fraternize with drivers. If they spot a bus, they would burn it? Twenty centavos more for a bus ride. Brazil, June 2013. Thirty pesos more for a subway trip. Chile, October 2019.

Two of South America's most disruptive urban mass protests of the past decade have emerged from an increase in public transport fares. The Brazilian uprising was still fresh in people's minds when I first arrived in Rio de Janeiro in March 2014. Seven years later, I am writing up this introduction as Chilean protesters stand by, confined to banging pots and pans from their balconies, while the outbreak of the new coronavirus has temporarily cleared them off the streets. Both movements have profoundly shaken up their respective societies and political systems, albeit with different outcomes. In Brazil, the demonstrations have ultimately been hijacked by conservative and right-wing populist forces and ended with the impeachment of the Worker's Party president Dilma Rousseff in 2016. In Chile, a popular referendum planned for October 2020 strives to replace the 1980 Pinochet-era constitution, seen as embodiment of the dictatorship's neoliberal inheritance. Both movements have spurred radical political transformations in one direction or another, but also importantly both have for the first time in many years brought together people of very different socioeconomic backgrounds, political convictions, and territorial belongings in constellations quite uncommon for their highly segregated urban societies (Rolnik 2017; Segura 2014; 2019).

How did a fare increase of a few cents bring thousands of protesters onto the streets? Recent propositions for re-thinking public transport as a particular kind of *public space* (Tukivene et al. 2020) offer some initial answers to this question.¹ Looked at from this perspective, public transport arguably belongs to the "social sphere": It is a space where political conflicts are fought out, where claims over citizenship emerge – it's full of promises for participation and mutuality (Arendt 1972, 57). Adding from less human-centered conceptualizations of publicness, mass transit becomes a "matter of concern" (Latour 2004): Turnstiles being jumped over in present-day South America,

¹ I am grateful to Tauri Tukivene and the PUTSPACE ("Public Transport as Public Space", cf. putspace.eu) project members for pointing me into this direction, thank you especially to Wladimir Sgibnev and Tonio Weicker for sharing their thoughts on the potentialities (and risks!) of exploring the publicness of transport.

a seat taken by a black woman in 1980's USA, burning tramways in the streets of Rio de Janeiro at the turn of the twentieth century – protest evolves from relations between people and things² that are more than symbolic.

The capacity of things like fare gates and bus benches to enter into new relationships with the potential to disrupt existing inequalities of *race*, class, and gender also points to how public transport might not be seen as merely a static reflection of structurally determined social conflicts. What a “mobilities” perspective can offer for a critical (urban studies) inquiry into public space, then, is an emphasis on the transitory character of socio-spatial arrangements and the fleeting intensities of temporary encounters amongst all kinds of stranger people and things (Sheller and Urry 2003).

Against this background, the question marks left by the South American fare protests point to the relevance of exploring new formations of urban collectivity from their very fluidity and ephemerality: How could a mass movement emerge spontaneously and without previous “warning”, and how to make sense of its radical openness towards the future? In lieu of answers, two influential critical urban researchers have admitted the limits of established theories of social movements and urban inequalities when invited to comment on the recent uprisings in the two countries. “A new social phenomenon exists”, Spanish sociologist Manuel Castells remarked in a public speech in Chile in November 2019, “spontaneous social explosions in various societies that are difficult to understand.”³ Three years earlier, David Harvey told activists from the Rio de Janeiro Right to the City Movement that the even if they singled out the factors that led people to the streets in 2013, for him, what would remain unanswered would be the question “where did these collectives come from [...] and how could [they] disappear so quickly again?”⁴ (audio transcript, 08/03/2016).

² I will use the terms “matter” and “thing” interchangeably throughout this work, following Bruno Latour’s (2004) etymological and philosophical retracing of the terms. “Matter”, in the following, will be used to designate a material *object* that has turned into a *thing* “of great concern” (ibid., 235) and that has the capacity to assemble, or to “gather” (ibid., 237), a number of people around this concern.

³ Manuel Castells, public speech held at the Parque Cultural, Valparaíso, November 06, 2019, full speech available at: <https://youtu.be/h97emCUyMf0> (last accessed 10/04/2020). I am very thankful to Maxwell Samuel Woods for providing me with this quote after delivering a sharp and inspiring presentation on the Chilean Social Explosion of 2019 at the Leibniz Institute for Regional Geography, Leipzig, in January 2020.

⁴ David Harvey, public speech held at the Cine Odeon, Rio de Janeiro, March 08, 2016. The above quote is a transcription from an audio recording made by the author. The full quote goes “We cannot identify this

These quotes do not only underline the importance of exploring the emergence of new forms of urban collectivity, they also raise again new questions about their exact ways of un/relating. What held together the very different protesters, which started from high school and university students, but which soon came to involve residents from all kinds of social classes and political ideologies? How did these collectives become operable (*handlungsfähig*), despite their meandering between “emancipatory” and “right wing” claims in the course of just a few months?

Writing on how the increasingly deterritorialized flows and corridors of global urbanization are continuously being challenged by an array of emerging local actors, practices, materials and dispositions, AbdouMaliq Simone (2020, online first) has described such formations as something urban studies might learn about from *Cities of the Global South*:

What perhaps then continues to distinguish a ‘South’ is the intensity of the various ways in which urbanization is splintering or mutating into multiple forms, providing different proportions of both precarity and potentiality, risk and stability, and provisionality and continuity in relationships that are impossible to disentangle, and thus challenge us to continuously think anew about what we see.

Such a re-thinking of relations along the lines of fragility and temporariness, but also of endurance and potentiality arguably opens up for exploring “new forms of collective life” (ibid., cf. also Bhan 2019; Caldeira 2017; Gillespie and Naidoo 2019), protagonized by a young generation of urbanites and reflected in the global spread of protests in recent years – from Istanbul’s *gecekondu*s, over European Refugee Marches, to students shouting #RhodesMustFall in South Africa and young women performing *Un Violador En Tu Camiño* in South America.

In line with these, the fare-protests in Brazil and Chile that frame the present study are part of a “South” that has become the source for narrating new urban possibilities and that has proven fruitful for opening up a series of theorizing (Roy 2009; 2011; Parnell and Robinson 2012; Robinson 2016; Schindler 2017). Research that followed along these lines has provided fresh accounts of the momentary experiences of togetherness and the interlocking material and immaterial infrastructures that organize ordinary citylife, thus significantly contributing to a new

one factor that led people to the streets in 2013, it might be the fares, it might as well be capitalist urbanization, mega-event investments ... But these do not explain why ... So I am asking you: Where did these collectives come from in 2013? And where are they now? Why do we have demonstrations against president Rousseff instead now, how could these emancipatory movements disappear so quickly again?”

grammar currently under development in cultural urban studies (Blok and Farías 2016; Färber 2019; Simone 2020) and human geography (Anderson 2014; Amin and Thrift 2017; Katz 2017). Uniting this diverse body of research are its concrete efforts to come to terms “with what we cannot see, yet perceive; with what we cannot properly theorize, yet foresee” (Lancione and Calafete-Faria 2016), that is, with forces, matters, movements, and affects that escape existing understandings of urban transformation.

The present work attempts to contribute to these ongoing debates by asking how new forms of urban collectivity emerge from the relations of residents and techno-material elements.

I approach this question from a case of infrastructural breakdown that has catapulted one of South America’s popular central-city districts into a decade-long period of suspension. In 2011, the oldest electrified tramway of the subcontinent literally lost track, when after a break failure Rio de Janeiro’s government announced to withdraw the historic line that had served as the city’s last surviving “public”⁵ means of transport for over 120 years. Since that date, residents of Santa Teresa have protested untiringly for the return of their *bonde* – the Brazilian word for tramway.

As part of Rio’s central region, the Santa Teresa neighborhood stands out, or stands apart from both the splendid white Copacabana-style condominiums in the south, and the vast poor areas of the city’s northern and western peripheries (cf. chpt. one, fig. 4). During the past decade, elements of both extremes have appeared in the hilltop district. In a climate of financial euphoria and “entrepreneurial governance” (Ribeiro and Santos Junior 2017, 913) that captured Rio as part of the mega-event preparations for the 2014 World Cup and the 2016 Olympics, a seemingly infinite number of hostels, souvenir sellers and tourist guides popped up along the streets, and the local favelas saw a boom in construction and rent-outs. However, since the military took command of Rio’s security apparatus in February 2018, incidents of armed assaults have grown again as everywhere in the city (Ramos, Nunes, and Dutra 2018), and shootings may happen any time of day, at any place in the neighborhood. Ultimately, none of the established concepts of critical urban theory “from the North” seems to last, and labels such as touristification, gentrification, and marginalization disappear as quickly as they have appeared. By this, Santa Teresa is not an

⁵ “Public” is meant here in the sense of “state-owned”. The Santa Teresa tramline was the last mass transit infrastructure in Rio operated by a state company. All other means of public transport are in private hands. – I wish to thank Licínio Rogério for pointing this out to me.

exception, but can be read as exemplary for “Rio’s unusually complex physical and social geographies [which] confound any assumptions of uniform policy impacts across the urban territory” (Richmond and Garmany 2016, 633). Part of this complexity are the dynamics of drug trafficking and criminal gangs, which interfere into housing markets and local economies (Müller, forthcoming), but other factors, ranging from topography over vegetation to climate conditions, also contribute to the wavering between many labels that sets the rhythms of Santa Teresa.

Together, these unsteady rhythms bring the neighborhood closest to Simone’s (2013, 246) description of a *majority district*, that is, a space in-between “the superblock and the slum, the ascendant middle class and the poor”. In Santa Teresa, you can cross a street and end up facing a line of picturesque stucco facades or turn a corner and find yourself standing amidst a group of improvised concrete- and-brick shacks. The different types of housing are in turn inhabited arbitrarily by petty bourgeois artists and artisans, composers of short poems or huge waste sculptures, manufacturers, street vendors, service workers and businesswomen of all incomes. They compose a population that is marked by contradictions and heterogeneity, which accumulates all kinds of professions, livelihoods, origins and political orientations – and which makes the bulk of inhabitants of many such “majority” districts in cities of the Global South (and beyond, see Hentschel 2015). Socio-economic inequalities and categories of race, class and gender become suddenly palpable in the neighborhood when another black body is found dead in the streets, when women wait for each other at street corners to walk home together, when a new wave of European “expats” moves in.

At certain times, such as in the case of the tramway-protests, specific shared demands will crystallize into formations of collectivity with a certain momentary stability. Because such collectives appear as never entirely formed, and because they may as well dissipate over time or turn into something else, the Santa Teresa protests resemble the mass demonstrations against fare increases in 2013-Brazil and 2019-Chile in at least two ways.

First, because of their spontaneous emergence and heterogeneous composition, both protest formations are difficult to grasp with classical theories of urban social movements. Commentators like Manuel Castells would arguably have troubles explaining the tramway protests in Santa Teresa similar to those they have faced with the Chilean “social explosion” of 2019; because they operate according to a logic divergent from the progressive claims and integrative repertoires that have been associated with Latin American social movements since the 1980s (Caldeira 2012). Both the

Santa Teresa protesters and the fare movements of 2013 and 2019 have exposed barriers to access the city (as in increasing transport fares), yet they do not ask for inclusion (as in claims for universal citizenship and social welfare programs). Second, the Santa Teresa protests are also characterized by an unsteady directionality, similar to what David Harvey has remarked about the question marks left by the 2013 uprisings in terms of their “wherefroms” and “whereabouts”. Over the years, local protesters have also articulated claims for free fares and alternative ways of organizing public transport together with more ambiguous, sometimes apparently conservative or reactionary demands.

In spite of its parallels to the mass protests, however, the tramway conflict of Santa Teresa bears one characteristic that make it a somewhat unique, yet also a potentially telling case for exploring new forms of urban collectivity. And this peculiarity has to do with the *bonde* itself. Since my first stay in the neighborhood in 2014, I have encountered all kinds of contradictory explanations for residents’ protest. Yet in one way or another, these would all point to the tramway: Be it the “material resistance” of the historical vehicle itself that supposedly made protesters endure the ups and downs of its suspension for over nine years; or their standing by some of the most remote parts of its infrastructure as way of also holding on to the tramway’s ambivalent promises – ultimately, these elements would appear *less as symbols* of protest (like in the case of metro turnstiles or bus tickets) *than as the very matters* that assembled protesters in the first place.

Bonding thus designates a process of un/relating that is quite different to the fare movements of 2013 and 2019 in that it does not depart from evidences of urban inequality and associated political claims, but from residents’ attachments to some specific instances of urban matter. The hypothesis guiding this study, accordingly, is that there is a particular quality to the relations between residents and *bonde* that has allowed for them to uphold the fragile balances of a majority district.

Instead of limiting the scope of this case study, the particular role of the *bonde* in the emergence and remarkable persistence of a heterogeneous constellation of (protesting) residents, I argue, allows for a further stretch of the argument. If my working hypothesis prompts me to become a *tramspotter* – that is, to begin the search for new forms of urban collectivity by attempting to systematically observe, locate, explore all kinds of tramway-related objects and phenomena – then it may be an advantage that the cultural legacy of this specific genre of transport vehicles is often portrayed as closely entangled with concrete imaginations of cities and urban everyday formations in both academic literature and planning practice (Doucet 2019; Frehse 2000; King and Fischer

2016; Meyer 2015; Pickrell 1992). “Cultural legacy”,⁶ I understand here as the way in which past relations to the tramway – be it techniques of riding along that have been passed down through several generations of residents, or urban renewal plans that were introduced together with the first bonds of the early twentieth century – would reverberate in imaginaries of “urbanity” and formations of urban collectivity today.

One example for such kind of cultural legacy is the so-called “tramway renaissance” that has been underway already since the 1970s in North America and parts of Europe, but which gains new vigor also in cities of the Global South in the face of climate urbanism (Ferbrache and Knowles 2017). In this context, tramways have been portrayed by urban authorities and transport companies alike as the saviors of the carbon-dioxide heavy, polluted, congested city (Moraglio 2011). In search for an explanation for their seemingly uncontested success, even the most prosaic transport studies scholars would recur to tramways’ “mythical allure” (De Bruijn and Veeneman 2009, 358), which is apparently deeply entangled with their being introduced as symbols of urban modernity and progress at the turn of the twentieth century. Through their revival, tramways are now supposed to “bring back” urbanity in the sense of socio-spatial density and heterogeneity, to revive public spaces, and to re-launch a city’s image and identity (Boquet 2017; Olesen 2019). As transport scholars have rightly pointed out, these attributes are not power-neutral, but exactly the ways in which, through their cultural legacy, (railway) technology “revives” both Eurocentric

⁶ I have chosen the term “legacy” here also to differentiate the term from established concepts of “cultural heritage” in cultural anthropology (Broccolini 2013; Hemme and Tauschek 2007; Kirshenblatt-Gimblett 1995; Schneider 2005; Tauschek 2010). While I am also interested in forms of “intangible” heritage as defined by Regina Bendix (2008) – that is, I also look into immaterial, affective or emotional aspects of that what is claimed as needing “preservation” (ibid., 257), and I explore “habitual aspects of culture” (ibid., 254) such as techniques of tramway-riding – I do however understand that “heritage” designates a quite different set of study objects than those I will present in the following. The advantage of Bendix’ conceptualization is also that (similar to how I will analyze the *promissory assemblage* that has evolved around Rio’s tramway) it opposes a narrow focus on “heritage sites” as i.e. specific buildings, monuments or landmarks that have their origins in the past and are protected against future damage or alteration. Despite Bendix’ importantly pointing to the processual character of “heritage making” (ibid., 258), the notion “heritage” does however retain a certain possessive and objectifying character. Contemporary discussions around heritage making designate practices that are aimed at conserving past achievements (Bandarin 2019), that stem from “identification” with a specific place (Edensor 2002), and that advance social cohesion (Albert et al. 2012). In other words, my choice of the term “legacy” is to designate a process that is less “directed” at preservation of the one, bounded object, and that plays out in more contradictory manners (sometimes involving claims for preservation, sometimes directed at the modernization, transformation, or even abandonment altogether) and is distributed amongst multiple and changing elements (not simply “the tramway”) and involves a heterogeneous set of actors (not identifying as “local community” in a straightforward way).

imaginaries of public transport as space of “everyday multiculturalism” (Koefoed, Christensen, and Simonsen 2017; Lobo 2014) and local histories of violent urban renewal and protest (Paget-Seekins and Tironi 2016; Rokem and Vaughan 2018) opens up for a “decolonization” of expert knowledge about and ways of knowing transport systems (Schwanen 2018). The following section will detail on how also beyond the specialized sphere of transport studies, and from a quite different perspective, urban railway transport has proven a source for theorizing and contesting “urbanity” and new forms of collectivity.

New formations: Public transport *as* collective

For the present study, it might be particularly telling how two influential authors in the field of anthropology have developed parts of the conceptual foundations of their, quite different, theories of (urban) collectivity from what could be called “railway” ethnographies. “In the Metro”, Marc Augé (2002 [1986]) discovers not only the richness of observing people, places atmospheres from the encapsulated spaces of train carriages, narrow tubes and underground passageways, but also stakes his fiction on how an account of a day of travel can be of import to *urban* anthropology. The talents of the fieldworker should be drawn away from the study of “traditional” cultures, into the dilemmas of urban everyday life, Augé argues. The urban anthropologists’ task is, in other words, to re-figure the city’s constitutive ambivalence of fleeting relationships and aleatory encounters that suddenly reveal a shared condition.⁷ Augé’s experience as passenger, then, sets the grounds for his later theories of urbanity: “For such is, really, for those who take it every day, the prosaic definition of the metro: *collectivity without festival and solitude without isolation.*” (ibid., 30, emphasis added)

While Augé’s account of metro travel concentrates on the human experience of being-together-apart in the city, Bruno Latour (1993) has developed his seminal “ethnography of a ‘high-tech’

⁷ In the broader scope of Augé’s writing, the ticket to the metro can be seen as a first entry into a *non-lieu* (Augé 2015; Conley 2002, 108), that is, a “non-place” where the transient passenger remains anonymous and which dies nor even jold enough history or identity to be regarded as place (more widely known examples for non-lieux are the shopping mall, or the waiting rooms of airport). Such observation also points to the irresolvable contradiction between individuum and community, between interpersonal closeness and anonymity have been a recurrent theme in urban theory ever since Georg Simmel’s (1903, 26) observation that “One nowhere feels as lonely and lost as in the metropolitan crowd.”

case” as a study that sets the material object itself – in his case the futuristic driverless train system ARAMIS (1996) – center stage. The goal behind his half detective story, half sociological treatise, Latour reveals, is to convince researchers from the humanities that the technological objects populating their daily lifeworlds were “cultural objects” worthy to be studied.⁸ In spite of remaining critical with the style of Latours grand gesture of *Reassembling the Social* (2005, 14) not in a society, “but a collective”, the present research has however been strongly influenced by this definition of collectivity, as “woven together out of speaking subjects, perhaps, but subjects to which poor objects, our inferior brothers, are attached at all points”, and his related earlier argument that by including also nonhuman actors into the definition of collectivity “the social bond would become less mysterious” (1996, VIII).

Such a conceptualization of collectivity, in my view, does more justice to the volatile formations of urban collectivities of people and things which can be observed in the context of urban protests “from the South” during the past decade. In an attempt to provide some answers to the question marks left by these movements, *part one* explores the local tramway-conflict of Santa Teresa as a case for the emergence of uncommon constellations of actors, their becoming-operable and their persistence despite contradictory claims. In line with a tradition of works in urban studies that have experimented with a “Deleuzian” approach to the city, the chapters in part one depart from the assumption that “what we know as the city today – the flows of bodies, forces and matter” affords a theorizing of the urban that “challenge[s] the very notion of form or identity” (Frichot, Gabrielsson, and Metzger 2016, 1).

In this way, part one also resonates with recent contributions to non-representational theory in human geography that foregrounds cities’ “associative ability”, arguing that they generate provisional, loosely configured groupings of residents, materiality, technologies, practices, imaginaries, feelings, et cetera (Anderson and Harrison 2010; Bissell 2019; Dirksmeier and

⁸ Only two years after publishing ARAMIS, Latour has engaged, together with photographer Emilie Hermant, in an online-book project (Hermant and Latour 1998), which does more explicitly deal with “the city” – or rather, the question how to approach the city of Paris through a combination of multi-medial sources that prompt the visitor of the website to “suspend the zoom, multiply the connections between the different views of Paris, with- out making them commensurable too quickly” (Latour 2012, 93) – to make a strong case for the “non-representability” of “the city” as a whole, remarkably “represented” on the website of paris by what resembles a stylized metro map (Latour 1998).

Helbrecht 2010; Simpson 2017; Thrift 2008; Wilson 2017). Research that follows along these lines explores different ways of assembling and connecting human and nonhuman, material and immaterial elements whose collective agency brings about particular enactments of the city (Färber 2014a, 2014b; Fariás 2010). What differentiates these collectivities from a stream of pedestrians or passengers is exactly their becoming-operable, or their modes of agencement, to speak with both Deleuzian and ANT-inspired approaches (Law 2008). Other than classical sociological conceptions of community – ranging from the German Ferdinand Tönnies, Max Weber and Georg Simmel to Chicago School founders such as Robert Ezra Park – these newer approaches in cultural urban studies do not take collectivities as aggregates of intentionally acting individuals with shared norms and values. Instead, their “becoming-operable” can be rooted in rather latent experiences of togetherness or in the mutual affection of bodies of all kinds.

Following such recent considerations on “form” and “identity” in urban studies, part one of this work is framed around *formations* of collectivity. Turning back to the case of Brazil, and to the ways in which urban protests in the Global South provoke new questions on what holds together the city more generally, it seems quite fitting what Deleuze’s partner in writing, Félix Guattari, has stated on the occasion of a meeting with Brazilian activists in São Paulo in 1982:

It can’t be said that I am predicting a linear evolution toward a new kind of revolution. But it is not starry-eyed optimism to believe that substantial historical upheavals are on the agenda for the coming years. This further increases the urgency of the need to create new instruments of struggle, new types of conceptual references to understand the evolution of these unaccustomed situations. One of the characteristics of the crisis we are experiencing is that *it is not situated only on the level of explicit social relations but also involves formations of the unconscious* [...] that utterly escape the traditional academic explanations – whether they be sociological, Marxist, or otherwise. (Rolnik and Guattari 2007 [1982], 267, emphasis added)

Re-reading this statement after the Brazilian mass protests of 2013, Guattari’s basic argument that traditional Marxist and other theories of social movements might have reached their limits in explaining these new kinds of urban collectivity gain a renewed actuality. Following from what I have argued above, his statement could as well be read as an answer to analysts of the recent South American fare-protests like David Harvey and Manuel Castells. In particular when proposing a search for new academic concepts of relation that come to involve also ephemeral, non-actualized or “unconscious” *formations* – where the latter, for him, “have to do with basic questions such as the future of movements for social transformation” (ibid., 294).

Here, an approach that provides the basis for much of Guattari's and Deleuze's theoretical language, namely that new concepts need to be connected to the new instruments of a struggle, can be translated also to the present case study. The decision to take the local tramway-struggle as a case for further interrogating and challenging existing conceptualizations of collectivity in part one in this way is motivated also by the observation that in Brazil, public transport after 2013 has been claimed with renewed emphasis *as collective*. While the term *coletivo* [collective] had been used only sporadically to refer to "public transport" [transporte coletivo] in urban everyday language prior to 2013, the free fare movement of that year led to a rediscovery of the term amongst urban activists and scholars (Vainer et al. 2013; Maricato 2017; Peschanski 2013).

Building on this observation, CHAPTER ONE explores the formation of collectivity through the continuous *reassembling* of residents and urban materiality around the tramway of Santa Teresa. This way using a Latourian theoretical language, and also departing from an almost classical case of "infrastructural breakdown" as discussed in ANT and STS approaches to the urban (Graham and Marvin 2001; Larkin 2013; Star 1999), the first part of this chapter explores how an absent tramway has become a matter of protest, and how it has generated experiences of togetherness between all kinds of people and things after the accident and subsequent suspension of the system in 2011. However, the "mapping exercise" related to this approach – that is, the tracing and tracking of the human and material actors that have articulated their connection to the tramway by way of protest, or because they have turned "visible" as a result of the breakdown – is complicated throughout the chapter by exploring how the commemoration of the tramways' "absence" continued even after its official re-inauguration in 2015.

Hence, in addition to following the swift formations of collectivity over specific events, and to disentangling the changing actors and claims that have emerged in the course of seven years "without tramway", in the second part of this chapter, I also look at how agency has been (re-)distributed amongst these actors after the return of the tramway. Here, I concentrate on the literal break-up of the street, and the subsequent *piling up* (Simone 2010, 4) of infrastructural elements during reinstallation, in order to examine how this process has directed and imposed limits to the agency of all sorts of individual and institutional actors.

Inspired by work on "rubble" and "ruins", in the third part of this chapter, I further explore the power of *presence and absence*, that is, how the physically absent tramway could be felt into being throughout the first half of the protests, and how despite its comeback, protesters have enacted its

absence. Similar to what I have been arguing above (with Guattari), such formations point to forces beyond subjective experience, as theorized also in more recent approaches to affect or material agency, which will be tested for their analytical value throughout the chapter.

CHAPTER TWO continues along the lines of combining inquiries into the material *and* the immaterial forces of urban infrastructures for assembling collectivity. Coming back to what I have described above as the cultural legacy of tramways, that is, the ways in which past relations to this particular transport type resurface in urban imaginaries and everyday formations of contemporary cities, this chapter engages in a “historical dimensioning” (Färber 2017) of the protest collective described in chapter one. The aim of this chapter is to contribute to the further development of a temporal perspective on the formation of urban collectivity as entailed in Färber’s (Färber 2019) notion of *promissory assemblage*. By replacing “promissory” with “premissory”, I set the conditions for speculating on whether some of the expectations of the city that attach residents to the tramway today have popped up, sometimes in contradictory manner, throughout the 120-year history of the tram.

The hypothesis guiding the first part of chapter two, accordingly, is that some of the promises of the bonde today, associated with urban regeneration and progress can be retraced to the becomings of a *Marvelous City*. Here, I explore the cultural legacy of Rio’s first tramways by looking into how their installation at the turn of the twentieth century has been entangled with specific (Eurocentric) imaginaries of “hygienization”, “urbanization” and “embellishment” of the time. Drawing from conceptualizations of “promissory notes” as developed in urban anthropology (Abram and Weszkalnys 2013a; Frehse 2017), I analyze how specific documents and artifacts intended to promote the new tramlines have generated new formations of collectivity, but also how they have regularly clashed with local “rules” for tramway riding.

In the second part of this chapter, I draw from newspaper reports of riots and tramway-related protests to explore how the ways in which residents have carried out conflicts with the state by attacking specific material instances of urban infrastructure has also generated new urban imaginaries and practices. Here, I introduce the trope of *the Divided City*, which resonates in the figurations of asphalt and hilltop in Santa Teresa until today. Adding to the hypothesis formulated for the first part of this chapter, I study how the bonds between residents and tramway have played out not only as promises, but also as threats. The early tramways’ role in generating new formations

of collectivity from the swift transitions between promise and threat studied throughout this chapter also sets the scene for a deeper analysis of “bonding” in the second part.

“No one let go of anyone’s hand”: Bonding as mode of un/relating

Drawing from the example of the mass protests against public transport fare increases that have emerged in urban South America throughout the past decade, I have so far explained my interest in new formations of collectivity from an observation of their fluidity and ephemerality. From a theoretical standpoint, I have also suggested that a re-thinking of urban collectivity along these lines needs to account for the temporary experiences of togetherness and the interlocking material and immaterial infrastructures that organize ordinary citylife. What the fare-protests show, I have argued, is how despite their heterogeneity (the fact that they cannot rely on fixed interests around class, race, or gender), they bring about new forms of relatedness that are characterized by fragility and temporariness as much as by endurance and potentiality. In other words, it is because these new forms cannot be captured through representational theories that they confront us with the necessity to develop new concepts.

Similar to how I have explained my choice of the term “collectivity” partly from the observation that after the fare-protests in Brazil, public transport has been claimed *as* collective, my interest in developing new conceptualizations of *un/relating* is also connected to the new instruments of struggle currently under development in Brazil. Take the meme of two hands holding each other that has turned viral after the election of right-wing president Jair Bolsonaro in October 2018. On top of the drawing that many in Brazil and beyond have been sharing on social media, somebody had written a quote from dictatorship-times: “ninguém solta a mão de ninguém” – nobody let go of anyone’s hand (Nassif 2018). My guess would be that the illustration turned viral because it captured the spirit of the moment, marked by a collective feeling of uncertainty with a future that had turned now inevitable, but also by the emergence of new alliances. And beyond this, for me, the meme also exemplifies how the emergence of actor constellations with very different socioeconomic backgrounds, political convictions, and territorial belongings throughout the past years in Brazil and beyond has been influenced by their *modes of un/relating*.

Adding to this empirical interest lies the more abstract impression that as much as current theoretical accounts of such new urban collectivities – like actor-networks, assemblages, affects, or

infrastructures – are based on concepts of relation and connection, they only briefly expound the actual making and quality of such relations.⁹ However, as one of the influential figures for thinking such collectivities reminds us:

It is not the elements or the sets which define the multiplicity. What defines it is the AND, as something which has its place between the elements or between the sets. AND, AND, AND – stammering. (Deleuze 2007, 34)

I have introduced the notion of bonding above as conceptual proposition for capturing a process of un/relating that does not depart from shared identities or fixed political claims, but from residents' attachments to each other *through* specific instances of urban matter. *Bonding* this way also rephrases the main hypothesis guiding my case study, namely, that there is a particular quality to the relations between residents and bonde in Santa Teresa that has allowed for them to uphold the fragile balances of a majority district. This quality can range from loose to tight, from strong to weak, from lasting to temporal, etc. but the important thing is, it influences the actors and the formations of urban collectivity that emerge from these in-betweens.

In CHAPTER THREE, accordingly, I take the notion of *material resistance* to explore how political formations of collectivity in Santa Teresa have emerged not from shared ideologies or preexisting interests, but from a set of ambivalent attachments of residents to the tramway. In the first part of this chapter, I study how residents' strong affective relations to the tram's footboard have stabilized a protest collective over joyful and embodied memories of tramway riding. The *micropolitical* dimension (Bissell 2016; 2018; Merriman 2019) of this relation is further explored in the second part of this chapter, where I take filmed accounts of footboard-riding, together with graffiti writings and technical drawings as starting point to address the question which processes happen between people and materiality that might explain the transition from something *affording* (Hutchby 2001) a certain praxis, towards this relation bringing about a political formation of collectivity, and generating shared claims for free-riding and alternative ways of organizing access to the city. In the third part, I argue that the affective quality of residents' relation to the tramway

⁹ I owe this theoretical conviction as well as my general interest in “modes of/unrelating“ in the second part of this work to the many discussions at the Graduate School “Loose Connections: Collectivity in digital and urban space“ (based at the University of Hamburg, 2015-2018) of which I have been part of, and in particular the annual conference we have been organizing in January 2017 around this theme (Graduate School “Loose Connections: Collectivity in digital and urban space” 2017).

has turned “cruel” (Berlant 2011a) after its return, because they have held on to it too fast, and at the cost of losing its potential to subvert dominant modes of organizing access to the city. In other words, I explore how “tight” relations to urban matter can give rise not only to revolutionary, but also to conservative formations of collectivity.

CHAPTER FOUR introduces the notion of promise as another conceptual offer for sounding out the question what happens when “virtual” connections collapse into infrastructural materialization. Here, I draw from an understanding of affective bonds as “promises” (Ahmed 2010; Berlant 2007) a notion which also points to how the in-betweens of people and things often reach beyond the conscious, and how the resultant collective formations can be ephemeral, non-actualized, and elusive (Abram and Weszkalnys 2013a). The “virtual” quality of connections, here, designates the potentiality of affective relations, that is, urban matters’ ability to convey an indication of future events – to have “promissory” properties. Throughout the first part of this chapter, I frame specific instances of urban matter as *promissory things*, with the goal to look closer into their capacity to exceeded human speech acts. Drawing from the example of stop signs and schedules, I analyze how these have come to replace the originally outspoken promise of *bonde-comeback*, and how such “infrastructural materialization” of the tramway has spanned new, *elastic bonds* between local authorities, residents, and urban matter through both temporal and spatio-affective dynamics of openness and deferral, speculation, and anticipation. Ultimately, even though I will explore how promissory things also help further interrogate the spatialization of affect through “drawing the city near” (Simone 2014), the second part of the chapter also explores how through various “mismatches”, the relations between residents and the material elements of the *bonde* infrastructure are loosened again, leading to different degrees of proximity and alienation.

In CHAPTER FIVE, I further explore the quality of looseness, through the swift transitions from urban promises to threats. Departing from the assumption that urban collectivities might indeed rely on *loose bonds* (cf. Stäheli 2018), this chapters follows anthropological debates (Candea, Yarrow, et al. 2015; Strathern 1996) that understand these and similar modes of un/relating as prerequisites for establishing connections. From the example of asphalt, in the first part of the chapter I study how a particular enactment of repulsion towards the viscous substance has allowed for the *strategic detachment* of residents from tramway matters. In the second part of the chapter, I draw from observations of local protests against the cockroach-cum-private-transport-operator of the neighborhood to explore how residents have managed to *pass on* the promises of affordable and

equal access to the city from the tramway to the local busses. Passing on the promise as a way of loosening bonds is then further examined in the third part of chapter five, where I look at the ways in which residents have upheld such “looseness” by employing specific modes of care, maintenance and repair. From my go-alongs with informants as diverse as tramway drivers and the “mothers of Santa Teresa”, I present evidence on practices such as counting potholes and scavenging plugs and pieces, to contribute to recent discussion on role of care and repair for modulating spatio-affective relations of proximity and distance, of attachment and detachment (Martínez and Laviolette 2019; Mol, Moser, and Pols 2010; Tironi and Rodríguez-Giralt 2017).

And how have I approached these questions methodologically? Before getting started with the five chapters of part one and two, the next section provides an *introduction to my fieldwork, the course of my research, and the methods* I have applied for this study.

Afraid of Things

Boarding the bonde affords overcoming several challenges. The tramway of Santa Teresa belongs to the small number of vehicles around the world that have survived the advent of low-floor technology in the 1970s. What these historical models have in common is that their carriages are considerably higher than curb or station platform. Hence, to enter the tramway passengers need to either use a footboard, a built-in staircase, a side handle, or to otherwise overcome the distance between street level and vehicle interior. In some cases, they might stay directly outside on the footboard to avoid fares or to risk adventure. Exposure,¹⁰ however, is an experience common to all tramway passengers. Since tramways usually share the street space with other traffic participants and since the vehicles are less “fenced off” than other (closed) transport systems like metros, they are particularly prone to collide with cars, busses, bicycles, or pedestrians. Inside the vehicles, bodies need to constantly outbalance the swaying and shaking specific to this particular mode of (rail) transport. Likewise, tramway noise is also often perceived more intensely than, for instance, the rattle of a busses’ interior trim, or the muffled sound of steel rails inside the thicker walls of a metro wagon.

In this chapter, I argue that tramway researchers confront challenges similar to those experienced by tramway passengers. Throughout *fieldwork*, I have been exposed to the bonde of Santa Teresa in many ways – and frequently this has not been a voluntary experience. As I will explain further below, some of the affective methodologies¹¹ I have employed for my study in order to get hold of the unconscious, embodied, and sensory dimensions of residents’ relations to the tramway made me expose myself to the bonde in a more deliberate, sometimes playful, sometimes joyful way. More often, however, exposure has taken me by surprise.

Similar to the passengers boarding a tram, I have been warned of the gap between the vehicle and “the street” – where the latter stood for everything I was familiar with, or at least confident with as a researcher. I had been doing “street” studies before; I had written my master’s thesis about the renovation of my Berlin home street (Kemmer and Bergmann 2014); and I had worked for a United Nations Habitat project in Rio in the era of “streets as public spaces”-enthusiast Joan Clos (UN-Habitat 2013). When it became more apparent that this time, my research would not be

¹⁰ As I have argued elsewhere, an understanding of public transport as public space affords exploring not only themes such as integration and conviviality, but also to look into experiences of exposure (Kemmer, Sgibnev, Weicker and Woods forthcoming, cf. also Simone 2019). Researchers have dealt with the theme of exposure in (all means of) transport mostly related to commuting/exhaustion, health/pollution issues, and to experiences of violence, inequality, and discrimination (Boterman and Musterd 2016; Jungnickel and Aldred 2014; Nikolaeva et al. 2017; Straughan, Bissell, and Gorman-Murray 2020).

¹¹ For further reflections on the “affective methodologies” employed for this study, cf. sections “from interviews to go- and ride-alongs” and “video-based ethnography” below.

about the main street of my Rio neighborhood, but about the tramway that for centuries had passed through it, I was eagerly cautioned by others about the methodological challenges this implied. I remember attending my first STS conferences, and how well-meaning colleagues explained to me that the study of technology afforded methods quite different from those I had been trained in from my Social Sciences background. You cannot interview a tram. And how to organize a participant observation of what seemed like “a love bond” (cf. Latour 1996, 5) between humans and technology; between residents, drivers, engineers and a particular way of conceiving a chassis, the hydraulics of a break system, the axle box suspension?

Latour’s study on ARAMIS was recommended to me as obligatory reading if I wanted to avoid falling into the “anthropocentric trap”.¹² The Epilogue of this almost standard reference in technology research left a heavy burden on me: “I myself am an outsider in the world of guided transportation, and I too have been susceptible to the contagion”, writes Latour in retrospective about his case of railway ethnography, “I don’t mind telling you all that I really loved it [ARAMIS, the driverless train]” (ibid., 291). To me, this made it very apparent how I was supposed to become attached to the tramway throughout research; about how I was to become infected by at least the feelings that “insiders” had for my research object. The more I have been learning about “the love of technology” however, the more I became afraid of the nonhuman “things” that populated my case.

In his 1981 seminal essay “Die Angst des Forschers [der Forscher*in] vor dem Feld” [The Researcher’s Fear of the Field], Rolf Lindner explores the methodological implications of the anxieties that are experienced by the ethnographer during her first encounters with the field. Agitation, accelerated heartbeat, hesitation, walking another round around the block, insecurity, postponing appointments – all these are expressions of a particular type of “fear”, caused by that what Lindner describes as “symmetry between observer and observed” (Lindner 1981, 54). The relevance of this assertion for the field of European Ethnology lies in the fact that it does not understate or obfuscate the anxieties of the researcher, but that instead it calls for methodological reflections on what it means to consider that upon entering the field, the researcher is as much

¹² For more reflections on how to deal with anthropocentrism, cf. section “on thing following” below.

exposed to her research participants as they are to her (Hess and Schwertl 2013, 15; Kaschuba 2012, 130).

The kind of exposure that Lindner describes could be translated as the experience of “being at the mercy [Ausgeliefertsein] of strangers” (Warneken and Wittel 1997, 2), that is, feeling subjected to a group of people who in many cases might have already formed an opinion about the researcher long before she can construct her role in the field or make her research activities “plausible” to them (Lindner 1981, 52). This type of exposure comes with the fear that her research participants, because of her different cultural background, social status, or due to other, less discernible factors that have caused antipathy, will not accept the researcher. What if due to these factors she will not be granted “entry into” the field? What if her academic curiosity is misunderstood as a form of spying (ibid.)? Ethnographers, one can get the impression from textbook introductions to the discipline, live with the constant fear that their role as “partner” or “sympathizer” in the field will be exposed (in the sense of uncovered) as false pretense and be punished by mistrust, by withholding information, et cetera (Kaschuba 2012, 206).

While in Lindner, exposure is connected to the researcher’s fear of being uncovered as “egghead” or “know-it-all” (Lindner 1981, 59), others have pointed out how ethnographers might as well feel “intellectually inferior” to their research participants. This “New Fear of the Field” (Warneken and Wittel 1997) has been explored in particular for the field of company research, but with important insights on the implications of the related rationalization and displacement processes for ethnographic knowledge production. Even though in my case, research participants belonged to all kinds of status groups – from transport minister to street vendor – the kind of exposure I have experienced during fieldwork has been mostly related to a feeling of inferiority as described above. Because one thing that all people I met throughout fieldwork had in common was that, with difference to me, they were all “tramway experts”.¹³

The researcher’s fear of the field, I argue in the following, does not only depend on her interaction with human research participants. Rather, the anxieties experienced when confronted with one’s own role in the field can be significantly influenced by all kinds of material devices, technologies, even plants or animals (DeMello 2012; Gibson and Venkateswar 2015; Rankin 2011).

¹³ For a more detailed introduction of the term “tramway expert” and how it has been employed by my research participants, please cf. chapter five.

This introduction to my research methodology, accordingly, builds on a systematic reflection of what it means to be *Afraid of Things*. In my case, the fears not to be accepted, to be mistrusted, or not to be granted entry into the field altogether were all connected to the *bonde*. What if I would be uncovered as ignorant of tramway technology? And what if people found out about my missing love for the *bonde*? Exposure to the field, in my case, was mediated through the tramway.



Figure 1: “Exposição”

The picture above well captures how I have felt exposed *to* the field *through* the *bonde*. Similar to what Lindner and others have described as the challenges arising from the researchers’ fears of her *human* participants views on her, I can recall the mixed feelings I had when posing behind the yellow tramway statue during the first days of my fieldwork in 2015. My diary of that night describes the short scene on my way back home, ending with the words

[f]ortunately it was late, so hopefully nobody has seen me posing behind the *bonde* like a tourist. But I also had to do this, like doing something forbidden this was also exciting, it felt like a sacrilege almost to slip into the role of *bonde*-lover. (fieldnotes 03/09/2015)

Exposing oneself to the field, taking the risk of “going native” (becoming a tramway-enthusiast), and, simultaneously, the risk of being uncovered as ignorant outsider (i.e. “tourist”) to the field, is an essential part of ethnographic research praxis. As Lindner and others have shown, the almost classical “balancing” of positions between closeness and distance during fieldwork should not be seen as merely challenges to be overcome, but also as opportunity for adding transparency and reflexivity both during the process of data gathering and at the later stages of analysis and writing up (Kaschuba 2012, 130; Lindner 1981, 64). In my case, such “balancing” was connected to the “fear” not so much directly “of tramway experts”, but rather of the foundations of that expertise

(namely the my research participants' close, intimate connections to and long involvement with the bonde), which I was afraid not to be able to “catch up” or that would hide important technical details or insights on the quality of relations within this particular formation of collectivity from me. Consequently, in the remainder of this chapter, I will detail on how my fear of the bonde, the constant shifts between wanting to be taken seriously as a tramway researcher by my research participants, and not to be seen “only as a tramway researcher” by the scientific community, has significantly altered the course of my fieldwork (section two) and the methods applied for this study (section three).

According to schedule? Multi-sited ethnography and the value of deviation

In light of the researchers' “fear of the field”, I have argued, the question about the actual course of the research process becomes essentially a question about the mutual dynamic of exposure between the ethnographer and her (human and nonhuman) research participants. These kinds of interaction, according to Lindner (1981, 54), find their expression in the researchers' being afraid of the view that others might have of her. Since such dynamic is particularly palpable during the early stages of field access (Mohr and Lindner 2017, 67), the following presents a reflection on some of the differences and difficulties I have experienced along the process of making contact with the residents of Santa Teresa, and, through them, with the bonde.

Long before I could establish a role as a researcher, or even a tram-researcher, in the neighborhood, most residents knew me from my position at the front door of the “Espirito Santa”. The name of this establishment is a play of words. In allusion to the “Holy Ghost” [*Espirito Santo*], the spirit of Santa Teresa is invoked here. Located in the busiest area of the stretched hilltop main street, the Espirito Santa serves all things that the neighborhood is famous for. Good food, a little exotic, not too pricy, local live DJs for the Sunday lunchtime visitors from the richer parts of the city, folklore mixed with funk, a touch of bohème, doors wide open to the street, views to the backyard jungle, the interior of the place stuffed with artificial flowers, golden Buddhas, Candomblé goddesses, yellow miniature tramways.

I took my position at the door of this restaurant in September 2014, just a few weeks after my internship with the UN-Habitat, and with that, my scholarship had ended. I badly needed a job. My housemate, also working as a waiter in the Espirito Santa recommended me to the manager,

and when she learned I spoke some languages I was engaged for “translating the menu”. Literally, this meant standing at the front door getting bored. I had been working as a waitress before. “It’s such a thrill when things run smoothly”, Emma Dowling (2012, 110) writes in her both sensitive and sensible research article on affective labor and affective methodologies entitled *The Waitress*. And it’s so unbearably boring when nothing happens in that job (ibid., 114). Frustration, hurting feet, moments that do not seem to ever pass, I can recall all of these feelings I had while standing there scanning the street for potential clients during endless afternoons.

As methodological reflections on affect have pointed out, boredom is not simply an expression of dullness, or disinterest, but it also makes the body register all kinds of intensities that continue to rush through it while time slows down, thus pointing us to the tensions expressed through, for instance, a sigh or a yawn (Anderson 2004; Bissell and Fuller 2011). It is this way that the researcher can use her body bored, to detect some of the atmosphere of a place, to pay attention to the feelings that circulate within it, to *unconscious formations and ways of relating* that are not immediately apparent in what is being said or done. “This is what it means to attune to how the body feels and what analytical connections it makes as it does so”, Dowling (2012, 114) writes about how she has been using her embodied memories to offer an account also of the relations of power and capital that *The Waitress* reveals.

It would stretch the argument too far to draw systematic conclusions on the composition of collectivities in Santa Teresa from my already faint memories of working at the Espirito Santa. The first systematic notes I have taken from fieldwork date back to August 2015 – to seven months after I had ended my last shift at the restaurant (cf. table 1 below). What I have kept from that time, however, is a more diffuse feeling, best described as intense awareness of that what Lindner (above) describes as the image that the researcher fears others in the field might have of her. I still carry with me a small box full of memories from my waitress-job, including a collection of print-out bills, on whose back I have scribbled new words in Brazilian slang and some other things I have learned from my colleagues and the frequent passers-by. “*A bessa* [actually *beça*]”, one note says, “a lot”. “*Loira* – blonde”. “All strangers are *gringos* in Brazil”,¹⁴ I have written on another

¹⁴ I knew the term “gringo” from Mexico, where it is used exclusively (and pejoratively) for US-Americans. In Rio, I noted somehow sarcastically, not only US-Americans but also everybody else who is not Brazilian citizen (sometimes even people from other cities or regions of Brazil) is called “gringo”.

paper. But through these notes, I also have learned that I was *gringa loirinha*, the only white waitress of the Espirito Santa.

Then how would my later research participants recall me from those days? As a stranger, as one of the many European self-proclaimed “expats” that came to invade the picturesque decaying mansions of the neighborhood from time to time? But a failed expat, maybe, now rather belonging to the hippie-kind of *gringo* that also populated the neighborhood during the Football World Cup (2014) era? Because after six months of daily walking down the hill to the bus station in *ropa formal* [business outfit], definitely a sign of making at least middle income in some of the downtown offices, I was now standing at the restaurant door earning an equivalent of three Dollars per hour? Some of my fears of being uncovered as pretending false sympathy for the residents’ cause (and their love for the *bonde*) originate here. However, as I have also argued above, exposure works both ways. And similar to how Dowling describes her waitress’ memories flashing up most clearly at moments which make her recall vulnerability vis-à-vis the guests (2012, fn. 16), but also their being-at-the-mercy of her goodwill (ibid., 111), I also have relived some of the affective states of *both* being exposed and of exposing myself willfully during research through my embodied memories of how it felt being looked at, talked to, touched by people at the Espirito Santa.

This doubleness of sense, best captured in Stacy Alaimo’s (2016, 5) observation that “practicing exposure is to grapple with the particular entanglements of vulnerability and complicity“, has since accompanied me through fieldwork. In Santa Teresa, I have learned a new dimension of what it means not to rely on (self-)perceptions of isolated and bounded beings, but that the very boundaries of our bodies expose us to others in ways that can be voluntary and involuntary at the same time. What Dowling so well described about the waitress, whose body is never fully her own, always conditioned by desire, receptivity, and all those modes of address and addressability, I have also learned to play with from my job at Espirito Santa. I have skipped my habit of looking down when walking up and down the street during fieldwork, I have learned to always make eye contact and to greet correctly, “bom dia” before noon, “boa tarde” as soon as it’s five minutes past twelve. It is also important to remember people’s name in Santa Teresa. I have noted this many times, once you have been asked your name in even the most random conversation, the other person will also expect you to say hers next time you meet. Those are things that are important in waitressing, too; call regular guests by their name, create familiarity, make eye contact. From my job at the restaurant door, I had not only pre-acquired the role of *gringa loirinha*, but also had

(unconsciously) trained myself in this kind of exposure (as form of interaction). The same way my later research participants had already formed some kind of image of me long before I could present myself as “researcher”, I also had gained some awareness of how it felt to be exposed in Santa Teresa. Vulnerability and complicity have been strong feelings I experienced during waitressing, to be exposed to guests’ and colleagues’ judgement of my looks, my way of speaking, etc., but also to make somebody feel you do them a special favor, that they depend on your skills of translating for them, of making their choices easier. During fieldwork I often had the feeling of slipping back into this role. Both positively, when becoming complicit for a short moment with somebody I greeted by their name and who would let me know in return about which street people were avoiding currently because some thugs had been spotted there on a scooter. And negatively, when I felt I would draw more attention to me than I could stand, because of the way I move, look, speak differently than many people in Santa Teresa.

During the first months at the restaurant door, however, this way of exposure first and foremost made it easier for me to enter into conversation with all kinds of people. This is how I became a *tramspotter*. Because I was bored. Because my colleagues liked slipping out of the restaurant to linger at my side for a while, enjoying the fresh air. Because random passers-by and routine street walkers would start to stop by for a brief chat. Mostly, I asked them questions about what was right in front of our eyes: The main street of Santa Teresa. I got no big response. Most of my colleagues used to walk up this street after their shift to get home, many of them living in one the neighborhoods’ favelas that can be reached through steep staircases branching off from the main street. However, there seemed to be no stories to be told about this particular street. Also when I started interrogating some of the passers-by, street vendor Lela, artisan Paulo, DJ ZOD – many of the people who later became my research participants¹⁵ – had no secrets to reveal about the main street. Yet there were things “in front of our eyes and still hidden from me”, I noted on the back of a restaurant bill on an October afternoon in 2014. “Bonde”, I had written underneath, just this, as if to remember the new word.

In a way, my position at the door of the Espirito Santa has helped me ease the “gap” I have described above between street and vehicle. Because the tramway was not there, and because it was

¹⁵ For a detailed introduction of the core group of my research participants, see section further below on “Interviews”.

still doubtful whether it would ever return, I could stay with the street stories of the bonde, of how it had been a “mobile meeting place”, and what it meant to be missing for street life in Santa Teresa. This seemed like a “softer” methodological entry to a study of technology, or even the “love” of technology. “Maybe I won’t write about the bonde at all”, says one of the first entries in my fieldnotes (10/08/2015), in a hopeful tone. My fear that academic peers would (not) take me (seriously) as a tramway researcher, or worse, a tramway enthusiast,¹⁶ was strong. The first exposé I have been writing for my PhD is marked by the desire to speak to things “bigger” than the bonde. Here, I propose to use assemblage approaches in urban studies as methodological tool for examining the interrelations of everyday experiences in Santa Teresa and the globally circulating “urban age discourse” (Brenner and Schmid 2015) of that time. The bonde, in this version of my exposé, is presented as merely a vehicle for finding out more about the historical dimensions of street renewal in Rio, maybe even its contested nature (tramway protests), but I not about *how* the vehicle itself had actually driven people to the streets.

However, as much as my access to the field through the doors of the Espirito Santa did not exactly unfold as an ideal-type research, my very plans to engage with an “absent bonde” soon also proved to be subject to *deviation*. Linear trajectories of fieldwork *according to schedule* have been questioned in contributions to social and cultural anthropology ever since it became apparent throughout the 1990s that in light of globalization processes, and the increasing mobility of the research subjects, a “static” study of local communities was no longer tenable (Appadurai and Breckenridge 1989; Welz 1998).

In line with this critique, George Marcus (1995) has developed his “multi-sited” approach to ethnography. Contradicting the trajectories of stationary, single-site ethnographies, Marcus introduced a methodological logic of “tracing and tracking” (ibid., 106-110), that is, a literal following of people, things, signs, symbols, stories, and conflicts. In this sense, the trajectory of research becomes a trajectory of deviations, because it is “designed around chains, paths, threads, conjunctions, or juxtapositions of locations [...] with an explicit, posited logic of association or connection among sites that in fact defines the argument of the ethnography” (ibid., 105). Such a

¹⁶ A combination that seemed sometimes inseparably entwined, not only in Bruno Latour (“I don’t mind telling you all that I really loved it” (1996, 291)), but in many transport researchers I have met in the years to follow.

research design should however not be misunderstood as “placeless”. In Marcus’ multi-sited approach, the basic principles of ethnography are kept, including the bodily presence of the researcher in the field and her engagement with everyday life through participant observation (Welz 1998). What is new, however, is the temporal organization of the research, which does no longer follow the classical design of a continuous long-term ethnography, but which involves a series of “sequential” (Welz 2013, 48) research stays of differing length, adapted to the dispersity and deterritorialization of the “field”.

It is in this sense of “multi-sited ethnography” that the course of my research did not follow a strict schedule. Rather, I have organized my stays in the field around a series of deviations which in one way or another have been caused by the tramway itself. Between my first arrival to Santa Teresa in March 2014 and my last research stay in 2019, I have spent a total of two and a half years in Brazil (cf. table 1 below).

Of these, the first ten months could best be described as “explorative” stay, since they involved first orientations in the field and the making of initial contact with both my later research participants and a nascent interest for the bonde. Prior to my waitressing job, I had also gained some overview of recent urbanist and infrastructural interventions in Rio de Janeiro from my work at the UN Habitat, also making contacts to local authorities which I could later re-activate as interview partners during fieldwork (see section on interviews below).

Seven months after I had left Santa Teresa as a waitress, in August 2015, I returned as a PhD student for a ten-months period of “official” fieldwork, that is, authorized and financed by the Graduate School “Loose Connections”, University of Hamburg (2015-2018). The first *deviation* I had to deal with during this research stay occurred shortly after my arrival. On July 27th, exactly one week before I landed in Rio de Janeiro airport, the bonde of Santa Teresa returned to the streets of the neighborhood – still without passengers though and circulating only on a short “test” track. Its comeback took me by surprise, since from my previous conversations with people in the neighborhood throughout 2014, I had become convinced that, despite the officially promised re-installation of the system, I would never see the tramway run through the neighborhood again during fieldwork. And there I was, other than beginning what was planned to become an ethnography of infrastructural breakdown, involving an “absent tramway”, one of the first events I attended for fieldwork was the re-inauguration of downtown station Carioca (chapter one). My

first encounter with the bonde occurred only a few days later,¹⁷ and from there on I collected evidence not only of the kinds of relations that had emerged around a “failed” infrastructure, but also of how formations of collectivity constantly reshuffled in Santa Teresa in reaction to the now-again physically present tramway.

This first deviation from the originally planned course of my research was followed by many more, and already during my first stay in 2015, all kinds of small breakdowns and temporary suspensions of the system, unannounced expansions of the test-track, and constant changes to the originally announced course of re-installation works would lead me to new interview partners, artifacts, and locations. In this sense, it was in some way just “another location” visit when I returned to Brazil in 2018 – this time to São Paulo. That the tramway had led me there would be too much of a “smooth” story, however. More honestly, I had again not planned to return to Brazil for bonde-research when I left Rio in 2016. Two years later, I had already written some chapters for my dissertation, but when I ran out of scholarship from my graduate school again, I did not feel like this project was ready to submit. My eight-months stay at the University of São Paulo in 2018 gained me another funding opportunity, but more importantly, profound insights into the historical dimension of my research in exchange with Prof. Fraya Frehse and throughout further archive visits and conversations in May and August with local tramway researchers in Rio (documented in chapters two and four). While the 2018 stay added more depth to my study of the bonde’s past, my last visit to Rio between January and June 2019 also allowed for a look into how the future transformations of the city might again be closely linked to tramway technology (cf. conclusion and outlook).

¹⁷ For a detailed description of this first encounter with the tramway, cf. section “On thing following” below.

Table 1: Research stays

PERIOD	TYPE	METHODS / MATERIAL
03/2014-01/2015	“Explorative” stay in Rio: 03/2014-09/2014 UN-Habitat, 09/2014-01/2015 waitress	informal conversations, unorganized “field” notes, first contacts to later informants and local authorities
08/2015-05/2016	Main phase of field research, 01/2016-02/2016: archival work	ethnographic observations, (video)-interviews, incl. go- and drive alongs, photography, expert interviews, archive work, participation in meetings and protests
01/2018-08/2018	Research stay at Universidade de São Paulo, incl. two research stays in Rio in 06/2018 and 08/2018	archive work, museums, conceptual work (Brazilian academic literature), interviews, ride- alongs
01/2019-06/2019	“Writing up” and explorative research stay (postdoc) in Rio	informal conversations, expert interviews (urban railway sector and competent authorities), site visits (light rail production and maintenance), ride-alongs (both bonde and Rio Light Rail)

During all this time, I have accompanied the “on” and “offs”, the function and failures of the bonde of Santa Teresa. I have been riding along newly inaugurated track sections, I have walked from one construction site hole to another; I have even participated in preparations of des-bonde, of residents dis-connection from the tramway (chapter five). I have followed the unsteady schedule of the tramway, one could say. The value of such kind of deviation, retrospectively, has been in the way it has allowed me access to the field. Instead of engaging with “technology research” straight away; instead of confronting my “fear of things” as a cold start, I was able to “access” my field study of technology in Santa Teresa through many doors. Not only through waitressing on the threshold to the main street, but also throughout my later research stays in Santa Teresa I have learned to shift research perspectives constantly; between technology research and mobile methods, street ethnography and archive work, the important thing was to remain reactive to the infrastructure’s on and offs, and to take a new path of research wherever needed.

The kind of being-in-movement that multi-sided ethnography affords, the sequential organization of research stays, and most importantly, the frequent changes of plans, places and conversation partners has allowed me to approach the field from very different and sometimes contradictory perspectives, as displayed in the chapters to follow. Despite the value I have found in such kind deviation, including the reflexivity it has allowed for in terms of dealing with the non-linear organization and the non-static course of research, I have however also encountered new challenges

that come alongside such research design. The following section is structured around a second kind of “gap”, this time not between research perspectives (street ethnography vs. technology research) but between the ideal of the methods I have applied throughout fieldwork, and the ways in which these have worked differently than expected.

Mind the gap: Between methodology and praxis

Understanding methodological rules as “rules of interaction” (Lindner 1981, 51) does not only afford reflexivity when it comes to the ethnographer’s access to the field (fear), or the course of her research (deviation), but also with regards to the concrete methods applied during fieldwork. In this section, I will detail on the “gap” between methodology and praxis, or, as Lindner puts it, the discrepancy between abstract rules of *how to do it* and the concrete experience of *what it’s like* (ibid.). What happens after fieldwork, Lindner argues, it that the researcher uses the methodology section (this chapter) of her work to reconcile her research practice with the methodological standards of her discipline. Ethnographers have developed all kinds of dealings with such discrepancy, and it has become a standard in the discipline to include a reflection on how everyday interactions in the field have developed “a kind of life of their own” and how they have prompted the researcher to “spontaneously” follow the “rules of her field” (Färber 2006, 105; Goffman 2005, 113).

A unique quality of ethnography, in other words, lies in its reflexivity towards research situations that do not unfold the way they are described in methodology textbooks. At closer look, even these methodological “how to do”-rules of the discipline are less uniform than it might seem. As Sabine Hess and Maria Schwertl (2013, 18) conclude from their genealogical overview of the field’s toolkit, the employment of a methods mix has become an essential element of contemporary research practice. This way, “being-in-field”, the “attention to detail”, techniques of participant observation and ethnographic interviews still account for the most relevant and distinctive methods of the discipline (Göttsch and Lehmann 2001; Windmüller, Binder, and Hengartner 2009), but they are increasingly combined with the toolkits of assemblage research, mobile ethnographies and affective methodologies (Büscher, Urry, and Witchger 2010; Hess and Schwertl 2013; Knudsen and Stage 2015; Rankin 2011). The present work defends such methodological pluralism, however, as I will detail in the following, different methods have assumed a more or less prominent role during data gathering and interpretation.

Participant observation

In line with what I have described as most distinctive methods of ethnography, this work also relies heavily on participant observations and ethnographic interviews. During the main phase of field research (table 1, cf. Schmidt-Lauber 2012, 565), between August 2015 and May 2016, I have regularly walked the streets of Santa Teresa, and my field diary from this time comprises ninety-three entries, which accrues to one entry every three days. Most of these notes however date back to the period between September and December 2015, where I have carried out participant observations on a quotidian basis. Fieldnotes feature prominently throughout my analysis also because I have been interested particularly in those aspects of everyday life that are difficult to access through verbalization. In other words, *my theoretical interest in unconscious formations of collectivity and in affective and micropolitical modes of un/relating between residents and urban matters* has drawn me towards a method that accounts for routines and unreflexive practices. This is precisely the goal of participant observation, that is, in the words of Stephan Hirschauer (2001, 437), to capture tacit practices, material settings, and performative actions.

The limits of this method are the limits of the “observable”. Such kinds of gaps between what researcher and research participants see, feel, and write down (and the gaps between these three dimensions) have been discussed at length in the field (cf. Petersen 2007). In my case, such gaps became particularly apparent in the context of what I have described above as experience of mutual exposure between researcher and field. Similar to what I argued about how the experience of waitressing has *attuned* me to things and people in Santa Teresa, ethnologists like Brigitta Schmidt-Lauber (2007, 234) and Regina Bendix (2006) have also defended a methodological approach where the researcher’s body becomes the main instrument for resonating (and for dissenting) with all kinds of unconscious formations in the field. *Through playing with and reflecting on experiences of voluntary and involuntary exposure*, of complicity and vulnerability, I have found ways of dealing with the flaws of participant observation. This is not to say that feelings like shame, disquietude, anxiety, aggression, and attraction have not influenced my research, and most clearly so in situations where I have stepped back or looked away from a specific situation or a particular person that I did not feel like interacting with. Some of these I have reflected on in the chapters to follow. Other such unconscious “drawbacks” I could confront by applying a very concrete tool when it came to fieldnote writing: Pretty early on, in April or May 2015, I have been advised by Alexa Färber to organize my diary in a way so that it would allow for three columns (cf. also Bøhling

2007; Ingold 2009). On the left hand, I would note straight away things I (had) observed¹⁸ during the day. In the middle column, I would add my own reflections, sensations, or further questions. A third column served to note new people and things I had met during the day. This way of organizing fieldnotes proved to be particularly helpful during fieldwork when it came to “stick to” a certain thing or person. Notably, the column where I listed people and things was not meant to become a help for enduring in fieldwork in the first place. Rather, I had intended to use this column to organize a “snow-ball” principle for both interviews and thing-following, as will be detailed further below. During fieldwork, however, this column has helped me persist in situations where a less documented and thus reflexive way of writing things down would have allowed me to forget, repress, or postpone uncomfortable appointments, people, things.

Affective methodologies

Endurance, in the sense described above, could also serve as metaphor for how I have experienced embodied research. Using my body as way of exposing myself to the field, on the one hand has allowed me to “stand through” uncomfortable situations while carrying out participant observation. And systematizing this way of exposure in fieldnote writing, on the other hand, has helped me “stay with” research participants or fieldwork situations that I might otherwise have avoided. Similar to how ethnologists have defended the body-as-instrument in participant observation, recent developments in affective methodologies have taken up the call to investigate new “forms of knowing as *embodiment*” (Law 2004, 3, emphasis added). Reminding of Stefan Hirschauer’s description of participant observation as method for capturing tacit practices, material settings, and performative actions, contributions to the latter strand of methodologies – often combined with explicit Deleuzian frames of reference – have expressed a key interest in exploring the flux and flows of the social (Coleman and Ringrose 2013; Lorimer 2013). This strong theory-driven interest is supplemented by a strand of research that has explicitly aimed at addressing affects’ ephemerality and ambivalence by emphasizing sensitivity, attunement, and experimentation (Blackman 2019; McCormack 2014; Stewart 2011).

¹⁸ Most of my fieldnotes have been written from memory in the evening after returning home, since as precaution in relation to the frequent assaults in the neighborhood during that time (2014-2016), I would carry with me as few things as possible, and only scribble a few key points on loose sheets of paper when on the street.

As helpful offer for bringing together the plurality of perspectives in the literature, Britta Timm Knudsen and Carsten Stage (2015, 1) define *Affective Methodologies* as both a “strategy for (1) asking research questions and formulating research agendas relating to affective processes [and] for (2) collecting or producing embodied data”. Such twofold strategy of dealing with affect is reflected also in the chapters of the present work:

(1) While the main question leading my research about “how new forms of urban collectivity emerge from the relations of residents and techno-material elements” already points into such direction, the following chapters will specify on how I have been approaching urban collectivity as emerging from shared affect and emotions (chapters one and two), that relate “bodily space with social space” (Ahmed 2004a, 119). This way, I have operationalized urban promises as “affective bonds”, and combined questions about the making and quality of the relations between residents and things in Santa Teresa with an investigation into joyful embodiments (chapter three), and spatio-affective experiences of attraction (chapter four) and repulsion (chapter five).

(2) In terms of data gathering, in chapter three, I combine questions about the micropolitical force of affective relations with a methodological approach that attempts to capture embodied memories of footboard-riding through *dance*. Ethnographic accounts of dance have recently been employed as a method for attuning the researcher’s body to “the forms and forces unfolding in scenes and encounters” (Stewart 2017, 192), and as a technique for developing her capacities to be affected by other bodies in the field (McCormack 2014, 74). As Linda Lapina has shown from her methodological reflections of a dance scene on a construction site in Copenhagen, such research practice (although in my case mediated by my research participants) can help account for “elsewheres” and “elsewhens” – an industrial production site, the evicted inhabitants, shiny new condominiums yet to be built (Lapina, forthcoming). Such a reflexive take on dance is valuable also for the present research, where I have been interested in how embodied, affective experiences allow for further conceptualizations of non-linear, multi-directional *temporalities*.

Video-based ethnography

While in Lapina’s study, the researcher herself becomes an instrument for sensing both “the seemingly past and the yet-to-arrive” (ibid.), my accounts of dance and other forms of embodied movement have been less direct, or, in other words, they have been mediated *through* the bodies of my research participants.

In chapter three, for instance, I follow the swinging and balancing of Dario and Paulo as way of re-membling and re-turning (Barad 2017) to their both joyful and grieving, micropolitical connections with the tramway's footboard. Here, *video-recordings* have helped me study and compare the movements and expressions of my research participants' bodies.

During the first two weeks of December 2015, I have gathered about twenty-three hours footage of my daily walks along the street, including seven ethnographic interviews with the help of filmmaker Amin Müller¹⁹ (fig. 2). More than reproducing the affective intensities that pulse through bodies and things in Santa Teresa, watching the videos retrospectively has helped me “amplify” sensations I had during fieldwork.

“After all, who hasn't experienced different sensations than they did on the field after playing back one's own footage?” asks Philip Vannini (2014, 234) in his writings on video-based ethnography, further arguing that the slippage between an actual event and its filmed accounts help capture the “non-representational”, or, the latent experiences of togetherness and the mutual affections of bodies of all kinds I have been writing about in relation to my research question above.



Figure 2: Video-recordings

¹⁹ For a more detailed account of how we have been filming cf. chapter three.

Mobile methods

It is in this sense that video-based ethnography has been connected to *mobile methods* in my research. Mobile methods do not claim to re-invent but rather to refine and adapt existing methodological traditions, that is, they have been designed to compensate “static” perspectives on empirical realities and thus to account for such things as transitory collectivities and ephemeral encounters (Büscher, Urry, and Witchger 2010; Merriman 2014). Among the broad range of methods deployed by mobilities scholars, the *go-along*, with its variations as *ride-along* and *go-along* features prominently in the research (Bærenholdt, Haldrup, and Urry 2017; Evans and Jones 2011; Kusenbach 2003; Brown et al. 2008). Generally, go-along methods present a systematic technique of tracing and accompanying people and things in the field while they follow their ordinary routines, simultaneously observing or conversing about how research participants interact with others, with specific situations, or with a particular place.

Over the past decade, a number of go-along researchers have begun to employ digital recording technologies such as video and photography cameras, smartphones and audio recorders (Pink 2007; 2008; Spinney 2015). In my research, I have used video-recordings and photography especially in situations where the limits of participant observation and affective methods in accounting for “mobile experiences” became most palpable. The strategy of using my body as instrument reached its limits whenever it came to situations where the relation between my research participants and the *absent* tramway reached a spontaneous intensity. When two of my research participants started to dance, each on a different (video-)interview occasion, both these movements have in a similar way pointed me to the limits of “becoming affected” (Knudsen and Stage 2015, 16). During the interview situation, the intensity of my research participants’ embodied memories of footboard-riding created a rather “distanced” feeling in me, suddenly making it very apparent that my body would not resonate or react with neither the passion nor the sorrow expressed through their dance. Later, however, when I went through the footage, the intensity of that situation has been “amplified” by the videos in the sense described by Vannini (2014, 237). Comparable to the effect that fieldnotes had on my “staying with” uneasy moments in fieldwork, the videos also worked here to point me to situations and intensities that while “participating” in them I had not been able to perceive that way.

In a similar manner, the combination of fieldnotes and photography has also helped me “re-member” and “re-turn” (Barad 2017) to my *go-along* across the aqueduct-cum-railway bridge of

Santa Teresa during the commemoration of the tramway-accident (cf. chpt. one, fig. 11). Through the mix of data sources, retrospectively, I have been able to access and amplify both my direct bodily feelings of “stuckness” in the mass of moving bodies *and* the layer of memories of being trapped together inside a tramway-carriage that pulsed through these bodies. Here, I recur to David Bissell’s (2010, 276) way of employing a mix of mobile (ride-along) and affective methodologies (embodied data, auto-ethnography), in order to account for how the shared experience of uneasiness inside a halted vehicle galvanizes the “passenger body” into a momentary form of collectivity. With difference to both Bissel and Lapina, however, I have not been able to directly “dance” with the footboard or to resonate and react with the affective atmosphere that unfolds *inside* a moving vehicle. Here, I have combined participant observation and go-alongs with video-recordings and photography, in order to shift emphasis to the interplay of actualized *and* virtual²⁰ affective connections. Affect, as I will argue in the following, needs to be *located* in the spatiotemporal gap between the presumably lost past, the projected future of infrastructural development, and the actual here and now.

On thing-following

Most of the methods described in this chapter can be attributed to relational theories, that is, they take the interactive dynamic of participant observation (including go- and ride-alongs) through mutual exposure as common point of departure for their analytical inquiries (Lindner 1981, 1; Lorimer 2013). On the conceptual level, the embodied methods presented so far build on theoretical debates that conceptualize affect as force of transmission (Brennan 2004) or resonance (Mühlhoff 2015). The consequence of such conceptualization, as Knudsen and Stage (2015, 5) argue, is to develop methods that are “concretely linked to specific bodies (for instance, the researcher’s own body) in specific (and empirically approachable) social contexts”. The methodological impasse²¹ that amounts from such way of approaching (affective) relations, however, is that even though affect is situated in a momentary configuration of relations, it cannot be limited to this singular moment. Either affect remains in constant transformation, lending it a

²⁰ For more reflections on how the virtual and the actual are folded into each other in relation to infrastructural promises in Rio de Janeiro, refer to chapter four.

²¹ I am thankful to Steffen Krämer, Helge Peters and Vanessa Weber for all the discussions on methodological issues and other implications of “locating affect” (Kemmer et al. 2019).

specific duration (chapter two), or there is a chance of affective repetition if some elements of the affective assemblage coincide again (chapter five).

In order to address some of these challenges of embodied methodologies, that is, the question of how to register both the spatial mattering and the temporal unfolding of affect in my research, I have been recurring to the methodological toolkit of assemblage research. Assemblage approaches²² have entered methodological discussions in (urban) ethnology since more than a decade (Hess and Schwertl 2013; Färber 2014b; McFarlane 2011a; Rankin 2011). As Hess and Schwertl (2013, 31) argue in their introduction to “ethnological researching”, the study of multi-scalar and emergent constellations of actors affords assemblage as method that allows for the situational and ambulant organization of participant observations, interviews, and conversations. In reaction to what I have argued above, about the methodological consequences of multi-sited ethnography (Marcus 1995), I have carried out go-alongs not only with human research participants. Instead, I have applied methods of *thing-following* (Akbari 2020; Christophers 2011; Cook 2004; Cook and Harrison 2007) throughout fieldwork that ranged from accompanying a tramway t-shirt along a protest march (chapter one), over tracking and tracing stop signs and schedules (chapter four), to counting potholes (chapter five).

Additionally, and recurring in particular to Marcus’ notion of mapping (1995, 99), Hess and Schwertl have argued that field research needs to account for “expanded and networked formations” of collectivity (ibid., 30). In a similar way, in chapter one, I show how I have applied assemblage methods for an initial mapping of residents and urban matter and how this has set the basis for both subsequent fieldwork and analyses as exemplified in the chapters to follow. Also in chapter one, I react to the pervasive critique²³ in urban studies that assemblage approaches and the related methodologies (in particular mapping), because of their “flat ontologies” would not be able to grasp expressions of socio-economic inequality or historically entrenched, uneven spatial development (Brenner, Madden, and Wachsmuth 2011). Here, through tracing the ways in which certain material elements of the tramway infrastructure enhance or limit activists’, politicians’, and

²² For a more detailed discussion of assemblage approaches in urban studies, and their operationalization for my study, cf. chapter one and three.

²³ Also reacting to this critique, Alexa Färber (2014, 101–2) has pointed out how assemblage studies’ compromise with multiperspectivity and detailed examinations of actor-networks in form of case studies across locations and social status groups “releases critical potential” for the researcher to defend and (re-)claim interdisciplinarity and time-intensive fieldwork vis-à-vis academic institutions and funders.

residents' capacities to act, I show how assemblage accounts for power asymmetries and unequal distributions of agency. Utilizing assemblage as method, as Katherine Rankin (2011, 563) has argued, also allows for attending to the conjunctural geographies (the inseparability of micro and macro) and the historical entanglements (of past, present, and future) of urban everyday practice. Relatedly, the way I have been following "asphalt" throughout chapters two and five presents an attempt to translate assemblage into a method of thick description that accounts for how early twentieth century infrastructural reforms furnish the (trans)formations of collectivity in present-day Rio de Janeiro.

In my work, I have confronted part of the empirical task that comes alongside assemblages' orientation towards the contingencies of particular space-time conjunctures by sorting and categorizing the *private archive* of the neighborhood association of Santa Teresa in January and February 2016.²⁴ Thing-following, in other words, has led me to search for tramway-evidence in the documents that the association had been gathering in the shelves and folders of an extra room of the house of one of its members since its foundation in 1980 (fig. 3). The material I have been gathering during these two months in form of scanned documents has not been analyzed systematically for the present work, although each of the chapters to follow makes reference to either plans, protest flyers, lists, newspaper articles, or meetings protocols from the archive. Rather than having employed methods of archival research, I would describe the benefits of working with this material as providing me with further orientation in the field, pointing me to all kinds of tramway-related people, things and places which I have been visiting or interviewing as a result.

The way of organizing and ordering the archive I have learned throughout the process²⁵ has provided me with a first *arranjo*, an arrangement in the Deleuzian-cum-assemblage-sense of the word, of some of the actors I have encountered later on and of their relations to the tramway. *Arranjo* is the archivists' terminology I have been using when discussing my way of organizing the material with members of the neighborhood association. After going through all the unsorted staples of loose documents, crammed folders and boxes with a variety of seemingly random selections of material, I have been proposing "tags" or key words as root categories and

²⁴ For a detailed introduction of the neighborhood association (AMAST), cf. chapter one.

²⁵ Sorting and ordering these documents was part of the deal which allowed me to actually enter the archive in the first place, as I will describe further below. My deep gratitude goes to Camila Costa, for sharing her expertise as *arquivóloga* with me here.

subcategories for then sorting the documents back into folders with corresponding name tags (fig. 3 left hand image). The way the *arranjo* looked like a mind map (fig. 3, right hand image) that we constantly moved and changed, has also provided me with a first idea of how to organize the later coding of my research material with the qualitative data software tool MAXQDA. Remembering the months in the archive, I have used a similar methods of “tagging” and (re-)organizing my fieldwork material in mind-maps, the result of which is also reflected in the structure of the chapters to follow (each being organized around specific “tags” or clouds of tags, such as “stop signs and schedules”, “asphalt and potholes”, “footboard and free-riding” etc.).



Figure 3: Archive of the neighborhood association

Getting access to the archive was not easy. The first time I had heard of the existence of a room full of documents, most of them related to the bonde,²⁶ was during a meeting of the local neighborhood association I attended in September 2015 (fieldnotes 15/09/2015). A resident had joined the meeting that evening, offering to donate his collection of historical tramway-postcards to the organization’s archive. Later, during a conversation with then-president Adriene, I learned that the association had collected documents from all over the neighborhood that way, receiving donations from residents, and activating their contacts to architects and historians all over the city to gather plans and drawings of the historical houses and infrastructures (including sewage system, gas pipes, but also ancient lampposts and particular handrails). These documents had been

²⁶ For more explanation of why the tramway is a “main cause” of the neighborhood association, cf. chapter one.

“archived” together with the protocols, first handwritten then typed, of the monthly meetings of the neighborhood association since the eighties, documentation of protest actions (flyers, attendance lists, photography) and conversation (e-mails, letters) exchanged with local authorities and media representatives.

These documents, however, seemed unreachable for me. Although Adriene would soon become a frequent conversation partner of mine, every time we met she presented new reasons for why I could not “yet” visit the archive, the key that had been lost, then reappeared, but had to be collected from somebody she did not know or like, and so it went on. Mostly, Adriene referred to the fire that happened in the former “archive” house and that had left many documents in a “fragile” state, some half-burned, or water-stained, better not to be touched by too many people and brought into even greater disorder. Only three months later I realized that the fire might actually be my chance to finally get access to the archive. Following a suggestion from Alexa Färber, I proposed to Adriene that I could re-organize the archive in exchange for being allowed to make scans of some of the tramway-related materials for my own analysis. During the December-meeting of the neighborhood association, this proposition was finally accepted, and Adriene became the true door-opener to the archive, suddenly defending my proposition during the meeting and announcing to trust me and to assume responsibility for my work in the archive (fieldnote 15/12/2015).

Writing on thing-following, Alison Hulme (2017, 159) suggests that documenting the challenges of such method, in particular the obstacles one encounters while following the thing through multiple sites, is a crucial line enquiry when it comes to reflect on the “syndromes in gaps [that] bring the bigger system into the picture”. My struggle to get access to the archive, this way, has been key for understanding how following the tramway was always also connected to particular human actors and gate-openers, and how these would help me locate certain materials and things within a “bigger picture”. As I will detail in the following section, and as has been argued by ethnologists all along (Petersen 2007, 30; Schmidt-Lauber 2012, 567), while the methods of fieldwork I have been describing so far – including participant observation, go-alongs, and thing-following – help account for actual practices and interactions (between residents and things), interviews and ethnographic conversations remain indispensable for opening up to subjective experiences and interpretations of these situations.

Ethnographic interviews and meetings

In order to flesh out what I have been arguing above about the added value of ethnographic interviews, let me briefly introduce how I have been approaching this method during fieldwork. Between August 2015 and June 2019, I have conducted (and audio-recorded) interviews and informal conversations of each around 60-120 minutes with about seventy people of different status groups. I have been following a snow-ball sampling principle where either conversation partners gave suggestions for further interviewees, or where I have contacted people whose names I had previously noted down in the “right column” of my field diary (described above).

Also during this period, I have participated in the monthly *meetings* of the local neighborhood association, amounting to a total of seventeen.²⁷ The meetings were always held inside the local cultural center “Laurinda” and I have counted between eight and sixteen participants, with a few exceptions²⁸ mostly residents from both the bourgeois areas and the favela parts of the neighborhood. Similar to what I have been arguing above about the archive, I have not taken my fieldnotes from these meetings as isolated material, but have rather analyzed them together with material gathered from other participant observations and interviews. By this, I have been inspired by Beate Binder’s (2009, 96) description of her research with a Berlin citizen’s initiative around the central city’s renewal in the 1990s, where she has also attended meetings, followed newsletters,²⁹ and participated in protest actions, which she analyzed not as isolated events, but in their unfolding as public events and thus considering the diversity of actors that (sporadically) participated in the meetings.

Listed in table two below is a selection of the thirty research participants who will be quoted throughout the next chapters, including their (pseudonym) names and a short description of their age, occupation and place of residence. Amongst these, nine people have formed a *core group* of informants, marked grey in the table. I will be referring in more detail to each of them throughout the chapters to follow, but what distinguishes these nine people from my other research

²⁷ I have participated in ten of the monthly meetings of the neighborhood association between August 2015 and May 2016, and an additional six meetings in August 2018 and between January and June 2019.

²⁸ The two exceptions I have noted were: A visit from two members of Rio’s free fare movement in November 2015; the participation in one meeting of an invited lawyer who had been hired to counsel the association with a civil lawsuit in February 2016.

²⁹ In my case, “newsletters” have been e-mail listservs, cf. chapters one and three.

participants is that I have interviewed each on a regular basis (between four and seven times) during the most intensive period of fieldwork in 2015 and 2016, and maintained contact, including further conversations and follow-up questions throughout the years 2017-2019.

Ethnographic interviews are communicative exchanges that follow-up and further explore situations that have been observed throughout fieldwork (Heyl 2001; Spradley 2016). Based on my main research question, I have been asking participants all kinds of “explanatory questions”, aimed at better understanding how residents would describe their relation to infrastructural matters (Schmidt-Lauber 2001; 2012). In line with the principles of this method, I have selected interviewees who I would either know already from situations (protests, street scenes, meetings) to which we could refer in our conversations, or else I have selected them because they were “thematically” connected to the field (as tramway driver, construction worker, engineer, archivist, historian, or employee of the state transport company). Interviews have been oriented by a pre-designed guideline, where I have defined thematic fields which I addressed flexibly throughout the interview situation. I have re-arranged and adapted this guideline after each interview. In spite of this variation, the interviews would mostly begin with a personal “bonde-story”, that is, my participants would tell me anecdotes about their memories of the tramway and I would ask a couple of *how-* or *what is it like-*questions to follow up on specific feelings expressed, practices described et cetera (Schmidt-Lauber 2012, 568).

Variations of this technique I have employed throughout fieldwork have been: First, the deliberate use of *ero-epic and reflexive elements* during later interviews (after 01/2016) with the core group of research participants, where I have not only been posing questions, but also encouraged participants to ask back, in addition to confronting us with things we had been describing and arguing in previous interviews (Girtler 2001, 147). Second, *go-and ride-along interviews* (cf. chpt. one, Sheila; chpt. five, Joana and Mateus), where I have been deliberately engaging with my interviewees “in the street”, or during a tramway ride, and where we have been pointing each other to specific things or places and taking them up as core interview elements (J. Evans and Jones 2011). Third, I have conducted six *studying up-interviews*³⁰ (Warneken and Wittel 1997), with two

³⁰ As explained above (“afraid of things”), my fieldwork has been influenced by the impression that all research participants were “experts” of the tramway in one way or another (cf. also chpt. five). This way, I deliberately chose not to speak of “expert” interviews when it comes to people of higher status groups.

chief engineers responsible for the tramway-reconstruction, two university professors who have been studying the bonde of Santa Teresa, the director of the public transport company (CENTRAL), and the then-transport minister (cf. table 2). Further above I have described how these interviews might trigger a “new fear of the field” (ibid.). Here, my former work with the UN-Habitat office, and in particular the contacts I had been making with employees of the municipal urban planning institute Pereira Passos (IPP), have helped me persist with some of these conversation partners (cf. chapter five).

Table 2: Interviewees (selection) in order of appearance – core informants marked grey

NAME (changed)	SHORT DESCRIPTION (age as of 2015; “resident” = of Santa Teresa)	INTERVIEW DATES (only interviews quoted)
Teresa	resident, member of neighborhood association AMAST, administrative assistant, aged 43	27/08/2015 (go-along), 03/09/2015, 23/03/2015, 08/08/2018
Caetano	local Anglican Priest, non-resident, aged 67	27/08/2015
Adriene	resident, former president of the AMAST, aged 72	27/08/2015, 10/09/2015, 17/11/2015, 08/12/15, 06/03/16, 13/04/2016,
Túlio	local favela resident, carpenter and artisan, aged 56	12/09/2015, 03/10/2015, 28/11/2015, 10/08/2018
Renata	resident, sociology student, graffiti writer, aged 29	22/03/2016, 21/05/2015
João	resident, journalist, member of the local Right to the City group, aged 32	05/09/2015, 06/03/2016 (go-along), 13/02/2019, 02/04/2019, 18/05/2019
Santana	resident, founding member of AMO-Santa, aged 59	27/10/2015
ZOD	resident, DJ/musician, and artist/street vendor, aged 53	14/10/2015
Dario	resident, local grocery shop employee, aged 23	24/10/2015, 08/12/2015 (video-interview)
Sheila	resident, street vendor, aged 64	02/10/2015 (go-along), 16/08/2018
Claudia	resident, member of AMAST, high school teacher, aged 42	27/08/2015, 17/11/2015, 19/01/2016, 06/03/2016
Luciana	archivist of the LIGHT archive, non-resident, age n.a.	12/01/2016, 06/03/2016, 16/08/2018
Patrícia	resident, waitress, aged 36	26/10/15
Hindenburgo Pires	resident, geography professor at UFRJ (has published about the bonde of Santa Teresa), aged 57	26/01/2016

Jambeiro	resident of local favela, painter, mural-artist, aged 40	30/10/2015
Ana	resident, graphic design student, aged 25	17/10/2015 (go-along)
Paulo	resident, artisan/, aged 58	12/12/2015 (video-interview)
Roberto	director of the public transport company CENTRAL, non-resident, age n.a.	17/03/2016
Álvaro ³¹	resident, graphic designer (developed the “bonde-font”, chpt. three), aged 26	03/08/2018 (go-along)
Paulinho, Carol, Luciana	all residents, P. is owner of a local samba venue, aged 50; C. is employee of a local take-out food restaurant, aged 26; L. is retired architect, aged 70	03/10/2015, 07/08/2018 (Luciana go-along)
Beto	resident, street-dweller, aged 53	08/08/2018 (ride-along)
Joana	resident, teacher, founder of “mothers of Santa Teresa”, aged 37	28/09/2015, 11/10/2015 (go-along), 06/03/2016, 15/03/2016
Marcelo	construction site worker, non-resident, aged 19	28/09/2015
Sara	resident of local favela, cashier at local supermarket, aged 28	06/09/2015
Britto	resident, founder of “Friends of the Bonde”-association (chpt. five), aged 85	02/09/2015
Carlos Osorio	Rio state secretary of transport (01/2015-02/2016)	27/01/2016 (interview, ride-along)
Mateus	resident from local favela, tramway driver, aged 48	03/11/2015 (go-along), 14/11/2015; 03/09/2015 and 12/08/2015 (ride-along)
Oscar	resident from local favela, tramway driver, aged 56	03/11/2015

Coming back to what I have argued in the introduction to this section about the discrepancy between methodology and praxis, I have identified four such “gaps” in relation to the ethnographic methods described above. Because I have been following an “intuitive” approach to the field, that is, I have made methodological choices depending on the dynamics of the field, these are gaps I can identify *retrospectively*. With view to future/other’s research, I have summarized them in form of a Q&A: (1) How to account for things that point beyond the observable? In order to confront the limits of participant *observation* as a method that relies heavily on “what can be seen”, I have combined it with the toolkit of *embodied* methods, in particular techniques of *becoming affected*.

³¹ I am extremely grateful to Álvaro Franca, introduced in more detail in chpt. three, for sharing his **BONDE** font with me (see title page) – let alone all his research in the (living) archives of the tramways of Rio, including his travel stories of tram-tracing around the world.

The limits of this latter method however could be reformulated as a question of (2) How to make sense of affective relations that the researcher's body does not resonate with or react to; How to deal with absence, affective memories, or movements I cannot share? As one way of dealing with the limits of using one's body as instrument (in affective research), I have detailed on how *video-recordings and photography* worked to "amplify" retrospectively some of the latent sensations I had during fieldwork, and how through their combination with mobile methods such as *go- and ride-alongs* I have been able to capture some of the movements and sensations that were connected to the absent tramway. As I have argued, however, a major challenge for such methods remains the question of (3) How to examine the durations and the spatialization of affective bonds? Here, I have proposed a combination with assemblage methods, and in particular *thing-following*, as way of exploring both the historical dimensions and the (future-related) potentiality of specific instances of infrastructural matter. Finally, I have been addressing a major gap amounting from all these methods described so far by asking, to paraphrase Hulme (2017, 159) quoted above, (4) "How to account for the bigger picture"? As way of answering this question, I have explained how ethnographic interviews helped me open up the material to subjective experiences and interpretations that draw pointed to socio-political events beyond single situations in fieldwork.

In summary, this Q&A could be said to exemplify how messy methods can still become messier. This way recurring to John Law's (2004) call, I hope to have shown not how I have solved the problems of the various techniques of field research above, but rather how I have dealt with them by bringing ethnographic methods into dialogue (and sometimes conflict) with other methods from the conceptual fields relevant to this study. Each of the following chapters present examples of such methodological combinations, in addition to further reflecting on their theory-generating value by combining empirical analysis with reflections on the conceptual perspectives that have influenced this work.

One Reassembling Collectivity

At around nine thirty in the morning of August 27th, 2015, Teresa puts on her black t-shirt with the yellow tramway-print. She leaves her house in the upper northern part of the Santa Teresa neighborhood and walks across the main street. From here, she will take a bus that carries her downhill to the former tramway station Carioca, to commemorate “four years without bonde”.

While the station has served as tramway terminal for over a century, the demonym “carioca” is even older. It has been used since colonial times to refer to anything related to the city of Rio de Janeiro: Carioca today is a nickname for residents and natives, it denotes their *sh*-heavy accent and swearword-loaded slang; it is used as adjective for the modernist architecture of Oscar Niemeyer and colleagues; and to describe the specific composition of the city’s thick rainforest. Rumors have it that the indigenous Tupí of the region used the term to refer to the Portuguese settlements as “house of the white men”, with the word “carioca” being composed of the words *kara’iwa* or *kari’* (white man) and *oka* (house). Again others claim that either the river carioca, or a homonymous indigenous tribe gave name to the first inhabitants of the city (Enders 2015).

After the term had become widely accepted as an all-encompassing label for Rio’s inhabitants between the sixteenth and seventeenth century, it soon became a marker of distinction when king D. Luiz de Vasconcelos decided to introduce the “more civilized” name *fluminense* (from the Latin “flumens” = English “river” = Portuguese “Rio”) in 1783. During the Brazilian Republic (from 1889), carioca survived only as pejorative nickname for the favela³² population of the city, but its significance changed to gain a more positive connotation again when Dictator Gétúlio Vargas came to power in 1930. Indeed, present-day residents of Rio de Janeiro are commonly seen as proud of being cariocas. Reminding of (capital) city-stereotypes around the world, they have gained some dubious fame amongst other Brazilians for their supposedly snobbish attitude and for bragging about their still Portuguese-sounding accent, as much as for their “characteristic” mixture of *preguiça* (laziness) and *malandragem* (rascality, cunningness).³³

³² I will deliberately use the term favela throughout this dissertation, thus following black activists’ and slum residents’ calls for re-appropriation (RioOnWatch 2012) of the long-time discriminatory and stigmatizing term (which would translate to the also-pejorative “slum” in English) – thus in a certain way following Judith Butler’s advice to strategically re-signify oppressive language (cf. Olson and Worsham 2000, 760).

³³ These two are less contrastive than it might seem, as *malandragem* has a connotation of “not wanting to work” (and indeed, Cariocas are often teased for hanging around Copacabana beach instead of going to office). Yet, the *malandragem* has achieved a less “light” meaning with the violent military interventions of

However, even though Santa Teresa is located in the very central part of Rio de Janeiro (see fig. 4), it does not so easily fit in as “carioca”. In conversations I had with Teresa and other residents over the years, they assured me that the neighborhood had always been “different” from the rest of the city. The densely inhabited area of around 5 km² and more than 40,000 inhabitants (IPP 2014) is commonly referred to as “a little island” (fieldnotes, i.e. 09/2015; 04/2016; 08/2018; 03/2019); sometimes alluding to its cobblestone-charm or brick-and-wood aesthetics, sometimes arguing that “there are people who never leave the hill” (fieldnotes, 10/2015). Public transport infrastructure has considerably contributed to the formation of such imaginary of Santa Teresa as something like a solid rock; a sort of island amidst Rios chaotic everyday business; a persistent territory that rises somehow suspended over the city. Local artist Ana Maria Moura has well captured such imaginary in a graphic depiction of the neighborhood which she has elaborated on behalf of Rio de Janeiro’s research foundation FAPERJ³⁴ for a public exhibition in Santa Teresa’s Chácara do Céu museum (cf. fig. 4, right picture). In her artwork, the “green” neighborhood rises from above a uniform grey city. Contributing to Santa Teresa’s peculiar “island geography” is the bonde, shown here on the bottom left, which remained the only local means of public transport to connect the neighborhood to the rest of the city until special mini-busses were introduced in the 1980s.

In the words of the above-mentioned Teresa, a long-term resident of the neighborhood who later became one of my regular interview partners³⁵ the bonde had played a particular role in the development of Santa Teresa’s (self-) representation as distinct from the rest of the city:

[i]t follows the tracks, right? So, if one of those downtown businessmen thought of himself as particularly clever and tried to use the Almirante Alexandrino [main street] as shortcut from Ipanema to the Center, he could not pass it. The tram is a pacemaker [marcapasso], it slowed down all other motorized vehicles, pedestrians move less hurriedly here, vehicles have to be careful [cuidadosos], because of the tracks and the cobblestones [paralelepípedos] and all that. (Teresa, 03/09/2015)

the last few years, which gained Rio a dubious fame as one of the country’s most dangerous cities. On the “staging” of Rio as laboratory for military “pacification” strategies, see Müller and Müller 2016.

³⁴ Fundação Carlos Chagas Filho de Amparo à Pesquisa do Estado do Rio de Janeiro.

³⁵ For a more detailed introduction of Teresa, please confer the methodology chapter (“Afraid of Things”) in the introductory section. All nine informants who have come to constitute the “core group” of my research between 2014 and 2019 are presented there.

According to Teresa, the tramway had set a distinct “pace” for the neighborhood, determining its gentler rhythms of everyday life, if compared to the rest of the city. Unlike other parts of the center, Santa Teresa could for a long time not be used as thoroughfare, but had to be passed around because the tram slowed down or even blocked traffic completely on the few steep streets of the hilltop.

Following Teresa’s pacemaker-metaphor, downtown Carioca station has “pumped” tramways and people through the main artery of Santa Teresa: the Almirante Alexandrino street (marked black on fig. 4, left picture), which leads up from the downtown business districts across the whole length of the hilltop ridge. The station has for over 100 years been the only connection of the local system to other means of public transport outside the neighborhood. As figure four illustrates, only a few streets that lead down from the hilltop neighborhood to the city center are usable with railway or motorized transport, since most of its flanks are either overgrown with thick vegetation or covered with densely populated favela-settlements. While the three local favelas³⁶ that Moura depicts on the lower right of her artwork lack asphalted connections to the city, the left-hand part of the neighborhood with its bucolic buildings is connected to the city center through paved streets.

At the same time though, the seeming isolation of Santa Teresa becomes porous at various ends. Innumerable small streets, stairways, and muddy paths lead straight down from the hilltop, and pedestrians, informal “mototaxis” or vans, and local public mini-busses intersect with the busy asphalted streets and crowded concrete-covered downtown areas of the center. Approaching the western upper end of the ridge, Santa Teresa merges more and more with the thick vegetation of the tropical rainforest that stretches its braids, lianas, spiders, and little monkeys, who brachiate across the power cables and send impressions of wildlife and tranquility far into the neighborhoods’ central parts. On clear days, the view from the east-west axis of the main street draws the vast favela areas in the north closer, whose building patterns repeat at the densely inhabited patches of reddish-brown brick-and-cement houses everywhere on the flanks of Santa Teresa hill. Looking south, sunlight reflects on the almost surreal white façades and beaches of Copacabana and Ipanema, but also on the pool water of luxury hotel Téréze in the very center of the neighborhood. Santa Teresa is in a certain way a typical central district of Rio, because it is neither fully part of the city, nor do

³⁶ Santa Teresa has a total of six favelas as of 2010 (year of the last census in Brazil), with a population of 15073 people and 4431 housing units (Lopes, Amorim, and Cavallieri 2011).

the characteristics it maintains make it a truly isolated place, but they blend and repeat the many contrasts of wildlife and business, failure and progress, misery and bohème that mark the city.

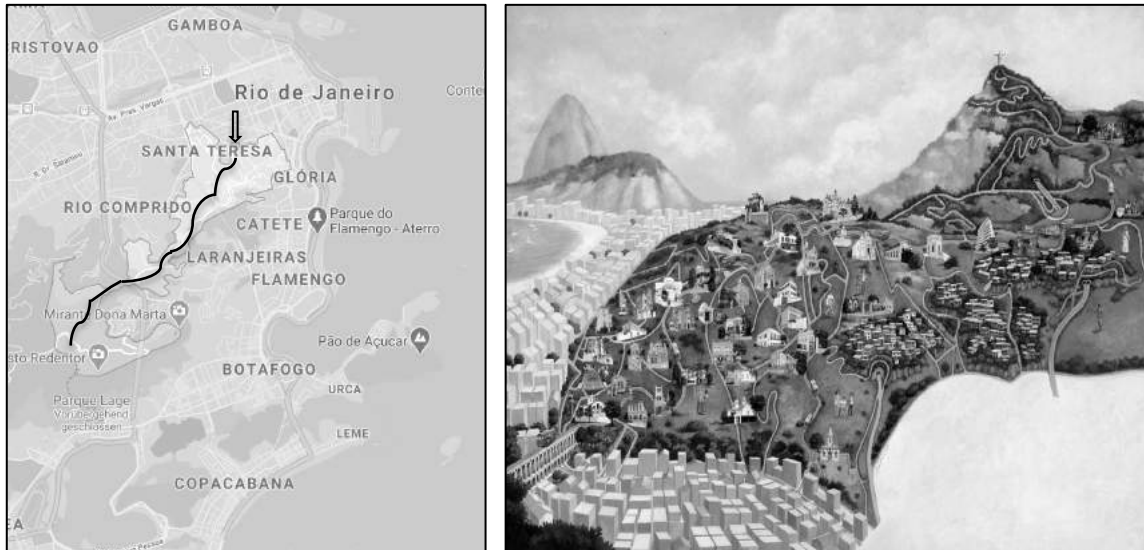


Figure 4: Santa Teresa, left: administrative boundaries and course of tramline; right: artist representation

This chapter is partly motivated by the ambivalent (self-)representations of Santa Teresa as described above and illustrated in the right picture of figure four. While local residents often retain a position of not being fully “carioca”, the close-knit patchwork of hillside brick-and-stone settlements and areas with richer single houses or apartment buildings that characterizes the whole so-called “southern zone” of Rio de Janeiro repeats in the neighborhood in ways that permeate its positioning as completely distinct from the city. Just like the term *carioca*, which oscillates between pride and prejudice, representations of Santa Teresa are fluid. In certain ways, the neighborhood is a very typical district of Rio’s center: It can be favela today, upper-middle class district tomorrow, “nature” retreat and busy tourist hotspot at the same time.

Departing from such ambivalences, this chapter contributes to a problematization, a questioning, and irritation of what is oftentimes referred to as “neighborhood community” both in everyday language and in urban studies jargon. Without doubt, the concept has proven fruitful for an impressive body of work in urban anthropology that has studied how people develop shared identities, or rather *place*-identities and -attachments despite differences in, for instance, income, gender, race or religion (Birenbaum–Carmeli 1997; Low and Altman 1992; Proshansky, Fabian, and Kaminoff 1983; Sieber, Cordeiro, and Ferro 2012). At the same time, while this chapter follows Teresa and her t-shirt down to the Carioca station, embarking on a journey throughout “seven years without bonde”, it will become more apparent how the ephemeral connections

between residents, and between residents and infrastructural matter in Santa Teresa point beyond such concept.

Embracing a conceptualization of “neighborhood community” for the case of Santa Teresa would have implied, for instance, searching for *commonalities*, rather than differences, amongst protesters, residents and others, who, at least temporarily, showed some connection to the tramway-struggle. The term “community” too promptly requires formulating assumptions beforehand about certain identity-markers – for instance concerning appearance, behavior, language – or suppositions on the boundedness of a territory, i.e. a favela, a gentrifying neighborhood, or a tourist attraction. Such an approach would have risked to “flatten out” the differences between the people involved, to repeat stereotypes such as the ones listed above for the term “carioca”, on the danger of smoothening the “in-betweenness” of Santa Teresa and the ambivalences between (self-) representations and everyday life experiences in the neighborhood.

As argued in the introduction to this work, I use the term “collectivity” instead of community, in order to attend to the loosely configured groupings of people, things, practices, imaginaries, and sensations that have momentarily stabilized around “the bonde”. In this, I follow a tradition of works in urban studies that have experimented with a “Deleuzian” approach to the city. As H  l  ne Frichot, Catharina Gabrielsson and Jonathan Metzger have argued, “what we know as the city today – the flows of bodies, forces and matter” affords a thinking similar to that of Gilles Deleuze and F  lix Guattari, namely a theorizing of the urban that “challenge[s] the very notion of form or identity” (Frichot, Gabrielsson, and Metzger 2016, 1). For my understanding of collectivity, I draw from works that foreground cities’ “associative ability”, arguing that they generate provisional formations, which temporarily emerge around specific issues, but which can dissolve as quickly as they formed (Amin and Thrift 2002; 2017; Far  as 2010a).

At Carioca station, such collectivities of varying composition and durability have reassembled every year anew, in order to commemorate the day when the last tramway of Rio de Janeiro literally went off-track. Exactly four years prior to the day Teresa steps into the station, on August 27th 2011, the bonde of Santa Teresa had derailed due to a break failure. On its way downhill, just a few minutes before reaching Carioca, the last survivor of the once-numerous tramway fleet of Rio lost its stable connection to the steel tracks and crashed into a lamppost, leaving six people dead and many injured. The day after the accident, then-mayor of Rio S  rgio Cabral (2007-2014) announced the temporary suspension, thorough renovation and subsequent re-installation of the system until

2012. Standing in front of stunned residents and crying relatives of victims, he pronounced a sentence that many in the neighborhood still remember:

I promise that in 2012, surely, we will hand over this present [the bonde] to the city.
(Cabral, quoted in: SETRANS 2011)

However, most residents did not seem to believe in the come-back promise,³⁷ and have since organized numerous protest actions to claim the return of the bonde.

This chapter chooses the events that have commemorated a total of “seven years without bonde” as starting point to inquire into the repeated reassembling of collectivity around the absent tramway. I borrow the term from Bruno Latour, whose book “Reassembling the Social” proposes a change in perspective “not [on] a society, but [on] a collective” (Latour 2005), in other words, a turn away from social scientists’ focus on already-stable groups (a neighborhood community, a social movement) towards an interest in the *formation* of volatile, temporary associations of human and non-human actors. In a similar way, this chapter refrains from understanding the formations actors that emerge around the bonde as already-stable associations. Rather, I am interested in the *process* of their formation, thus choosing an explorative approach to urban collectivities as described in the methodology section of this work. In order to prepare for the perspective that is assumed throughout all following chapters, I first disentangle the different people, places, imaginaries and things that have been involved with the bonde, to varying degrees, throughout its seven years absence.

³⁷ Residents disbelieve in the mayors’ promise has – at least partly – been proven right on various later occasions, first in 2012, when a further delay of the construction works until 2014 was announced (O Globo 2012).

Commemorating suspension: Seven years without tramway

Despite the mayor's promise to reinstall the Santa Teresa tramway within a year, the doors of the Carioca station opened for the first time again only in 2015, exactly one month prior to the fourth anniversary of the accident. Unimpressed by the partial comeback of the bonde, which has resumed its journey towards the Curvelo station (the first station uphill) on a provisional "test track" on July 27th, Teresa and others have not suspended their yearly reunion. After commemorating 1, 2, 3 years where the bonde was physically "absent", they continued to commemorate 4, 5, 6 and 7 years "without tramway" – even if the bonde had long returned³⁸ (fig. 5).

Before zooming in to the 2015 event and introducing the actors more in detail, the next paragraphs outline the volatile formations of collectivity that have assembled around the bonde throughout the total of seven years.



Figure 5: Seven years without bonde

³⁸ The consequences of the bonde-return (G1 2015) for the formation of (political) collectivities in the post-2015 era of financial crisis and mega-event induced renewal is discussed with greater detail in chapters three and five.

Table 3 Chronology of events (corresponds to Fig. 5, top left to bottom right)

2011	Accident and suspension of the Santa Teresa tramlines
2012	One year without tramway: The “Bonde-Crusade”
2013	Two years without tramway: “Occupy Cabral”
2014	Three years without tramway: A “Surprise Event”
2015	Four years without tramway: “Station Nelson” partial re-inauguration of the tram network, line one circulates on a test track
2016	Five years without tramway: “Olympic Rehearsal” further extension of line one until the neighborhood’s center
2017	Six years without tramway: “Online-Protest” further extension of line one uphill
2018	Seven years without tramway: “Missing Paula Mattos” re-installation of line one is completed, line two still missing

Year 1 ‘Bonde-Crusade’

The pictures in figure five above entail a first hint to the reappearance of certain elements during each of the seven events: most prominently amongst them features the graphic bonde – designed by ZOD,³⁹ the man who holds the protest banner on the top left picture – and which has since been present every year on flyers, announcements, and black protest t-shirts like the one Teresa is putting on in the beginning of this chapter. The degree to which the tramway has been physically “there” throughout the seven years without tramway, however, varies considerably since it only (partially) returned to the streets of Santa Teresa after the first half of the events listed in table three.

In a certain sense, then, the bonde has been rather present *through* its absence during the first anniversary of the accident in 2012. In academic works, the mutually constitutive relation of absence and presence has been treated as a recurring topic, notably in studies of commemorative practices around ruins and other spaces of memory (Edensor 2005; 2013; 2019; Stoler 2008; Navaro-Yashin 2016). In his work on “rubble”, for instance, anthropologist Gastón Gordillo (2014, 31) identifies a common “structure of feeling” amongst the inhabitants of a larger stretch of the Argentinean Chaco region. Gordillo argues that collective feelings can emerge despite the

³⁹ ZOD will be introduced further below, and a background story of the graphic design will be given later in this chapter.

social diversity of the population, because locals sense the subtle, but recurring “haunting” of indigenous absence. Such haunting cannot be articulated linguistically, but it is turned from “absence into a physical presence” (ibid.) through the intensities evoked by the material debris of places, built and socio-cultural structures.

Reminding me of this description, Caetano, the local Anglican priest of Santa Teresa has described the event of “one year without tramway” to me as a kind of “bonde-crusade”, where the tramway was not strictly “remembered” through human speech acts, but where its physical absence was nevertheless “sensible” as a kind of positive pressure on walking bodies:

We carried flowers through the neighborhood. When we departed from the church, we were still very few, maybe fifteen, but as soon as we stepped on the tracks, more and more people joined. They saw this train of people [bonde de pessoas] moving along the tracks, you know, that ring a bell with them. It was as if the overhead line [fios] was under tension again, people could feel this pressure. We were headed for recovering tramway land [recuperar a terra do bonde]. The bonde crusade [cruzada do bonde] followed the tracks until Curvelo station, where we prayed for the bonde and for the victims together with the Candomblé priests, the Buddhists, the Spiritists, and other religious representatives. (Caetano 27/08/2015).

Although the element of what Caetano called an “ecumenical rite” (ibid.) would be kept for most of the following events, the 2012 commemoration of “one year without tramway” stood out for its specific ways of turning the bonde’s physical absence into a kind of mystic presence. The performativity of what Caetano has described as “bonde crusade” lies in the ways in which the remainders of the tramway infrastructure re-enacted a “train of people”;⁴⁰ in how they evoked an intensity of feeling, a collective memory which could not be reduced to linguistic narratives, but which was felt as “tension” by those bystanders who stepped on the tracks to join the protest march. Not dissimilar from the violent Christian conquests that departed from medieval Europe, the “crusade” expressed an attempt to “recover territory”, as if it belonged to the tramway-people assemblage.

⁴⁰ “Um bonde de pessoas”/“a train of people” is a typical expression in Brazil, originally used to refer to favela (youth) gangs or graffiti writers, but more and more common also amongst other sectors of society, to refer to any grouping of people that one suddenly remarks (as in “Wow, that’s a train of people over there”). For more examples of popular sayings which contain the word “bonde”, please refer to chpt. two. For more reflections on this particular expression, refer to the final chapter (conclusion).

Year 2 'Occupy Cabral'

Besides the representatives of the various religions of the neighborhood, the actor with most regular participation in the commemorative events is the AMAST – the “Association of Residents and Friends of Santa Teresa”.⁴¹ As Adriene, a former president of the neighborhood association remembered in one of our conversations,⁴² on the occasion of “two years without”, the AMAST had taken over from the religious representatives (Adriene 10/09/2015). Literally “leading” the commemoration march along the rails again, in 2013, the AMAST did not end the march at Curvelo station but moved straight on to the place of the accident about 500 meters further downhill (*ibid.*). Here, the friends and relatives of the victims, inhabitants from the favela parts and middle-class population alike, laid down flowers at the bottom of the lethal lamppost, which had collided with the tramway in 2011 (*ibid.*). However, there seemed to be a lift of emotional weight from the “mourning” part, as Teresa would describe her feelings during the 2013 event. From how she remembers, instead, a feeling of “righteous wrath [*justa ira*]” diffused amongst some participants (Adriene 27/08/2015).

What had been important to the AMAST that year, Adriene explained to me later, was to show “that the movement can spread [*espalhar*] to the city” (Adriene 13/04/2016). And indeed, on the second anniversary of the tram-accident, the march continued after Curvelo and walked all the way down to Ipanema beach, stopping only in front of the house of then-mayor Sérgio Cabral – the very same mayor who had voiced the promise that the tram would be reinstalled two years ago, in 2011. Similar to the “crusade” of the first year, in 2013 the march expressed a territorial claim, this time trespassing the administrative boundaries of the district and gathering in Ipanema under the motto “the bonde occupies Cabral” (see second left picture in fig. 5 above).

As Teresa remembers, residents’ shared feeling of “righteous wrath” – in this case, “indignation” with the mayor’s broken promise – was carried by a new element that had entered the assemblage (Teresa 23/03/2015). Two years after the suspension of the tramway, the bonde of Santa Teresa reappeared in a “minor” version, as a wood-and-metal wagon on wheels pieced together by local

⁴¹ Port. “Associação de Moradores e Amigos de Santa Teresa”. This chapter will reflect more on the role of the local neighborhood association further below.

⁴² For a more detailed introduction of Adriene, please cf. the methodology chapter (“Afraid of Things”) in the introductory section. All nine informants who have come to constitute the “core group” of my research between 2014 and 2019 are presented there.

artisan Túlio⁴³ and pushed by the marching crowd all the way down to Ipanema. This new “thing” that entered the assemblage represented the kind of “bonde we want”,⁴⁴ as Túlio would explain to me later (Túlio 28/11/2015). By being replanted from Santa Teresa to the street in front of mayor Cabral’s house, the tramway-replica manifested not only the residents’ claim that the bonde should return “like it had always been” (ibid.), but it also put into question the state power to define how the tramway *was* (design) and where the political discussion around it belonged (to a neighborhood or to a whole city).

Year 3 ‘Surprise Event’

After the bonde had already returned to the political stage as an activist-made replica, its second come-back was enacted by the public authorities themselves. As local media reported on August 27th, 2014, they had been alerted on short notice that this very day, the mayor would present one of the tram carriages of the new fleet at the local Curvelo station (Silveira 2014). Despite the staging of the presentation as “surprise event” [evento surpresa], journalists were not the only ones to gather at the station that morning (ibid.). As soon as the blue cloth which covered the “new bonde” was being lifted by the director of the transport company, around twenty people streamed into the Curvelo square from different directions, all dressed up in colorful clown outfits. The clowns climbed into the open carriage and immediately started accusing the present representatives from government and transport agencies of having delayed the re-construction works for the tramway system (ibid.).

Behind the intervention was a spontaneous grouping of local artists and artisans, which appeared as part of the tramway-struggle for the first time during the “third year without bonde”. As Túlio later explained to me, he had introduced most of these people – residents of both, the rather bourgeois areas of Santa Teresa as well as the local favelas – to each other while they visited him and his tramway-replica that was parked in front of his open-air workshop in the center of the neighborhood (Túlio, 03/10/2015). Throughout organizing a kind of lending-and-return system for these people to stage the “bonde miniatura” [miniature] during all kinds of events beyond the

⁴³ For a more detailed introduction of Túlio, please confer the methodology chapter (“Afraid of Things”) in the introductory section. All nine informants who have come to constitute the “core group” of my research between 2014 and 2019 are presented there.

⁴⁴ For a background on why the bonde-design became a central political issue, cf. chpt. three.

yearly march, the artists “grew closer to each other” (ibid.) and soon came up with the idea to form an own section amongst the heterogeneous tramway-protesters. When one of them learned from a journalist friend about the “surprise” presentation of the new carriage, they decided to “screw [sacanear] the authorities” (ibid.) and to expose them to ridicule just like clowns would do it with their public. In light of the artists’ intervention, the success of that what could be interpreted as the authorities’ attempt to regain control by bringing the bonde back to Santa Teresa seems at least doubtful. However, after having “surprisingly” re-appeared – at least for one day, when it was unveiled at Curvelo square –, the bonde would not again trespass the administrative boundaries of the neighborhood again and both the restored tramway as much as its miniature version stayed in Santa Teresa during all subsequent events.

Year 4 ‘Station Nelson’

Indeed, in 2015, the third march along the rails stopped literally “on top” of the frontier between Santa Teresa and the downtown Lapa district, when Teresa and other protesters occupied the “Arcos da Lapa”. The “Arcos” are one of the famous sights of Rio de Janeiro, and the white arches of the former aqueduct feature amongst the *Cristo Redentor* [christ] statue and the Copacabana beach on tourism brochures. Besides their historic significance, having served as main waterway down the then-rainforest-covered Santa Teresa hilltop from the middle of the 18th century until the end of the 19th century, the arches also attract tourists because they are located just in-between two of the most visited neighborhoods of Rio’s center: Santa Teresa and Lapa. After having been transformed into a railway bridge in 1896, the Arcos were Santa Teresa’s only connection with the rest of the city by bonde for 115 years (Pires 2014). At the other end of the bridge, in the middle of the city center lies Carioca station (fig. 4, 6); renamed into “station Nelson” in 2015 in order to commemorate the driver who died during the 2011 accident. Since a more detailed reflection on how the aqueduct-cum-railway bridge staged the bonde as “present in absence” during the 2015 commemoration is included at the end of this chapter, I will not go into further detail with this event here.

Important to remember at this point of the story, though, is that that the 27th of August 2015 presented a turning point in the row of events that followed the tram suspension of 2011. Exactly one month prior to the commemoration of “four years without bonde”, on July 27th, the tramway network of Santa Teresa had been officially re-opened (G1 2015). Unimpressed by this turnout,

residents have continued their yearly march since and do not seem to be willing to suspend it. Figure six below shows the official “cronograma”, that is, a (planned) schedule for the tramway re-installation as published by the State Department of Transportation (SETRANS) of Rio de Janeiro in 2015. As of that year, the tram was circulating only on a test track of 3,5 kilometers (marked red in the map below) between Carioca station and Curvelo, the first tram-stop uphill. In the years to follow, the main line of the network was subsequently extended, each year reaching a new station⁴⁵ further uphill as marked on the map below. As of 2018, the main line, with a total of 10km of track has reached its penultimate stop before the final “Silvestre” station, which connects with the tourist rack railway that leads to the Cristo statue. Construction works for the 4km-line two, marked blue on the map (“Largo das Neves” station), have still not been initiated as of my last stay in Santa Teresa in June 2019.⁴⁶

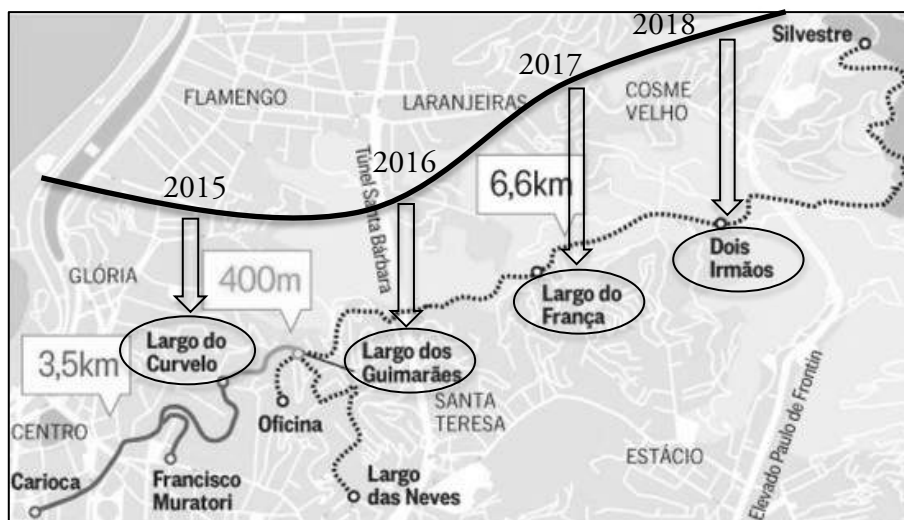


Figure 6: Timeline for reinstallation works

⁴⁵ The seven stations marked with bold letters (except “Oficina”) in fig. 6 are the main stations of the network. On the main line, however, there are at least 27 further tram-stops (not counting the “unofficial” stops that tramway drivers make according to request), which are marked with metal poles and stop signs. For further reflections on the role of stop signs during the re-installation process, refer to chpt. four.

⁴⁶ The original tram network of Santa Teresa had a total of 15km of track. Main line one (10km) and line two (4km) were complemented by a short, 750m branch of line one which led to one of the neighborhood’s few ground-level streets (“Francisco Muratori” in fig. 6). Another 250m of track connected the central Guimarães square with the so-called “oficina” – the tramway garage-and-workshop located in the heart of Santa Teresa.

Year 5 'Olympic Rehearsal'

One year after the protesters had stopped on top of the railway bridge, in 2016, the march would come to a total halt. On the occasion of “five years without tramway”, participants gathered at the central Guimarães square of Santa Teresa, to where the tramline had just recently been extended. Still not buying into the partial re-installation of the network, protesters used the mega-event-loaded atmosphere of the city during that year to enact an “Olympic rehearsal to save the bonde” [Prova Olímpica pelo resgate do bonde] (cf. fig. 5, bottom left). On this occasion, a new group of mostly young activists who were affiliated to Rio’s Right to the City movement⁴⁷ played a prominent role (Jóao 08/2018). Over one year prior to the event, in May 2015, this group had first appeared on the streets of Santa Teresa, when they enacted the so-called “Olympic Games of Santa Teresa”.

On that occasion, and while the official sporting venues of the city were still under construction for the upcoming mega-event of 2016, the activists had transformed the tramway reinstallation “sites” of Santa Teresa into an Olympic Park of its own. A hurdler jumped fences alongside a construction pit, workers paused their sand shoveling to applaud the long jump, and the historic tracks that were piled up alongside the street served as a racewalking circuit. “After years and years of hard work”, an alleged reporter announced with a false English accent, “a marvelous sporting complex [was] about to replace the ordinary tramway that once ran through the neighborhood’s streets” (Ninja 2015).

This playful intervention was documented as short video, and published by the Santa Teresa section of Brazil’s Mídia Ninja movement on their YouTube channel (ibid.). In the years prior to this intervention, the Ninja network of left-wing media makers had gained national attention, especially since their alternative coverage of the 2013 mass protests against fare rises. While the Ninjas were particularly active in São Paulo, a Rio branch of the movement had only recently set foot on the Santa Teresa hill in 2015, where they rented a decaying villa and started offering “cultural activities”, from video-cut, over political discussions, to graffiti workshops (Renata,

⁴⁷ For more information on Rio’s Right to the City movement, and their connection to the Santa Teresa case, cf. chpt. three.

22/03/2016). I first watched the youtube clip together with João⁴⁸, who explained to me that it had inspired her local group of Rio's Right to the City movement to ask the Ninjas to collaborate on the occasion of "four years without tramway" (João 05/09/2015). Together, the two groups of mostly young activists convinced the neighborhood association to let them organize the 2015 event. On August 27th, "athletes" of all kinds of sporting disciplines streamed into central Guimarães square from the side-streets. There were swimmers who immediately "dived in" to the big construction pit that still dominated half of the square; a shot-putter threw a plastic ball into the piles of sand that circled the hole; and more and more residents were attracted to the square as they followed the cyclists and runners who were competing with the local mini-busses on their way between Curvelo and Guimarães (ibid.). "The bonde stayed in the promise [ficou na promessa]",⁴⁹ João told me, explaining that the "Olympic rehearsal" had been enacted by her and her fellow activists to remind authorities of the unrealized promise of the bonde, of its abstract "absence" despite its partial return.

Year 6 'Online-Protest'

While the tradition of the march along the rails had already been interrupted in 2016, the event of "six years without bonde" finally unfolded on a completely virtual plane. In 2017, the notorious announcements featuring the bonde-graphic (cf. fig. 5) were shared by Santa Teresa-related groups via e-mail listservs, on facebook and twitter, but instead of inviting for a public event, this years' call for protest mainly featured a link to a public petition. The petition, drafted by Teresa, together with other members of the local neighborhood association, claimed a "true compliance [efetivo cumprimento]" with the restoration of the Santa Teresa tramway system, which had been in "course of implementation" since 2011 (own archive from AMAST e-mail listserv).

Addressed to Rio de Janeiro's State Secretary of Transport (SETRANS), the petition was written in the form of a letter, which claimed the immediate "return" of the Santa Teresa tramway. The neighborhood association, formally, could make this claim on the basis of a decision from 2011, by the same Court of Law, which had sentenced the city government to comply with the "complete

⁴⁸ For a more detailed introduction of João, please confer the methodology chapter ("Afraid of Things") in the introductory section. All nine informants who have come to constitute the "core group" of my research between 2014 and 2019 are presented there.

⁴⁹ For more reflections on this expression, please refer to chpt. "conclusion".

restoration of the system of tramways of Santa Teresa” (Process No. 0337079-49.2011. 8.19.0001). As a follow-up to that process, in 2015, the city’s Court of Law had also “frozen” the accounts of the former state secretary for transport, in addition to those of both the director and the then-president of the state company for transport, holding them responsible for the disrepair and subsequent deterioration of the system that led to the 2011 accident (Process No. 0423928-53.2013.8.19.0001). The neighborhood association now referred to these sentences, claiming to bear witness that “all the deadlines, timelines [cronogramas], promises made by the government remain[ed] unfulfilled” (AMAST 2017). While the AMAST ultimately did not enter into formal process with this letter – mainly due to missing resources, both financially and in terms of lawyers/plaintiffs available – it still extended the reach of the yearly protest action to the realm of online-petitions and court-actions.

Year 7 ‘Missing Paula Mattos’

In 2018, the currently latest event in the row of a total of “seven years without bonde” extended the reach of the protests into yet another direction. On August 27th of that year, I accompanied Teresa, João, Túlio, and his tram-replica together with around 70 people on a procession from the neighborhood’s main square towards the lower parts of Santa Teresa. It was for the first time that the march followed the course of the former tramline number two, that is, the so-called “Paula Mattos” line, named after a street and final stop of the line close to one of the neighborhood’s bigger squares and meeting places – the Largo das Neves (fig. 6). Under the motto of “Missing Paula Mattos [saudades]”, many of the actors who had participated in the events of the previous years – from Mídia Ninja and Right to the City activists, over members of the local neighborhood associations, to representatives of the various religions, and the favela organizations – walked down the abandoned tracks of former tramline two which had last been touched by the bonde in 2011.

The observations I made during this – at least for me – final protest march made me wonder how to qualify this series of events, that is, how to grasp the weight of “seven years without tramway” for the emergence of collectivity around the last surviving tramway of Rio de Janeiro? From the perspective of (urban) anthropology, it seemed at least plausible that the “ritualistic” character of the yearly commemoration had made it possible for people such as protest veteran Teresa, young activist João, and favela-artisan Túlio to partake in the tramway struggle and to form their volatile alliances. There seemed to be a pattern; a repetition of certain elements in each of the seven events

which allowed for residents of very different socioeconomic backgrounds, political convictions, and territorial belongings to get together every year anew. As classical anthropological literature reminds us, however, the mere repetition of the yearly march along the rails and the choreography of the events mentioned above are not sufficient to count as ritual. What differentiates rituals from everyday routines is the *purpose* and *form* of the actions (Lévi-Strauss 1975).

As a first distinctive feature of rituals is that they always imply the presence of something mythical, transcendental, or spiritual. In other words, a ritual meal has another purpose than simply eating (Mischung and Koepping 1999). In this line of argument, one parallel between the bonde-anniversary and classical definitions of a ritual might be found where certain material elements of the railway infrastructure, such as stations, tramway-tracks, and a viaduct, were *repurposed* to evoke the tramways' "presence" on a metaphysical level. Consequently, the "ecumenical rite [culto]" that has kept a more or less prominent place in the events' program over the years stands out as one way of spiritual repurposing. As the Anglican priest Caetano had explained to me, ever since the first years' "bonde-crusade", the local tramway stations had hosted the joint ceremony of the neighborhoods' different religious and spiritual leaders. In particular in 2015, on the occasion of "four years without bonde", the recently re-inaugurated Curvelo station was converted into a scene for ritualistic practice. "Borrowing" from the Brazilian Candomblé ritual of washing the stairs of the iconic Bonfim-Church of Salvador da Bahía,⁵⁰ a Baiana – the traditional name for women from the northeastern Bahía-region – spilled water over the floor of the station, in order to "prepare it for the return of the bonde" (fieldnotes, 27/08/15). By transplanting the Afro-Brazilian ritual to Santa Teresa, the Baiana repurposed the station as a spiritual place.

The second distinctive feature of rituals is the social form they generate. According to standard definitions, the emergence of such forms implies certain rules of conduct, as much as rules about actions which are to be avoided (Mischung and Koepping 1999). Adding to these, one of the most influential authors in ritual theory, Emile Durkheim, has argued that the overflow of excitement

⁵⁰ The beginnings of the syncretic tradition, which has become the second-biggest touristic attraction of Salvador after Carnival, are commonly interpreted as an act of repurposing. They go back to the late 18th century, where black slaves were forced to "wash [lavagem]" the stairs leading up to Bonfim church. Exchanging the normal water for the ritualistic "Água de Cheiro" (water from aromatic plants), followers of Candomblé found a way to repurpose the washing ritual for celebrating the god Oxalá, the creator of humankind (Bonfim 2000).

between a group of people performing, for instance, a religious ritual sets free a force which generates an extra-individual *form*⁵¹ (Durkheim 1965, 206-14).

By introducing the term “collective effervescence” for such instances of group-excitement, Durkheim has made a lasting contribution to contemporary reflections on the collectivizing force of affects and emotions (Seyfert 2012). Following from these reflections, it could well be argued that ritual studies contribute to an understanding of the collectivization process at force throughout the various commemorations of the tramway-suspension: by adhering to certain procedural rules related to “bemoaning” the accident or evoking the tramways’ presence, the people gathered throughout the yearly events felt a sort of shared metaphysical “excitement”, thus being drawn together more closely than before.

When examining the trajectory of the “seven years without bonde” more in detail, however, there remain some aspects that do not so easily fit into anthropological definitions of a ritual. Ultimately, the “repeatability” of the commemorative practices has been limited by various events, for instance, when the claims for the return of the tramway had been (partially) fulfilled, and also the “spiritual repurposing” of the Curvelo station has abruptly ended as soon as it started operating again. Other than the “patterning” of classical rituals, the form of the yearly events in Santa Teresa was less static, or more variable.

Accordingly, the protocol changed with every event, from reversing the direction of the march, to switching places, and protagonists – Clowns occupying the bonde, the bonde occupying Cabral. The causality of “ritual-form”,⁵² was regularly interrupted as Teresa and others constantly re-

⁵¹ On the issue of “form”, Durkheim has argued that the rules applied during a ritual are always already determined by the respective society (1965, 463ff). From this perspective, the forms of collectivity that are generated through ritualistic acts become mere epiphenomena of the respective social structure (cf. DeLanda 2006, 5). This latter aspect of Durkheimian theory has also left traces in Brazilian urban anthropology, especially in the work of Roberto da Matta, who, from his work on Carnival – probably one of the most prominent Brazilian rituals – argued that it would transform the streets into a space for temporary renegotiations of the social position of “individuals”, but ultimately refitting them into a hierarchic society of “persons [pessoas]” that privileges white men from the upper class (DaMatta 1997, 169–78). The Durkheimian approach has since been subject to heated debates and criticism in anthropology, incentivizing newer contributions to ritual theory to concentrate less on the (static) form of the actions, but on “ritualization” as a process with specific effects on i.e. cultural differentiation (Bell 2009, 8).

⁵² I wish to thank Marie-Luise Schneider at this point for teaching me the fine subtleties and intricacies of ritual theories. One central element of these theories, the so-called *rites de passage*, are based on the assumption that through rituals, individuals enter a new stage of their life, i.e. a new gender-specific role (girl to family-leading woman, boy to hunter) or generational phase (childhood to adulthood) (M.-L.

invented their respective roles and positions within the collectivity of people and tramway, re-assembling each year anew.

Ultimately, these misfits point to one of the major pitfalls of ritual theory, namely that it blinds out “complex contingencies” such as the ones just mentioned for the sake of identifying a social form representable through “consensus and homogeneity” (Chao 1999, 528).⁵³ For Teresa and others, the collectivity-generating potential of the yearly commemoration might not lie in exact repetitions, or fixed patterns, but in something else, even less graspable, which nevertheless strengthens their position vis-à-vis the local authorities and makes a whole neighborhood endure as “part and not part” of the city.

Consequently, instead of defining the seven years’ commemorations of the *bonde*-accident as rituals that generated a clearly demarcated and consistent “social form” in the Durkheimian sense, this chapter proceeds in a different direction. In order to prepare a more detailed analysis, not of the forms, but of the *formations of collectivity*, the next section introduces an understanding of “distributed agency” as common in studies of infrastructural assemblages.

Piling up: How infrastructure distributes agency

The bus that carried Teresa downhill for about 20 minutes drops her off on the narrow sidewalk of one of the busy streets of downtown Rio. It is almost 10 a.m. and the “four years without *bonde*” event is about to begin. Teresa hurries up a narrow side street, walks by a security guard, and straight through the metal fences that leave open a passage or gate. “Carioca station” is written in large letters and several languages on a blue banner above it. On the other side, just in the middle of a few steep stairs, a woman in blue overall offers Teresa a cup of water. Teresa frowns, and refuses. The other woman shrugs her shoulders and turns away. She carries a metal container around her neck from which she can extract the water, reminding of the equipment of Rio’s popular “*mate*”⁵⁴ street vendors. With the difference that her container shows the name of the public waterworks “CEDAE”; and the water she offers Teresa would have been for free.

Schneider 2016; Van Gennep 2005). In both cases, the form of the society that results from passing these stages is well-defined and it is also clear what roles individuals will assume from the beginning.

⁵³ Despite her critique, the author of here-quoted article reproduces a Durkheimian understanding, when she defines as “failed rituals” those which impede social reproduction and the emergence of group-identities (Chao 1999, interview with author).

⁵⁴ “Mate” is consumed in several Latin American countries, including Argentina, Uruguay and Paraguay. It is prepared by steeping dried leaves of the *yerba mate* plant in water. In Brazil, the drink is mostly consumed cold, its commercialized version (soft drink) mixed with high quantities of sugar.

“Everything depends on CEDAE” (fieldnotes 15/12/2015), a resident of Santa Teresa has once exclaimed during a meeting of the local neighborhood association in which I participated regularly in the months following the fourth’ commemoration of the tramway-suspension in late August 2015. Indeed, the Rio de Janeiro State Company for Water and Sewage⁵⁵ assumes a central role in the tramway reinstallation process. Workers in blue CEDAE overalls – just like the one the woman at Carioca station is wearing – have been the first to drive excavators, jackhammers and other heavy equipment to the neighborhood, ready to tear up asphalt and pull out cobblestones on search for the century old pipes that connect Santa Teresa to the vast water reserves of the Tijuca rainforest uphill, and to the sewage facilities downtown.

The replacement of leaking tubes and harmful materials (lead) with new copper-pipes has proven not to be easy, because the system is so old that not all supply pipes, branchings, and valves are mapped. Dating back to the nineteenth century, the installation of the water supply network actually “paved” the way for the first electrified version of the bonde, which has been inaugurated in 1896. Since that date, the course of the then-called “Via do Aqueduto”,⁵⁶ today the main street of the neighborhood (fig. 4, left picture, marked black), has been followed by the tramway. When the first tramlines were installed, layer after layer, the main street of Santa Teresa has gained first a new understructure of pipes and drains; then the dirt pavement was filled with cobblestones and metal tracks; and finally posts and overhead cables were installed to feed the whole system with electricity.

After the tramway-suspension in 2011, it is as if the “piling up” (Simone 2010, 4) of different elements of the infrastructures involved has to be repeated in order to properly re-install the system, which over the years has grown together inseparably with pipes, stones, cables, and all kinds of liquid, solid, or gaseous matter. Yet, “the [tramway] network is not a child’s play [a rede não é piada]” (fieldnotes 15/12/2015), to quote from the above-mentioned resident’s statement. Simply repeating the installation in “layer after layer”-mode has become almost impossible, since each of the streets below-and-above components is now inextricably linked to one or several public and private institutions in Rio, each responsible for the maintenance of the respective infrastructure.

⁵⁵ “Companhia Estadual de Águas e Esgotos do Rio de Janeiro” (CEDAE), in its Portuguese acronym.

⁵⁶ The street was renamed again in the 1950s as Rua Almirante Alexandrino after Alexandrino Faria de Alencar (1848-1926), military admiral and senator of Brazil’s first republic.

Figure seven illustrates some of these links between infrastructural matter and institutional actors in Santa Teresa (from top left to bottom):

Pointing to works “below ground” a traffic bollard features the logo of the public waterworks “CEDAE”, whose employees in blue overalls are standing on the sandy subsoil of the once-asphalted main street in the background. The “emergency”-van of the Grupo Gas Fenosa⁵⁷ is parked in front of a construction pit. At “ground level” somebody has written “bonde porra [goddamn]” on top of a concrete mixer. Metal tracks and other materials are stacked in front of the local office of the ELMO-AZVI consortium that is responsible for the tramway re-installation works. “Above ground” employees of the municipal waste collection company COMLURB are planting trees at the side of an already-renovated street section. A lifting platform from the electricity company LIGHT is parked underneath damaged overhead cables.



Figure 7: A “complex” actor constellation?

Given the apparent “complexity” of actors that becomes apparent just from these examples, it seems comprehensible that the re-inauguration of the tramway system of Santa Teresa has again and again been delayed, finally opening, at least partially, in 2015 – two years later than originally

⁵⁷ Rio’s gas company CEG (Companhia Estadual de Gás do Rio de Janeiro) has been taken over in 1997 by the private company “Gas Natural”. The Grupo Gas Natural Fenosa is the result of the “Gas Natural”’s merger with the Spanish “Unión Fenosa” in 2009.

promised. Regardless of their fulfillment or realization, however, the failed promises and broken infrastructures around the tramway-system of Santa Teresa have constantly re-assembled a heterogeneous set of actors.

In order to explore how the allegedly “complex” constellation of infrastructural elements and actors described above contributes to the emergence of urban collectivities, this section picks up on the concept of *agencement* as developed by Gilles Deleuze and Félix Guattari. Comparing the notion of “agencement” to the notion of “complex”, Guattari has argued that the former was “a notion whose comprehension [was] weaker, but whose extension [was] greater, enabling elements of diverse origins not to be excluded from the ‘complex’ field of actors [...]” (Guattari 2009 [1980], 41). For the case of the tramway-reinstallation, the notion of agencement allows to capture the “unconscious formation” (ibid. 24) of collectivity in Santa Teresa beyond human protagonism; including all kinds of actors, from piles of cobblestones, over garbage collectors, to water pipelines, into the analysis.

More recent translations of Deleuze and Guattari’s notion to the field of infrastructural research, well summarized in the work of Colin McFarlane, have shown how agencement captures “the power of *urban* formation” (2011, 209, emphasis added), that is, the ways in which the multiple socio-spatial becomings of the urban shape the agencies of their human and nonhuman inhabitants (ibid.). In a similar vein Stefan Höhne (2012, 143) has proposed to understand the material elements of an infrastructural assemblage as exerting “a highly constitutive force on the agencies of [the city’s] populations.” Further differentiating the debate from his empirical study of Santiago de Chile’s public transport system, Sebastián Ureta (2015, 4) has shown how the notion also allows for analyzing unequal distributions of power and hierarchies amongst the actors involved, for instance when “[t]he ways in which humans are brought into infrastructures spills outside them, directing and imposing limits to their agency.”

Reflecting some of the issues raised in scholarship on infrastructural assemblages, the example of the tramway-reinstallation well illustrates how agency has been constantly re-distributed amongst the humans and the material elements involved. As soon as the first construction sites appeared in Santa Teresa after the system’s suspension in 2011, for instance, a series of conflicts have erupted between the public waterworks (CEDAE) and the private gas company “Gas Fenosa”. While each party accused the other of damaging pipes and being responsible for the regular street flooding or gas leakages that appeared thereafter, the specific modalities of these companies’ presence and the

degree to which they tampered with things *below ground* has played an important role in negotiating distributions of agency. During my period of daily fieldwork observations around the neighborhood's main street (09/2015-12/2015), residents, construction workers, and local authorities reported all kinds of rumors associated with actual "things" to each other: workers from the gas company informed the local "administrator"⁵⁸ [administrador] that the CEDAE had placed their traffic bollards around the already-existing construction sites, just to "mark territory" (i.e. fieldnotes 11/10/2015, 13/11/2015, 24/11/2015); while in turn CEDAE workers told me that the "emergency unit" of the gas company had appeared only sporadically on the street "always when a visit from the administrator [administrador] ha[d] been announced" (i.e. fieldnotes 13/10/2015).

Another actor that has gained popularity, this one working *above ground*, is the Municipal Company for Waste Management COMLURB,⁵⁹ which took the remodeling of the streets as opportunity to plant new trees as part of a campaign for a "cleaner city". The association of COMLURB with "care" for the neighborhood is a recurrent theme amongst residents, and many have "adopted" a tree to look after, or else have participated in the re-forestation activities.⁶⁰

Again one level up, Rio's private electricity company LIGHT – arguably a powerful actor in Rio's infrastructural sector, which is involved in all kinds of "regularization" activities that exceed the realm of mere electric installations and come to include favela-"formalization" and control activities (Pilo' 2017) – has been able to secure its position. Today's "LIGHT"-company has been founded as "Rio de Janeiro Tramway, Light & Power" in Ottawa in 1904. It was not only responsible for the installation of the first comprehensive power network in Rio de Janeiro, but also almost monopolized the city's electric railway transport by buying up almost all existing tramway companies until 1908 (Ferreira, Ferreira, and Simonini 2012; Américo Freire 2012). Although the Santa Teresa line has been the only line to resist this (first) attempt to privatization, the LIGHT has secured its position by remaining the only company in Rio which is specialized on the tramway overhead lines, having been constantly involved in the bonde's maintenance from the early 20th century until today (Benchimol 1953, 97).

⁵⁸ The city of Rio de Janeiro is subdivided into 33 administrative regions, each of them counting with a local "administrator", appointed directly by the city's municipality for a period of 4 years (RJ GOV 2019).

⁵⁹ Companhia Municipal de Limpeza Urbana (COMBLURB), in its Portuguese acronym.

⁶⁰ Part two provides more details on the ambivalent promises of "preservation" and care, vis-à-vis the "threat" of other elements involved in the reconstruction process.

In contrast, the consortium that entered the scene as a new actor two years into the tramway-suspension has been less successful in securing its position *on the ground level*. After the ELMO-AZVI⁶¹ gained the concession for renewing the entire railway-network in 2013, residents started blaming it for damaged street pavements, delays in construction works and “disrespect” of historical materials. Figure seven shows two issues of conflict: On the right hand, piles of metal tracks, which according to some residents had been unjustly “scrapped” or “brought away” and sold to other companies; on the left hand, an ELMO-AZVI vehicle with concrete mixer standing in front of the consortiums’ local office has been tagged. One of the writings – using a more aggressive tone than other *bonde-graffiti* in the neighborhood⁶² – states “BONDE porra [goddamn]!” (Fig. 7). In addition to loosing popularity in the neighborhood, the consortium’s position vis-à-vis public authorities was also severely damaged when it finally received two fines for not complying with its contractual obligations in 2014 and 2015 (Bertolucci 2016).

In light of these examples, Teresa’s gesture to refuse the water offered by a CEDAE-employee back at Carioca station gains new possible meanings. From the year-long struggle of the residents “to get their *bonde* back” and the antagonism this generated with “public authorities” that have put into risk or deliberately delayed the re-installation process, it seems quite consequential that Teresa will not accept a gift from any of the institutions involved. Yet, as the above-stories on some of the corporate actors involved show, their positions shift continuously. If CEDAE was praised for its steady presence yesterday, it might become an adversary not even to accept water from today.

Linking these accounts back to the conceptual discussion as introduced above, it could be argued that through the lens of *agencement*, it becomes possible “to come up with cartographies capable of identifying and eluding certain simplistic conceptions concerning [for instance] class struggle” (Guattari 2009). Following an interpretation of this quote in Hélène Frichot et al.’s (2016) *Deleuze and the City*, it would not be decisive anymore whether drawing the lines of conflict between “the people” [*o povo*] and state, or between public and private institutions, because “agencement brings forth the *open-ended* dynamics of power relations everywhere, in any spatio-temporal configuration [construction sites; court; neighborhood; city]” (ibid., 5, emphasis added).

⁶¹ The consortium, which consists of the engineering and construction companies Elmo Eletro Montagens Ltda. and the Brazilian Branch of Azvi S/A, has strangely been the only applicant for the public invitation to tender in 2013 (AMAST archive, “protocol of technical meeting with engineers of ELMO-AZVI and CENTRAL”, 06/09/2013“).

⁶² For more on *bonde*-claims in graffiti form, cf. chpt. three.

In the reinstallation process, alliances have formed as quickly as they were undone, failing on leaking pipes, or consolidated through century-old cables, bound together by trees, and divided through holes in street pavements, or losing in influence, money, and reputation because of “mistreated” tramway-tracks.

Looked at from another angle, the open-endedness of the collectivity that gathers at the bonde-anniversary has a second implication for the distribution of agency. Seemingly unnoticed by Teresa and the water carrier, a still-vacant ticket booth which patiently stands in the background of the scene draws attention to the “pending” determination of transport fares for the new bonde line. This box does not only hint towards future-decisions but also reminds of other elements; of tickets, turnstiles, and parts of the tramway-carriages, which have a long history of determining (and, importantly, not “being determined by”) price politics.⁶³ What this short example shows is that human actors – be it passengers and transport companies, or (in the above-examples) residents and construction firms – have not only used material elements to improve their position, but their capacities to act have also been *limited or enhanced* in surprising ways by seemingly secondary material elements.

The following paragraphs exemplify a way of following the black-and-yellow bonde t-shirt which has accompanied Teresa from the beginning of this chapter, in order to work out, in the words of Alexa Färber (2014, 95), how such elements “stabilize or destabilize [...] assemblages in unexpected ways, beyond pre-established concepts of power relations”.

As soon as Teresa has passed the vacant ticket booth and entered the platform through an indulgent turnstile, the t-shirt becomes more than her individual protest outfit for today. Teresa does not hesitate a moment. Between the people that have gathered there in a circle, she does not direct her steps towards the formally dressed representatives of the transport ministry or the drivers, all wearing nametags; neither does she join the three rather casually dressed members of driver Nelson’s family, the journalists with their cameras, or the young man whose t-shirt print speculates “if the city were ours” [Se cidade fosse nossa].⁶⁴ The group that Teresa joins is by far the largest in numbers, and her shirt blends seamlessly with the

⁶³ The (micro-)politics of material elements, and in particular the tramway’s footboard, are the central theme of chpt. three.

⁶⁴ The same t-shirt is worn by the recently-shot politician Marielle Franco, in one of the many press pictures documenting her political activism (Morales 2018). Franco was the only lesbian and black woman in parliament in Rio for the left-wing PSOL (Partido Socialismo e Liberdade) party. More on the “If the city were ours” group in chpt. five.

identical bonde-shirts worn by the present members of the neighborhood association AMAST.

As mentioned above, the “Friends and Inhabitants of Santa Teresa” (AMAST) are amongst the few actors that have constantly been present throughout the “seven years without bonde”. It is no coincidence that “bonde” is the most prominent topic on the neighborhood association’s website. With 111 entries it outnumbers all other topics, ranging from “security”, over “busses” to “environment”, which taken together add up to a total of 84 entries (AMAST n.d.). Besides organizing most of the anniversaries of the accident since 2011, the AMAST has been the driving force behind numerous protest actions “in defense of the bonde”, ranging from public manifestations to direct interaction with public authorities in regular meetings and through court actions (AMAST n.d.).

However, the AMAST is not the only group in the neighborhood that has claimed the tramway as their “main concern” (Ibid.). Already prior to the AMAST, the “Amigos do bonde”, a group of tramway-fans who was active in the neighborhood in the 1960s and 70s, engaged with the issue – mainly by collecting an impressive number of historical documents, construction plans, pictures, schedules, and technical files. This archive was taken over by the AMAST, which was actually founded by the very same people who had been members of the “Amigos do bonde” before (AMAST private archive, fig. 3).

When Brazilian Military Dictatorship (1964-1985) entered a period of political opening in the 1980s, neighborhood associations were established in all major Brazilian cities, and have since survived as powerful local means of residents’ participation in urban politics (Kuschnir 2005). While one of the main points of critique with neighborhood associations in public discourse is that they are often affiliated or at least “close” to a specific politic party, the AMAST has a reputation in Rio for remaining impartial and for standing out from the usual scheme of clientelism and corruption (ibid., cf. Koster 2019). After its foundation on the sixth of July 1980 (Fig. 8) – actually making it the oldest neighborhood association of the city – the AMAST has added more and more documents, including the protocols of its monthly meetings to the archive.

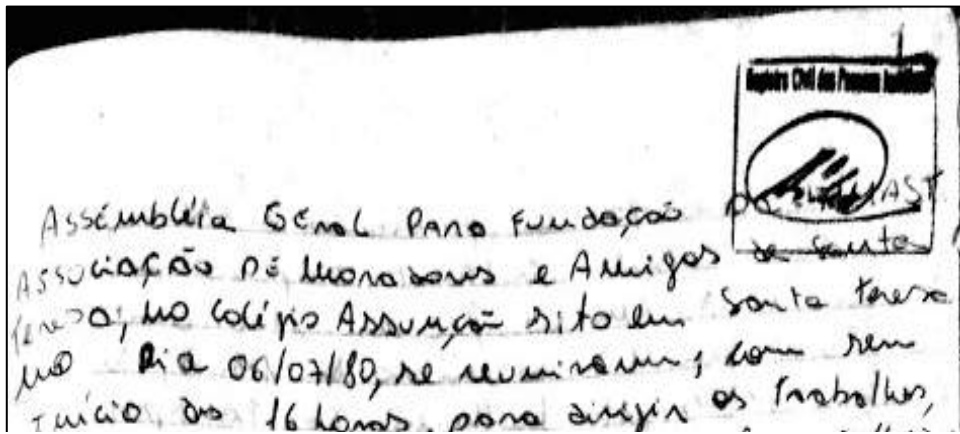


Figure 8: Protocol from the foundation of the neighborhood association AMAST

Only more than 25 years later, the AMAST was joined by two more associations: by the so-called “AME-Santa”,⁶⁵ founded in 2006, whose name translates as the imperative form of “love Santa [Teresa]” and in 2013 by the “AMO-Santa” – literally “[I] love Santa”. The “Association of Friends and Entrepreneurs of Santa Teresa” (AME) is a registered organization, initiated by representatives of the neighborhoods’ “gastronomical, cultural and touristic center” (AME Santa - Associação dos Amigos e Empreendedores de Santa Teresa 2013). The AMO-Santa, in turn, understands itself as “alternative neighborhood association” (interview Santana, 27/10/2015) but with difference to the AMAST, it is not registered as such legally.

Throughout their explicitly stated aim of “economical and social revitalization” (AME Santa - Associação dos Amigos e Empreendedores de Santa Teresa 2013), the AME-Santa positions itself against the AMAST, who have organized various protests against a threatening “touristification” of the tramway, and of the neighborhood in general.⁶⁶ The logo of the AME-Santa is a group of people holding hands with each other and with a human-sized bonde amongst them. While it might be true that the AMAST touches a nerve when they protest against price-politics or design changes to the tramway that might favor a touristic use of the vehicles, the AME-Santa has resonance amongst those residents who actually profit from touristic visitors to the neighborhood and who have long nurtured hopes that the bonde come-back would also bring back potential customers. Actions such as the occupation of an old mansion that was transformed into the luxury

⁶⁵ Associação dos Amigos e Empreendedores de Santa Teresa [Association of Friends and Entrepreneurs of Santa Teresa].

⁶⁶ For more reflection on the bonde and other material elements in the neighborhood as “threats”, cf. chpt. five.

hotel Tèreze by the Sofitel-group in 2006, have turned some residents who had been promised job opportunities and a general economic revitalization of the neighborhood against the AMAST, whose president holds that “[the AMAST] is not against progress or development, but that our neighborhood has its particularities, which need to be respected” (Adriene, 17/11/2015).

In a similar vein, the AMO-Santa tries to fill a vacuum that it intuitively felt there were “the AMAST is seen as a bourgeois association by many in the neighborhood”, as Santana, a small entrepreneur in his 50s and one of the three long-term members of the AMO association told me when we sat under an almost nonexistent ceiling in the living room of his old mansion (Santana 27/10/2015). Founded by a local delegate of the centrist to right-wing populist party Partido Trabalhista Brasileiro (PT), the AMO has functioned mainly as a one-man project in opposition to the allegedly “leftist” (ibid.) positions of the AMAST for around three years. After having lost its campaign to enter the city council in 2016, its president, Emídio do Badalo, has also taken offline the AMO-Santa website and continued his public appearances only under the more-successful name of an eponymous carnival group, the [bloco] “Badalo”. Before disappearing again in 2016, the AMO has stated its position on the associations’ website as follows

surg[ing] from the deep necessity for integration of the different, completely disconnected and sometimes even dissonant populations of this neighborhood, which does not only consist of picturesque mansions, but also counts with numerous communities [comunidades, another word for favela] of huge demographic presence, yet, with few to no representation (AMO Santa - Associação de Moradores e Amigos de Santa Teresa 2015)

In a press interview from the same year, president Badalo confirmed the antagonism of his association to the AMAST, provocatively also spelling out its acronym as “Association of Residents and Friends of Santa Teresa” (Amorim 2013). Other than the AMAST, my conversation partner Santana confirmed, the AMO had been founded to represent the local *favela*-inhabitants who were very happy with the design-changes to the new tramway model – namely the taking away of the tramway’s footboard, which had served as a free-riding⁶⁷ device for centuries (Santana 27/10/2015, cf. Kemmer 2019). While suspecting the AMAST to have authored a then-recent graffiti-message which claimed the tramway’s footboard back, AMO-president Badalo said to approve of these changes: “For the security of the people it’s very good. I live here since more than 50 years and I’ve

⁶⁷ The footboard, and the associated practice of riding the bonde without ticket (“free-riding”) is the main topic of chapter three.

seen so many people who fell out of the bonde, the new bonde will be a very secure thing” (Amorim 2013).⁶⁸

Both the AME- and the AMO-Santa associations have, through their relation to the tramway, been able to improve their bargaining powers and capacities to act vis-à-vis official institutions and residents alike. Still, the AMAST holds a special position in the neighborhood for two main reasons. Firstly, its’ juridical status as “neighborhood association” makes the AMAST the only elected association in Santa Teresa, and by this the only legitimate representation of inhabitants in negotiations with public authorities, in addition to providing her with the power to enter into juridical dispute with them.⁶⁹ While in general, neighborhood associations have not entirely recovered from Brazilian dictatorship – being widely seen as still controlled and infiltrated by political parties, and, more recently, as “instruments” of drug-traffic organizations in *favelas* (Vargas 2005) – the AMAST presents an exception to this picture (Pires 2014; Kuschnir 2005). Even though the AMO-Santa has touched a sore point when accusing the AMAST of “bourgeois” and “leftist”, and the organization is looked at with suspicion and as potentially hindering the neighborhoods’ economic revitalization by many residents, its current administration has been elected by more than 250 members (Souza 2017). What is more, “the power of the [AMAST] depends on the degree of mobilization it achieves”, as the association confirms in its own statute. Even though the carnival-group of AMO-president Badalo is one of the biggest in Santa Teresa, and the AME-Santa is the only organization that represents local entrepreneurs’ interests, they have not been able to attain such high participation in protest marches and public hearings like the AMAST.

The second reason for the particular agency of the AMAST compared to other associations in the neighborhood has to do with the bonde-shirt itself. The man who invented the black-and-yellow print logo of the tramway (cf. fig. 5, top left), is ZOD, a local entrepreneur in his early 50s, DJ, and street vendor. In an interview, ZOD tells me a story of the bonde-print:

⁶⁸ More on “safety“ measures, such as the introduction of a retractable footboard, in chapter three.

⁶⁹ The AMAST has last won a trial against the state government, which led the court to freeze the private assets of then-secretary of transport, Julio Lopes, accusing them to have missed the “preventive maintenance” of the tramway because of administrative misconduct (Correa 2015).

I invented the graphic in the night of the accident, on the 27th of August 2011. Because I could not sleep and I still felt the sound of the bonde, the rattle, the vibration, I went back to my computer and took a photography I had taken of the bonde some time ago. I made it look like a traffic sign. And I felt I needed to attach a teardrop to it [faltava uma lagrima], the one that everybody kept in a corner of their eyes during that period, a collective lump in their throats [o nó coletivo na garganta]. (ZOD 14/10/2015)

While the AMAST could not foresee how the bonde-symbol would spread rapidly throughout the neighborhood, being glued to cars, printed on posters that covered whole tramway-stations, and sold by various small entrepreneurs – including ZOD himself – in Santa Teresa’s streets, the AMAST has however influenced *how* the bonde is represented. The collective “sadness” that ZOD recalls as reason behind his decision for adding a teardrop to the graphic is a reference often made by residents, who would argue still in 2015 that “together with the bonde, Santa Teresa lost its happiness [alegria]” (Dario, 24/10/2015). The strength of Teresa and others vesting the “crying bonde” shirt back at Carioca station (fig. 9) seems to be that they can postulate how a whole neighborhood is sad, and that with it, collective mobilization becomes necessary: “Do not lament alone. Come fight collectively [Venha lutar coletivamente]”, the association claims on its website (AMAST 2015b).



Figure 9: Collective sadness

In addition to the AMAST and ZOD, who seem to be successfully using the bonde-shirt – whether for mobilizing a certain “collective feeling” (Ahmed 2004b) that urges for protest, as in the first case, or for gaining in popularity and money through selling bonde-prints, as in the second case – there is a third person which exemplarily stands for how the shirt can also do things not so easily controllable.

Street vendor Sheila⁷⁰ (fig, 10) is in certain ways very similar and yet very different to ZOD. Both are artists, both have painted the bonde in one or another way, and both sell t-shirts. Yet, while Sheila seems to be as famous as ZOD amongst Santa Teresa's residents, her fame is not attributed to DJ-shows in local restaurants or pop-up stands at street-markets and art exhibitions as in the case of ZOD, but simply from the fact that Sheila untiringly walks up and down the streets of Santa Teresa every day, carrying her notorious umbrella against sun and rain, and a huge bag with a set of bonde-shirts. Sharing with ZOD an experience of living in the neighborhood for more than forty years, Sheila has never left her small, stuffed room in the old, run-down mansion that she shares with twenty more people at the central Largo dos Guimarães square, just like ZOD has never left his picturesque house with the fresh blue paint in the more expensive part of the neighborhood around Largo das Neves.



Figure 10: “Give me a shirt”

Sheila does not like change too much, and her days vary as little as possible. After getting up at 6am every morning, she sits down over “cheese bread [pão de queijo]” and coffee, which she gets half-price at the small café down her house, and spends her first hour of the day taking notes on people's conversations, or portraying them into a small notebook. The rest of the day, interrupted only by a two-hour lunch break between 1-3pm, Sheila deals with the t-shirts, while always paying peculiar attention to peoples' expressions:

So I walk up and down the streets. After a round and a half someone asks me for a shirt, or she has a problem, or I give one for free. So there was that one guy. He shouted at me

⁷⁰ For a more detailed introduction of Sheila, please confer the methodology chapter (“Afraid of Things”) in the introductory section. All nine informants who have come to constitute the “core group” of my research between 2014 and 2019 are presented there.

from a staircase: ‘Hey, give me a shirt’. So if one would write that down, she would probably write: ‘Would it please be possible to give me a t-shirt?’ But sometimes, oral language is more concise. So if he says ‘give me a shirt’ he is not only asking for it, but really claiming it. And this is where he ‘collocates’ [colocar] himself, claiming his right to that place and shirt. Because he climbed up those stairs, he’s familiar, he knows everyone in the neighborhood... Colloquial language is like this ‘give me a shirt’. It is all about a person’s ‘collocations’ [colocações], or connections [conexões], or disconnections. (go-along 02/10/2015)

In Sheila’s example, the t-shirt becomes more than a symbol of protest. It is also an ordinary sign of claiming a place in the neighborhood, produced in such quantities over the years that it reappears everywhere around Santa Teresa, sold in local second-hand shops, worn by street dwellers, or given away by people like Sheila. In this sense, the t-shirt can be taken as an example for the open-endedness of urban formations of collectivity that an assemblage perspective attends to: It can be protest-outfit, commodity, and circulating place-holder at the same time. While the t-shirt print assembles a certain group of actors around the shared sadness for the loss of the bonde, the image of the crying bonde has soon become so diffused in the neighborhood that all kinds of actors have come to make very different uses of it. In this sense, by following the t-shirt one can also follow a whole heterogeneous set of actors while they constantly re-assemble around an absent modality of transport. As Sheila’s example suggests, this is not a stable formation of urban collectivity, and people’s bonds to a shirt, a tramway, a neighborhood, emerge as swiftly as they might also dissolve.

Present in absence: Experiencing collectivity

The group of protesters sets itself into movement, departing from Carioca station. The bonde-shirts are everywhere now, spread across the march of protesters, while they slowly move uphill until reaching the second of the three stops planned for today. The shirts line up again, before one of the speakers from AMAST announces a minute of silence. Where are we? The plate attached to the low concrete wall that serves as street embankment shows the date of the accident and the names of the victims, engraved in metal. Teresa starts crying, others join her. This is the place of the tramway-accident 2011. Four years ago, the bonde derailed and crashed into the lamppost that stands right beside the metal plate. Today, a small tree, planted into the earth by the widow of driver Nelson, will join the flowers already growing below the plate.

Was Nelson responsible for the accident, did he drive too fast? This is the version that circulated briefly during the days following the accident, supposedly first outspoken by Rio’s then-secretary

of transport (Junqueira et al. 2011). Or was the accident rather the fault of the government, which had misappropriated international funds meant for tramway-maintenance, ultimately causing the break-failure that led to the derailment? All these questions seem to float in the air while both protesters and representatives of public transport agencies gathered at the accident-place keep silent, and mutual accusations remain unpronounced today. Finally, one of the bonde-shirt holders rises to speak:

Nothing in life simply ends, and even less a bonde like this. Love stories also never end. The lovers might not see each other anymore, but there is something that continues. And a case of love with a bonde also does not end. It is but it is not only [é mas não é só] the tracks, and the walls, and the t-shirts and all this. (Claudia, 27/08/2015)

Her words fill the silence in a double sense. They do not only replace the vacuum of sound with a new voice to focus on, they also seem to wash away the thoughts about eventual culprits for the bonde accident. The suspension of the tramway has evoked a collective experience of loss, and shared feelings of sadness, anger, and hope amongst a whole set of very different residents.

In some ways, the words of the speaker add nuance to Susan Leigh Star's (1999, 382) influential claim that "infrastructure becomes visible upon breakdown". In Santa Teresa, all kinds of actors constantly re-assemble around abandoned stations, vacant tracks, an absent modality of public transport. On the 27th of August 2015, many of those who have negotiated their position vis-à-vis other actors during the four years that have passed since the accident gather at Carioca station: From the AMAST, which has bundled shared feelings of sadness and mobilized protesters around the crying bonde-shirt, over organizations like the AMO and AME-Santa which have nurtured hopes for a potential revitalization of the neighborhood or resentments against the local bohème, to construction firms, infrastructure providers and transport agencies, and with them tramway tracks, overhead cables, pipes and trees.

However, moving beyond the flashlights on the different actors that have gathered momentarily at the commemoration of four years "without", it becomes apparent that already prior to its ultimate suspension in 2011, the bonde had experienced several instances of breakdown. Indeed, the next chapter will confirm what Brian Larkin (2013, 336) has called out for in response to Star, namely that the history of the tramway prior to the accident is marked by a whole "range of visibilities" – from its grand staging as advent of modernity when first introduced, over furtive

upper-class rejections and subversive usages during its early years, to slow decay, missed maintenance and dooming oblivion.

This chapter, though, stays with the range of *in*-visibilities that the bonde-breakdown of 2011 reveals. Whereas it might have even seemed so far that some of the actors could only become visible to residents because of the breakdown, the present section tries to get closer to the nuances of presence and absence that have become graspable or rather sensible after the accident. The seven years post-accident have been marked by all kinds of “covering-over” of failed bonde-modernization projects, of half-buried tramway tracks, of groping in the absolute darkness of government plans and regulatory grey zones. The quotation from the accident-commemoration above, however, might point to another quality of such kinds of invisibilities.

What the “lovers”-analogy suggests is that regardless of whether the tramway, the tracks, the shirt, or other socio-material elements of the infrastructure become physically “invisible” to each other, the bonde “does not end”. Hence, the formations collectivity under study might not be analyzable alone by attending to questions of in/visibility. Inspired by Gastón Gordillo’s investigations into the “rubble” (2014) that was left of Spanish colonizers’ pathways through the North-Argentinean Chaco region, the following sequence suggests to ask how the bondes’ absence has “turned into physical presence” (*ibid.*, 31), that is, how it provoked bodily reactions and shared feelings and, by this, has generated a form of collectivity out of the commemoration of “years” without tramway.

Between assembling in circles at the place of the accident and at Carioca station, Teresa and the others form a long line of human bodies. Slowly, the march departs from the station, following the tramway tracks like residents have done for four years now to mourn the loss of the bonde. For the first time though, the march will take the direct way, and instead of climbing up the hill from street-level, today, residents cross the railway bridge that has once served as aqueduct (*fig. 11*). The aqueduct, today known as the Arcos da Lapa has been renovated various times until appearing in its current splendid white form. Standing out as huge landmark of the city against the small houses of downtown Lapa district, which extends between the slightly elevated Carioca station and the Santa Teresa hilltop. As soon as the first people step onto the narrow passage on top of the Arcos [arches], the marchers are forced to slow down and move closer to each other. No more than two at a time will fit within the narrow space between the metal-fenced bridge railings. Limited by track gauge, sidewalls and an uncomfortable pavement of loose stones within the railroad-bed, people look down and watch their steps carefully. Movements synchronize almost automatically, no one steps into the front person, no one is able to overtake, and the march advances at uniform speed towards the other end of the bridge.

When the first people have almost reached the center of the bridge, the march suddenly comes to a halt, some stumbling, others aching, until everybody suddenly falls silent. Conversations stop, and people seem to hold their breath. Those standing in the back like Teresa and me cannot see what is happening in the front and only later will we learn that a huge banner, stating “Motorneiro Nelson, we will never forget him [jamais o esqueceremos]” has been unfolded by some protesters and hung down the arches. For now, feelings of great heat, the sun burning down on unprotected heads, hands start sweating, heartbeat accelerates. Most of us avoid eye contact.

That night, I recall the situation in my notebook: “It seems we all hope for the same thing now, and nobody will talk to anyone or look at anyone else until we do not finally move on. Only when I could sense a movement in front of me, I started to breathe consciously again” (fieldnotes 27/08/15). Most curiously, it was during this moment of intense discomfort, that I could clearly sense the absent tram for the first time. It was like having been transported back into the wagon again, sharing a situation of unease with all those unknown people whose presence I could impossibly ignore.



Figure 11: March across the aqueduct

Only later, about a year after I participated in the march across the railway bridge, I came across a passage in David Bissell’s (2010) extensive research of everyday experiences of railway travel in British train carriages that describes a remarkably similar scene. While carrying out participant

observation of train commuting on the East Coast Mainline between London and Edinburgh, one day, Bissell witnesses an improvised train stop. The ways he described how his body is hit by “waves of frustration” (ibid., 275) reminded me of sensations I had myself experienced on the railway bridge: the adrenaline rush that Bissell describes seemed very similar to the one that had made my hands sweat on the aqueduct; and his description of how he turned “strangely inert” reminded me of the sudden stop on the tramway bridge, when people suddenly stopped talking or even looking at each other.

Instead of assuming, however, that an unplanned halt and the subsequently emerging “misanthropic atmospheres” inside the carriage create an isolating-cum-individualizing experience, Bissell argues that quite contrary, they give rise to “the formation of particular collectives” (ibid., 278). From his observations of the event, he suggests that

We might think of how communally experienced adversity through the event of the delay galvanizes the ‘passenger body’ where the eruption of frustration in the carriage generates shared dispositions (ibid., 276).

Rather than interpreting the circulating negative feelings amongst people inside the train carriage as leading to distanced relations, Bissell argues that being (involuntarily) captured by such atmospheres creates a “passenger body”, understood as collective of humans, materials and technologies, which bears “the potential to redraw and negotiate the field of what might be possible” (ibid. 286). Coming back to the case of the march across the Santa Teresa railway bridge, this opens up for speculating not only on the emergence of such collectivities through the presence of elements that are physically *there*, but also on how that which has been lost – the bonde – *makes present* another kind of “passenger body” while the marchers experience an unplanned halt *as if* they were inside the tramway vehicle. Confirming such a perspective, Colin McFarlane and Ben Anderson (2011, 163) have argued that “assemblage thinking” allows for exploring *potentialities*, thus adding a temporal perspective not only on the here and now, but also on the collectivities that could (have) form(ed).

Such a vision on infrastructures as mediating collectivity is shared by both assemblage urbanists and classical sociologists, and well summarized in the work of Urs Stäheli (2012, 112), who argues that

[there is] a specific type of infrastructures [which] does not only co-constitute the collective, but it also allows it to be *experienced* – both in the present and beyond, as anchor point for imaginations of collectivity.

Returning to the analysis of the march across the railway bridge – and in response to Bissell and Stäheli – it can be summarized that the *absent* tramway has enabled an experience of collectivity “beyond the present”. On the one hand, through generating shared feelings amongst the marchers “as if” triggered by an improvised stop, it has reminded of past collectivities like those that might have emerged inside actual carriages. On the other hand, because experiences of collectivity around the bonde persist *despite* its material absence, it becomes imaginable that these will repeat also in the future, even after seven years “without bonde”. Through the next chapters, I choose to follow these lines of thought by further experimenting with combinations of approaches to assemblage and affect to account for the presently-assembled, but also in order to speculate on past collectivities (chpt. two) and their modes of un/relating (part two) in light of a troubled present and its uncertain futures.

Two A Premissory Assemblage

Table 4: “Rio de Janeiro’s tramway century”

1859	Inauguration of the first tramway (animal-powered) in Rio
1896	Santa Teresa inaugurates first completely electrified tramline of South America
1950s	Rio has largest tramway network in Brazil (1,468 trams, 650 km tracks)
1960s	Zenith of Santa Teresa tramway network (35 trams operating)
1968	Monopolization and privatization of bus service in Rio
1965-1970	Dismantling and suspension of all Rio-tramlines, except the bonde of Santa Teresa

“Because Brazil used to be all tramways, especially in Rio de Janeiro.” (Luciana, 16/08/2018)

The above quote is taken from a conversation I had with the chief archivist of the Rio de Janeiro’s Light and Tramway Company (LIGHT) at a relatively late stage of my research. Luciana and me had been put into contact because I was looking for a specific photography of a tramway-publicity from the early twentieth century (fig. 13 below). The chances of finding the respective document in the company’s vast archives was high, because LIGHT had not only been the main actor behind the electrification of Rio de Janeiro’s first bondes at the turn of the 20th century, it had also held a quasi-monopoly over the majority of Rio’s tram-lines until the late 1950s (Weid 1988; Américo Freire 2012).

While we leaned over a table with pictures and newspaper articles, Luciana gave me her explanation for the large number of documents spread in front of us: Rio had once been the “center” of Brazil’s urban railway experiments, she argued. All new systems had been tested here first, from the early horse-driven tramways, over steam engines, to the first electrified vehicles. Between the last two decades of the 20th century, the city produced more railroad companies, types of tramways, track gauges and kilometers of rail network than any other place in the country, Luciana added. Starting from Rio, Brazil had irreversibly entered what she called “a tramway-century” [o século dos bondes] (Luciana, 16/08/2018). This chapter is guided by the question how the bondes of Rio de Janeiro have influenced urban promises during this period of time, between the 1850s and the 1960s (see table 4).

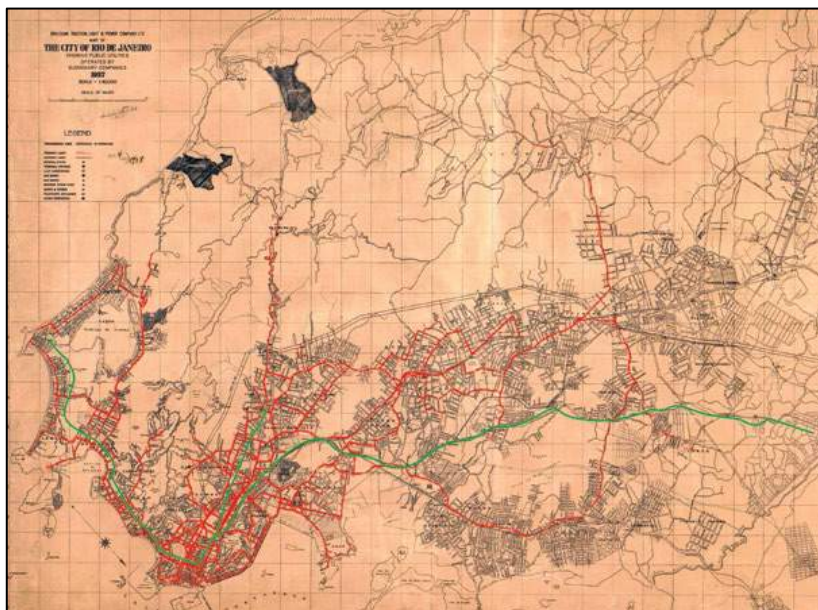


Figure 12: Rio's tramway network in 1937⁷¹

In 1859, Rio was the first South American city which introduced public railway service, and after their electrification from the 1890s onwards, the *bondes* quickly evolved into an urban means of mass transport (Weid 1994). This technical innovation left its traces in popular culture and has survived in contemporary common language expressions: “To buy a *bonde*” [comprar um *bonde*] for example means “to make a bad deal”; if somebody “takes the wrong tram” [pegar o *bonde* errado], she has deceived herself about the success of an enterprise; and one can even “miss the *bonde* of history” [perder o *bonde* da história], when being overtaken by the events.⁷²

In 1896, the *bonde* of Santa Teresa became the first entirely electrified system of tramways of the whole South American continent. In the years to follow, the tram tracks expanded from a few lines in the center to cover the whole city, including suburbs (fig. 12), with passenger numbers increasing up to seven times until the early 20th century (Santos 1934). The introduction of this new type of vehicle had such a profound impact on city life and the organization of urban space that Brazilian historians speak of a Rio de Janeiro before and after the “revolution” of collective transport (Abreu 1987, 37).

⁷¹ Marked red: electrified tramway lines in 1937; marked green: lines 1 and 2 of Rio's metro in 2015, added by ©Álvaro Franca for comparison.

⁷² Quotes are taken from own research from LIGHT-archive (see chpt. “Afraid of Things” for more details on methods and fieldwork).

Confirming this hypothesis from a broader perspective on the “History of Private Life in Brazil”, Nicolau Sevecenko (2006b) argues that technical innovations played a central role in the ruling authorities’ attempts during the first Brazilian Republic⁷³ (1889-1930) to maintain peace and order against a political context which was marked by the deep inequalities of a society of slaveholders.⁷⁴ New artifacts stemming from the fast developments in energy production and petroleum-based industries became crucial for eliciting a “confidence for the inevitable victory of progress” amongst the population (ibid. 2006b, 27).

Indeed, at the time of the introduction of the first electric bonds in the late 1890s, most of the (white) men who dominated politics in Brazil had engineering backgrounds (Fausto 2003, 138). Rio de Janeiro’s influential mayor Francisco de Pereira Passos (1902-1906), for instance, was a trained railway engineer who had studied under the controversial Baron de Haussmann in Paris. When coming back from France, Passos brought with him not only knowledge of technological innovations in the transport sector, but also an ideological background to that knowledge which was common amongst Brazilian elites of the time. The public authorities’ thinking as described by Sevecenko, can be interpreted as an embrace of the “technological fix”, that is, the belief that science, engineering, and new types of machines would resolve social, economic and political problems.

In Rio, this thinking went hand in hand with the dynamics of what has been described as “spatial fix” in critical geography (Harvey 2001, 24). The city administration, together with the private railway companies of the time promoted geographical expansion and the urbanization of new neighborhoods through tramlines as part of a strategy that was supposed to resolve the problems of overpopulation and socio-economic conflicts in the city center. However, while the new trams hurriedly evolved into a means of mass transport, confirming Luciana’s impression that especially cities like São Paulo and Rio de Janeiro became “all tramways”, their alleged success story during

⁷³ The Brazilian Republic from 1889, which started with a coup d’état by Marshal Deodoro da Fonseca against Emperor Dom Pedro II, put a sudden end to the constitutional monarchy of the “Empire of Brazil” (1822-1889) that had ruled since independence from Portugal.

⁷⁴ Brazil abolished slavery as late as in 1888, making it the last country in the Western world to nominally end slavery, although Brazilian black scholars and postcolonial academics have convincingly argued that “in a society like the Brazilian, the legacy of slavery is present in the racism which black people experience *today*, and whose opportunities are restricted because of this system of repression” (Ribeiro 2018, 98, own translation, emphasis added), while “the marks of slavery are still apparent, these days, metamorphosed into the misery of slums and shantytowns“ (Gomes 2011, 410) in Brazilian cities.

the first half of the 20th century was dampened by the many accidents and technical setbacks (most commonly power outage) of the bondes' early days, as well as their evidencing of the socio-spatial conflicts of the time. The first decades of electrified tramway service in Rio were accompanied by spontaneous protest actions, commonly referred to as *quebra-quebra*⁷⁵, culminating in mules being stabbed, drivers beaten, tramways overturned and burned (Terra 2012).

Finally, the alleged “tramway century” seemed to end with the advent of the automobile from the 1950s onwards (Wolfe 2010), flanked by a willful dismantling of the impressive urban rail networks of cities like São Paulo and Rio de Janeiro. It seemed as if the promises of progress attached to the bondes had passed over to the car. Already in 1919, when Henry Ford initiated his automobile manufacturing operations in the country's northeast, he announced that the car was destined to make of Brazil “a great nation” (ibid. 2010). Since the 1960s, Brazilian academics and/or activists from the environmental movement and the Free Fare Movement have proclaimed a new era of *carrocracia*⁷⁶ – a car-dictatorship (Trói 2018, 272). From this perspective, the rule of the automobile consolidated during the Brazilian dictatorship (1964-1985), when the military government abandoned all rail projects in transport of passengers and goods and replaced tramways with busses and trains with trucks (Baderna 2005, 11).⁷⁷ In Rio, buses have since become the most-used means of public transport, accounting for 77% of the journeys made in the metropolitan area in 2016 (Rodrigues and Bastos 2016, 42).

The appeal of the promises of national progress through petroleum and diesel-fueled vehicles is reflected in Brazilian modernism and put into practice in the car-prioritizing planning of cities like Brasília. The turn to the left and the 15 years of socialist government did not break with this tendency, and during the Lula-era, the slogan “poor people should also get cars” (Freire 2010, own

⁷⁵ While the Portuguese *quebrar* literally means “to break” something, the combination *quebra-quebra* is used with reference to tumults or protests which result in the plundering of public goods (Dicionário Online de Português 2019).

⁷⁶ The word *carrocracia* (car-autocracy) has become diffused mainly across an activist spectrum (passenger-organizations, cyclists, environmentalists etc.) ever since the 2013 mass protests in Brazil against fare rises in public transport (Brock and Burzywoda 2016; Meyer 2015; Trói 2018), and taken up by academics in the years to follow. For more information on the 2013 protests and its connection to the protests against the suspension of the Santa Teresa tramway, see chapter three.

⁷⁷ In the context of the recent petroleum crisis of 2018, where the rise of petroleum prices resulted in a truckers' strike that paralyzed a whole country (Phillips 2018), many press articles emphasized that Brazil was dependent on highways and that one third of the national railway infrastructure had actually been abandoned since the 1980s (Augusto 2018; Borges 2018; Rocha 2018).

translation) became an essential part of the social welfare programs. Until today, leaders of all political parties promise to facilitate automotive transit during elections, thus confirming the predictions of an academic-activist collective from 2005, that “[i]n Brazil, ‘to govern’ will become synonymous with opening streets” (Ludd 2005, 25).

Looking at the history of the *bonde* through these brief spotlights, it seems rather anachronistic that today’s protesters, as depicted in the previous chapter, would steadily claim the comeback of Rio’s last remaining e-tram since over seven years. The alleged “tramway century”, which ultimately has been survived only by a single line, does not provide enough evidence for why residents should hold on to a type of transport which could not “solve” the social and economic problems of the 20th century and that for a long time received rather hostile reactions from the city population.

The most evident explanation for the recent emergence of an urban protest collective seems to be a kind of nostalgia, or, rather, what Thomas Blom Hansen (2012) has described as melancholia for something *that has never really been there*, for the loss of something that one cannot even really name. However, following up on the findings from the previous chapter, this chapter builds on the hypothesis that the *bonde* which is reclaimed *today* is actually connected to all kinds of things *that have been there*, and that can be located or backdated in history. I argue that “things”, however short-lived, minor, marginal, or even immaterial have forged lasting attachments between residents and urban materiality. Consequently, this chapter embarks into a speculative time-travel, in order to find out more about how “the *bonde*” of today is connected to both the urban imaginaries and the mundane practices and things that have criss-crossed Rio during the past century.

In order to achieve such shift in (temporal) perspective, I am building essentially on Lauren Berlant’s (2011, 24) definition of “objects of desire”. Instead of phrasing the *bonde* as a bounded “thing”, such conceptualization allows for understanding it as a whole “cluster of promises” (ibid., 23) which glues together all kinds of actors in their aspirations for a better future. This means that residents, planners, or politicians are not attached to “the *bonde*”, but for instance to specific ideas, desires, hopes, a feeling, that they want the *bonde* to make possible for them.

Clusters of promises, from this perspective can be examined for two reasons. First, because they reveal something that Berlant (2011, 23) calls a “sense of endurance in the object”, arguing that the object of desire provides people with the capacity to outlive the often harmful conditions of

their daily lives. Second, studying clusters of promises helps understand how “impediments to social change” (ibid., 16) emerge, because the same optimism that has attached people to “objects” like the bonde in the first place, might cause them to hold on to it even if instead of a betterment, they brought a change for the worse.

Such dynamic of stiffened attachments, or “cruel optimism” (ibid.) is of special interest for the following chapters, as it offers a hint⁷⁸ to, first, why residents of Santa Teresa remain attached to the bonde despite its troubled history. Second, speaking back to a question that could be taken from the previous chapter, it provides further clues for how a specific formation of urban collectivity could “reassemble” with such apparent ease and spontaneity throughout the period of tramway-suspension.

Consequently, this chapter disentangles some of the promises attached to the bonde of Santa Teresa, and its temporary “companions” in the history of Rio de Janeiro, in order to prepare for a more detailed analysis of what “binds” the single elements of this urban collectivity together throughout the following chapters. I chose the perspective of “promissory assemblages”, developed by Alexa Färber, as a toolkit for translating the notion of promise into a workable concept for urban anthropology. Such perspective is particularly helpful to understand how urban collectivities are made and remade everyday under the impact of promises. If we conceive of “[t]he city as promissory assemblage”, Färber (2019, 265) argues, we can

[G]rasp [...] the urban as simultaneously attuned articulations in and of the city: The promise of the city that centralises resources and opportunities; the promised city as an object of desire in ‘urban imagineering’ [...] and urban promises that articulate these and other expectations of the city.

The “cluster of promises”, that is, the ideas, feelings, hopes, movements that from an affect-theoretical perspective might attach people to the bonde because they want it to make these promises possible, with Färber, become translatable to “expectations of the city” (ibid.) that are articulated both through everyday practices *in* the city, as much as through city concepts (Färber 2014) produced in acts of “urban imagineering” (Färber 2011).

⁷⁸ For further pieces in the puzzle on why residents of Santa Teresa hold on to the bonde despite its “cruel” politics, see chapter three.

The aim of this chapter is to contribute to the further development of a temporal perspective that is already entailed in the notion of promissory assemblages. Replacing the term “promissory” with “premissory”,⁷⁹ here, is to add an explicitly “past tense”-layer to this notion. The way Gisa Weszkalnys (2010, 99 ff.), in her ethnography of urban planning in central Berlin, uses “premise” not as own notion, but rather as conceptual support for theorizing “promise” (cf. Abram and Weszkalnys 2013b) has inspired also the way I am dealing with the terms it in this chapter.

Playing with the etymological origins of promise (pro-mettere, “to send forth”) and premise (prae-misse, “sth. that has been set in front”), I suggest that the seemingly future-oriented promises of the tramway that assemble forms of collectivity in the here-and-now have had their starting points at other times in history (Cambridge Dictionary 2020). Because assemblage thinking allows for exploring potentialities (McFarlane and Anderson 2011), it allows for speculating on whether some of the city concepts or practices associated with the promises of the bonde today might actually not be contemporary inventions but have already appeared at other times in Rio’s history. The aim of this chapter, in other words, is the historical dimensioning of the collectivity-generating potentiality of the railway infrastructure today. This way, I employ the term premise to confront both the out-of-nothingness that promises’ futurity might suggest, but also to question the taken-for-grantedness of past *conditions*.

In urban research, a perspective on the entanglements of time and space is well established, often following on Henri Lefebvre’s prominent argument that the production of space has to be analyzed as inextricably linked with the multiple temporalities of past times and future events (Lefebvre 1991, 132 ff.). The Berlin Center for Metropolitan Studies, for instance, has taken Lefebvre’s argument as motto for guiding its fifth cohort of graduate students through their studies of urban temporalities.⁸⁰ According to the organizers of the program, urban temporalities and patterns of living are intrinsically entwined, as can be seen in the results of technological innovations, such as the standardization of time through “railway time” (Brantz and Vonderau 2014).⁸¹

⁷⁹ I wish to thank the participants of our panel “The Promise of the City” (org. Alexa Färber) at the Association of American Anthropologists’ Annual Meeting in Vancouver, Nov. 2019, for pointing me in this direction.

⁸⁰ I wish to thank Dorothee Brantz and all members of the CMS colloquium, in particular Friederike Landau, Robin Kellermann and Massimo Moraglio, for commenting on earlier versions of this chapter and for sharing their perspectives on temporality, railways and how this links to urban everyday life with me.

⁸¹ Railway time was a standard time introduced in 1840 by the British railway company “Great Western Railway” and subsequently taken up by all railway companies over the country (and beyond: in North

Another influential author in the field is Karl Schlögel (2009, 39), who, positioning himself against what he identifies as dominant perspective on time sequences in the humanities, defends a “topographical hermeneutics” which “gives voice to”, or “makes readable” the simultaneity of different temporalities in space (ibid., 48). Examining Schlögel’s argument from the perspective of South American cities, urban anthropologist Anne Huffs Schmid (2015) has shown how collective memories materialize with all their contradictions and instabilities in the centers of metropolises like Buenos Aires and Mexico City. In Brazil, Fraya Frehse (2017) has convincingly made Lefebvre’s “regressive-progressive” method productive for an ethnographical study of how early 20th century past and 21st century present overlap “in the bodies of São Paulo’s pedestrians”.

Following up on these important interventions, this chapter traces some of the practices and imaginaries that feed into today’s “promissory assemblage” around the *bonde* through their multiple space-times. Such “retracing” does not equal with an attempt to provide “evidence” for necessarily outspoken promises, but rather follows recent lines urban anthropology, where promises can take the form of, for instance, a plan (Abram and Weszkalnys 2013a), a survey (Hetherington 2016), or a road (Harvey 2018), and where immaterial, affective relations to these things have effects on the formation of urban collectivities, even if they are disappointed, postponed, bypassed, forgotten, or simply realized (Färber 2019; Kemmer and Simone, forthcoming).

Agreeing with Färber (2019, 266) that “[p]ublic transport often appears as a promised object of urban politics”, I choose “the *bonde*” to guide through the following pages. I build the “historical dimensioning” work of this chapter around two main and seemingly contradictory tropes that I will come back to repeatedly throughout the following chapters. The first trope stems from Rio’s nickname as “Marvelous City”, the second is related to the theme of the “Divided City” as a socio-spatial imaginary.

America, India, and Europe) in the following years. Railway time presents the first recorded occasion when different local mean times were synchronized. The introduction of this new standard time, however, was not without controversy, and local resistance often led to the display of two different times between station clocks and local watches (Zerubavel 1982).

Rio on rails: The becomings of a Modern City

In Rio, the installation of the first electric tramways at the turn of the twentieth century played a central role in one of the biggest urban reforms in the city's history. The hypothesis of this section is that the promises of the bonde today, associated with urban regeneration and embellishment, socio-economic progress, and more abstract expectations around "modernity" can be retraced to the birth of a city concept. Rio's internationally known nickname of *Cidade Maravilhosa* (Marvelous City) is the result of a radical reinvention of how the city should be perceived, lived, and represented at the beginning of the twentieth century. A new city concept was born, in other words, pushed through by the same man who also inaugurated the first bondes. Francisco de Pereira Passos had just returned from his studies in France when he was appointed mayor of the then-Brazilian capital in 1902.

The inauguration of Rio's first tramway fleet needs to be understood in light of a political and planning trend set forth most prominently in Paris by Passos' mentor, Baron de Haussmann. As prefect of the Seine-department (1853-1870), Haussmann had re-imported a violent logic of street enlargement and "control" into the urban grid from the French colonies in Algeria (Kipfer 2007). The sheer possibility of an urban intervention of such magnitude raised the hope in Passos that he would be able to liberate his city from the references to its colonial and slave-trading past.⁸² These references condensed in in the then-common nickname "City of Death", depicting Rio as a place of danger and disease, which historian Elisabeth von der Weid, recurring to testimonials from the late nineteenth century, describes as follows:

Narrow streets, bumping and winding, their majority without pavement, congested with the traffic of people and merchandise between train station, harbor area, and commercial center. Muddy or dusty, exposed to rainfalls and heat. The houses were small and simple, with degenerated façades. The population went barefoot and poorly dressed; slaves with freights of merchandise were crossing paths with street vendors carrying baskets, or donkeys loaded with fruit. The streets were populated by all kinds of animals: dogs, cats, goats, even

⁸² Rio de Janeiro played a central role as both, colonial capital and slave-trading center. Since Portuguese colonizers landed on the soil of Guanabara Bay on the 1st of January 1502, the city quickly gained economic prominence (first sugar cane production, then exporting gold and diamonds from the neighboring state of Minas Gerais, later coffee) and expanded considerably during its years as capital of colonial Brazil (1763-1889). Between the 16th and the 19th century, Brazil was the principle destination for the trans-Atlantic slave trade, with more than 4.9 million slaves arriving to the country. Out of these, more than two million docked in Rio de Janeiro, which became one of the biggest slave ports in the world.

turkeys. This image only intensified with the spatial and demographic growth of the old town. In the unhealthy areas of the harbor area erupted all kinds of epidemics (smallpox, typhus, yellow fever) that spread over the whole city with a frighteningly high mortality rate, turning Rio into a high-risk area. (Weid 1994, 5, own translation)

Making a “modern city” became a desire not unique to the case of Rio, while all over Brazil social elites became keep to copy an allegedly European lifestyle. Following the logical of a “technological fix” described above, city governors discovered the bondes as transport innovation which would catapult their cities into modernity. From her analysis of postcards featuring the first tramways in São Paulo between 1880 and 1910, Frehse argues that these literally *produced images* of a “clean” and “ordered” city, similar to what was supposed to be the European and North American standard of the time (2000, 130). The speeding up of urbanistic interventions and proliferation of new city concepts in these decades, according to Frehse, had to do with the reorganization of the country’s political and social order after the official abolition of slavery in 1888 and the installation of the first republican government in 1889.

The image of the “modern city”, however, clashed with the still highly hierarchized social context of early 20th century Brazil. The tramway-postcards of this era well illustrate this contrast: While depicting crowded vehicles – where the sheer quantity of passengers suggested a scenario “similar to that of other big and ‘modern’ cities” (ibid., 140) – these images collided with the local “rules” for tramway-riding. In addition to being simply too expensive for a majority of the urban population, the social codes of conduct of the time discouraged especially women from squeezing into a full carriage, and dress codes invented specifically for the tramways excluded first and foremost (former) slaves who generally did not possess shoes (for Rio, cf. Terra 2012).

Similarly, in Rio, believes in “the promising twilight of both the end of the century and of a new [republican] regime” regularly clashed with the post-abolition realities of an “inevitably unstable society” (Sevcenko 2006b, 43). More than the fact that Rio was the country’s main port – and indeed the third biggest port of the continent after New York and Buenos Aires – the city’s position as capital of the young republic made it a “showcase” of Brazil’s modernity (ibid., 23). This presented an opportune political moment for the installation of what has been called the “triple dictatorship” of mayor Pereira Passos, military engineer Lauro Müller, and sanitarian doctor Oswaldo Cruz. Inspired by Haussmann’s large-scale renewal of Paris, they took the disease-ridden central and port areas of the city as the starting point for a threefold strategy of “hygienization”,

“urbanization”, and “embellishment”, a process that became known as “bota-abaixo” [knock-it-down] policy (Benchimol 1953). Following what has been described as “spatial fix” above, the Passos administration authorized the destruction of supposedly “unhygienic” buildings and introduced obligatory vaccination, it re-designed the center to adapt it to European standards of “beauty”, and installed transport, sanitation, security and health services infrastructures that provided services for approximately one million of inhabitants (*ibid.*, 40–43).

It is against this context that the bonde became a “desired object” (in Berlant’s sense) for those aspiring urban regeneration. The bonde, as first public mass transport in Rio, articulated promises to residents about their connectedness to the city, thus transporting an urban imaginary of equal opportunities that was (and still is) quite common for public transport around the world (Harvey and Knox 2012; Höhne 2015; Ureta 2014).

Yet at the same time, this “object” was feared by thousands of people whose displacement had been justified with the construction of new tramlines (Weid 1994). As the rail network required extra space in the streets, it paved the way for the construction of large boulevards and the subsequent destruction of traditional housing structures and related forms of social organization of the urban poor. These housing units were organized around the so-called *cortiços*, a typical type of tenement in the central districts of Rio that was inhabited mainly by factory and harbor workers. Their peculiar architecture and organization around a courtyard with shared sanitary facilities generated a social organization based on solidarity and co-operation, which was severely threatened with the destruction of these houses (Abreu 1987). In addition to shaping the exodus of populations from the former center to Rio’s growing periphery, the bonde lines of the early 20th century changed the geography of Rio by flattening, tunneling, overpassing mountains; and contributing decisively to the birth of whole new neighborhoods like Leme, Copacabana, Ipanema and Leblon (Weid 1994).

However, the transformations of urban demographics and even topography did not go hand in hand as smoothly with a change in city concept as might have been envisioned by the Passos regime. It would take until the World Exhibition of 1922 until Rio’s image of “Marvelous City” became internationally advertised – consolidating only forty years later when the eponymous song composed by André Filho (1906-1974) was recognized as official anthem of the city in 1960 (Jaguaribe 2014).

What connects the Cidade Maravilhosa concept with the bondes, rather than the swift realization of a mayor's plan, is the (indirect) ways in which tramway companies engaged became involved with acts of "urban imagineering" as described by Färber (2011). Through their advertising campaigns, these companies have – willingly or not – produced and reproduced pictures, narratives and symbols of a "marvelous" Rio, as an ambivalent mixture⁸³ of both "exotic" and "attractive" (Jaguaribe 2011). The historic foundation for such acts of imagineering through private companies was set by the ruling elite's proclamation of a modernization "at all cost", giving way to a complete opening of the national economy for foreign capital (Sevcenko 2006b).

In Rio, this liberalization was followed duly by the Passos regency, who mainly multiplied concessions to international capital (Benchimol 1953, 201). During his mandate, the railway network was significantly expanded and between 1902 and 1905 – the peak of Passos' urban reforms – 40 companies were authorized to explore new railway lines. The first tramways of Rio attracted all kinds of entrepreneurs; Brazilian-international fusions, Canadian ventures, and established US-American companies. This had two important consequences: Firstly, it initiated the co-operation with other sectors, especially Electricity, Gas and Sewage,⁸⁴ and secondly, it gained companies the right to expropriate Rio's residents for building their lines (ibid. 100).

At the same time, during this period, the city-growth speeded up considerably, with Rio's population increasing between 1872 until 1890 from 200,000 to 500,000. This gained Rio not only the status as biggest Brazilian city, which until the end of Passos' reign in 1906 grew again until reaching 800,000 inhabitants (ibid. 172). It also made Rio one of the most attractive places in the country for investments in the newly developed urban residential areas. Against this background, it is no coincidence that the companies which operated the early tramways of Rio became simultaneously active in the real estate sector – with the railway sector and the real estate sector being two of the biggest markets in Rio at the time (Weid 1994).

⁸³ For a critique of such forms of "cultural hybridization", cf. the influential work of anthropologist Néstor García Canclini (2005, xi), who has argued that South American countries have become trapped in a hybrid position "between traditions that have not yet gone and a modernity that has not yet arrived".

⁸⁴ The LIGHT legacy and influence on socio-material collectivities in Rio today is described in more detail in chpt. one.

Historian Jaime Benchimol summarizes the dynamic, where the first urban areas to be connected by public transport often included terrains that had previously been acquired by railway companies, like this:

This ‘vector of expansion’ [urban railway systems] was full of *promises* [cheio de promessas], with prospects for the exploration of services for the already-settled population, but also profits arising from real estate which the occupation, division and valorization of the available land promised” (Benchimol 1953, 100, emphasis added)

As Benchimol’s analysis makes clear, the early bondes were already entangled with promises of profit and land valorization, arising from the expansion of transport infrastructures. The early railway companies in Rio speculated with real estate, buying property there where they were planning to build their railway lines. Notably, here, is the fact that these companies also soon adapted the terminology of the “marvelous” to their publicities for the newly built lines, thus reproducing a signification it had achieved through the conquest of South America, and which was strongly associated with the mythical treasures of El Dorado and other “riches” that Europeans hoped to bring back to their home countries (Giucci 1992).

In addition to setting the foundations for a branding of “marvelous” Rio as a place that could be explored for economic profit, the foreign companies also brought with them the artifact that gave birth to the name bonde. The Brazilian name for tramway derives from the English word “bond,” which was printed on top of the first tickets issued by the US-American Botanical Garden Rail Road company around 1890 (Weid 1994).

In the world of finance, a bond is a type of promise, meaning that the “bond” – in this case, the ticket – is issued in exchange for something, it has a monetary value. Such an understanding of tickets as a type of “promissory bonds” has some tradition in the theory of law, and, as noted in an early text on railroad company tickets “when small change was scarce, horse-car tickets passed readily from hand to hand as currency” (Beale 1887, 28).

From the perspective of cultural theory, again, “currency” can be defined as a reminder for an incomplete circle, that is, an unfulfilled or open promise of the goods that – at least in an abstract imagination – have been given in exchange for the banknote (Vogl 2005, 314). Even though we might not have literally “given” something in exchange for the banknote, this piece of paper is still imbued with the promise of an unspecified *value* that we attribute to the, however distant, things that make its material counterpart. In a certain way, then, the promises inscribed in a “ticket”

(bond) have since the beginnings been passed on the bondes, and with them a strong desire (*Begierde*) that it might valorize a territory, a social status, an everyday experience (*ibid.*, 328).

In 1892 Rio de Janeiro, the first issuer of such “tickets” was the Botanical Garden Rail Road company, which gained the exclusive right to develop a whole new neighborhood in Copacabana. In order to draw people to the new lines and to the so-far thinly populated and rarely visited coast areas, the company launched an intensive propaganda campaign, offering free transport and installing huge billboards at the stations (cf. fig. 13), which announced: “Want to enjoy good health? Go to Copacabana”; “Free and refreshing journeys: Copacabana”; or “Graceful ladies, elegant young men, flee from the streets, from the unhealthy dust, there is no places for picnics like in Copacabana” (cited in: Weid 1994, 16, esp. FN 34). Statistically speaking, the incentive to attract Rio’s residents to the new tram lines seemed successful, and between 1870 and 1896, the number of passengers increased seven times (Santos 1934).



Figure 13: “The moonlight is bewitching”⁸⁵

The left hand picture above shows the headquarters of the Botanical Garden Rail Road Company at Largo do Machado around 1880, the right hand picture zooms in to an advertisement for new urbanized areas, marked red in left picture and reproduced from the collection of Allen Morrison (cf. 1989). The poster promotes “ample tramways [bonds]” towards the newly urbanized areas of Rio’s southern coast in the districts of Leme (a part of Copacabana) and Ipanema. As attractive

⁸⁵ Detail of left-hand picture outlined in red is enlarged in right-hand picture.

feature of these newly connected districts, the advertisement highlights how the fresh seacoast nights are “bewitching [encantador]”.

Notable, here, is the relation of the term *encanto* – which could be translated also as charm, beauty, allure – to Rio’s Marvelous City image. As cultural scientist Beatriz Jaguaribe has noted, the refrain of Rio’s 55 years later composed anthem defines the marvelous as “full of thousand charms [cheia de encantos mil]” (2011, 332). The repeated appearance of *encanto*, according to Jaguaribe, is due to its becoming a shared cultural reference that dates back to Brazil’s colonization. For the author (ibid. 334), the commodification of the non-European Other into a form of “exotic delight” and “hedonist enjoyment” by the Portuguese colonizers have been appropriated by Brazilian early 20th century governors in order to showcase national achievements and subsequently reproduced through two major “the spectacles of modernity” – namely the Passos administration’s 1922 world exhibition and the 2016 Olympics.

From the perspective of scholars who work at the intersection of sociology and history, the tramway advertisements can be interpreted as public displays of such common reference points that have emerged in Rio de Janeiro’s early 20th century society. One of the influential representatives of this field, Björn Wittrock, has argued that at the turn of the century, modernity⁸⁶ was culturally constituted in various countries across Europe and the Americas through “a new set of promissory notes” (Wittrock 2000). According to Wittrock, promissory notes are immaterial, yet explicitly expressed in public as desiderata, as ideas, or as “statements about a range of achievements that may be reached by the members of a given community” (ibid., 42). In this sense, Rio’s 1922 World Exhibition – a type of event that for Wittrock heralded the arrival of modernity – entailed promissory notes of a clean and ordered “showcase” city, of urban regeneration and embellishment as steps toward national progress and prosperity.

In the years preceding this presentation of the Marvelous City image to an international audience, however, the tramway advertisements had already manifested such better future-to-come in Rio’s local public sphere. Confirming such interpretation, Simone Abram and Gisa Weszkalnys also

⁸⁶ Although I agree with Wittrock’s differentiation that modernity is not “universally acclaimed” all over European countries of the late eighteenth century, I am critical of his argument that only with the export of institutional patterns of Western modernity to the colonies, these countries became “modern”. For a differentiated critique of the role of the concept of “modernity” in western sociology, please refer to Boatcă, Costa, and Gutiérrez Rodríguez 2010.

argue that advertisements, as much as statistics or blueprints, can be understood as promissory notes in Wittrocks sense (*ibid.* 2011, 11). Operationalized like this, in Rio, plans of new neighborhoods such as Copacabana, statistics of growing passenger numbers, and advertisements of the tramway companies point to shared desires for economic development and socio-spatial integration, expected to balance the inheritances from centuries of slave trade, colonization, and exploitation.

Usefully differentiating the promises entailed in promissory notes from a more abstract concept of “hope”, Wittrock argues that a target audience can “validly” expect the former’s realization, because they are based on shared values or cultural references. At least three of the promises listed by Wittrock as essential for the constitution of “modernity”, resonate with the messages of Rio’s tram advertisements. Where the Botanical Garden Railroad company promotes healthy environments, idyllic picnic-sites, and bewitching coast nights, Wittrock mentions promises of “urban growth without pollution” and “amidst newly invented pastoral landscapes” (*ibid.*, 49).

Another set of common reference points that the author summarizes as “movement without friction” (*ibid.*) can be linked to postcard-pictures of crowded vehicles which are nevertheless attractive for “elegant” and “graceful” passengers according to the tram-ads. The seeming contradiction between the two dissolves in an imaginary of “European-lifestyle”, which implies both, well-dressed middle or upper class passengers and the packed vehicles of a modern means of mass transport. As Colin McFarlane and others (Anand 2006; Graham 2018) have shown, such imaginary of urban transport infrastructures is deeply entangled with “expectations of the modern, circulatory city” (McFarlane 2009, 134). Until today, according to McFarlane (*ibid.*, 133), the notion “circulatory city” reflects modernity’s promise of “movement without friction”, where a huge flow of passengers and vehicles is supposed to be orderly orchestrated and to offer a transport option which “inculcates a culture of discipline, order, routine and cleanliness”.

Similarly, in contemporary Rio, the promise to socially and economically “enliven” designated areas of the city is strongly connected to urban railways. The “Porto Maravilha” (Marvelous Port) project which has been launched by the city government in 2010 in the run-up to the two sporting mega-events of 2014 and 2016, respectively, follows the above-sketched strategy of land valorization (Aalbers, Mosciaro, and Pereira 2020). Similar to the harbor areas of Buenos Aires, Boston, Baltimore and Barcelona – the latter being a case in time for the entanglements of urban renewal and mega-events – the Porto Maravilha follows a global cookbook of regeneration

strategies, where the “local color” of Rio’s central and port areas are selectively staged, mixed with a presence of symbols of latest technology and infrastructure (Jaguaribe 2011). The recent inauguration of a hypermodern “Light Rail” in 2016 is one such case. The “Porto Maravilha” has not coincidentally been projected by the city’s planning institute – the Pereira Passos Institute – which has since its foundation in 1999 reproduced the legacy of Passos’ city concept, both in scope and ideology.⁸⁷

During fieldwork, I have encountered another case for today’s repercussion of the “Marvelous City” promises as transported by the early tramways. In 2015, exactly 119 years after the electrification of the Santa Teresa Bonde, a speaker at the commemoration of “four years without Bonde”⁸⁸ read out a newspaper column from famous Brazilian chronicler Machado de Assis. He chose a text where Assis witnesses the inauguration of the first “inclined plane” railways of Santa Teresa – a sort of funiculars that were not pulled by donkeys but steam driven and which presented the most advanced technology of the time, setting the basis for the later electrified trams in 1877 (Morrison 1989). The original text is entitled “progresso” (progress) and has been published two days after the inauguration of the Santa Teresa inclined plane, on March 15, 1877, as part of a total of 40 chronicles that appeared under his name between July 1876 and April 1878 in the magazine *Ilustração Brasileira*:

The *bonds* have been inaugurated – a system of buckets [alcatruzes] or a kind of Jacob’s Ladder [escada de Jacó] – in summary, a reflection of all things in this world. [...] It goes without saying that the still animal-drawn carriages looked upon this event with an extremely nostalgic expression. Some *burros* [both “donkey” and “stupid”], were complaining about the new pace of progress. One of these bystanding quadrupeds watched the bond with a look full of *saudade* [comparable to the German “Weltschmerz”] and humiliation. Maybe, he was recalling the slow pace-of-donkey, expelled in all parts by steam; just like steam will be expelled by electricity, and electricity by a new force, which will lead our big train of world to its terminal station. [...] But the Bonds have been inaugurated! Now Santa Teresa will become fashionable [vai ficar á moda]. Travelling by

⁸⁷ Haussman’s ideology continues to influence urban renewal politics in Latin America until today, as Dennis Rodgers has shown for the case of Managua, Nicaragua, which has undergone a substantial “makeover” between 1998 and 2012, especially through infrastructural development and “pacification” of poor communities (2012, 415).

⁸⁸ For a detailed description of this (series of) event(s), refer to chapter one.

carriage has turned to be now the most boring thing, a carriage is indeed something in-between a tortoise and a donkey. (Assis 2009 [1877])

After finishing the quote, the speaker compared the present authorities with Assis' donkeys, whose chronicle, in his account, "remind[ed] of how much future the bondes promised [quanto futuro os bondes prometiam]" already in 1877 and how "anachronistic" it was from the city authorities to suspend the Santa Teresa line (fieldnotes 27/08/2015). A kind of taken-for-granted idea of "progress" resurged from the speakers' interpretation of Assis' century-old chronicle. As if the linear process of climbing the Jacob's ladder, where every innovation is superseded by an even more advanced technology, had somehow been set on standby with the bonde, whose suspension would mean the suspension of progress itself.

But how can the bonde of today still carry promises for "progress", while a new Light Rail Vehicle circulates in the nearby center and the first Latin American "Magnetic Levitation Train"⁸⁹ is being tested at the Federal University of Rio? This section ends with the proposition that this has to do with the persistence of the promise, as cited above, that Santa Teresa "will become fashionable"⁹⁰ *through the bonde*. During my fieldwork, residents of Santa Teresa have affirmed that since the tram's suspension, the neighborhood had been perceived by many as "one big favela". Without the bonde, they argued, an "integrative device" was missing that had bridged the local socio-spatial inequalities and made Santa Teresa more attractive to visitors and all kinds of investments and valuations.

As I will show throughout the next chapters, common reference points that have to do with the Marvelous City image resurge in Santa Teresa constantly: Similar to the promises circulating in early 19th century Rio, today's tramway-installation is imbued with hopes for (and at the same time fear of) regeneration and embellishment; residents of Santa Teresa speak of healthy and bucolic landscapes that seem to emerge only around the bonde; and they paint a picture of the tram as "transporte popular", as a means of mass transport which at the same time maintains its elegance

⁸⁹ Cf. <http://www.maglevcobra.coppe.ufrj.br> (last accessed 23/05/2019); similar systems are in operation only in Japan, South Korea and China.

⁹⁰ Santa Teresa did not simply climb up the "Jacob's ladder"; it did not become "fashionable" as foreseen by Assis, but decayed again as will be shown later in this chapter.

and thus attracts both, poor favela inhabitants and members of the local bourgeoisie, providing equal opportunities and access to the city for all.

Adding to the above-formulated hypotheses on promissory notes and acts of urban imagineering, the next section searches for further explanations for the persistence of bonde-promises, inspired by a claim about the *Cidade Maravilhosa* as formulated by Brazilian geographer Jorge Barbosa (2010). The “compulsory utopia” (ibid., 3) of the Marvelous City, he argues, can reproduce itself only through nurturing a permanent antagonism with its anti-symbols: the favelas. In line with other scholars who have studied Rio de Janeiro’s socio-spatial composition (Arias 2004; Gaffney 2016; Lanz 2007; Oosterbaan 2017; Torres Pereira 2014; do Prado Valladares 2008), he sustains the hypothesis that *asfalto e morro* [asphalt and hilltop] are constitutive for the multiple becomings of the city (Barbosa 2010, 5).

Between asphalt and hilltop: The Divided City

A first hint to what I will describe as the trope of the “divided city” in this section lies in the reactions of Rio’s residents to the first electrified bondes. In a certain way, many of them sided rather with Assis’ historic “donkeys” (as quoted above) than supporting the unconditional “progress” advertised by city government and tramway companies. As I will argue in the following, the ways in which the first “citizens” of the republic have carried out conflicts with the state, namely, by confronting not directly the authorities but rather by attacking the specific instances of urban materiality which disciplined, “governed”, and changed urban geographies of the time, has forged affective bonds between residents and the bondes. These bonds played out as both, promise and threat, but in both cases have generated new formations of collectivity. The transition from promise to threat, as I will explain with more detail in part two, works swiftly and into both directions: Something that seems to be the “desired object” of urban authorities and residents alike can soon turn into a threat – and vice versa.

In Rio, first signs of such transition showed after 1992, when a wave of residents’ protest spread over the city, accompanying the first tests for electrified tramways in the central districts. These protests took very different forms, ranging from readers’ letters to newspapers, over spontaneous riots and uprisings, to bigger movements like the above-mentioned *quebra-quebra*⁶. In 1896, Rio’s renown chronicler Olavo Bilac (1996) identified the early 1990s as a turning point in the relation

between residents and tramways: In contrast to what he remembered as a “general enthusiasm” for the first animal-powered trams, he felt that now, 37 years later, an atmosphere of discontent with the new e-trams was growing in the city. The “marvelous city” promises of progress and modernity were sidelined by the threats of a malfunctioning means of transport. Bilac (1996, 437) summarized the reason for complaints as follows: “they [the bondes] move slowly, their jerkiness is horrible, there’s poor lighting, they never meet the schedules and the drivers do not even deserve this name.”

According to historian Paulo Terra (2012, 236), it was during this period of protests that a spontaneous collectivity of “passengers” emerged inside the bondes whenever one of them felt “disrespected” by the tramway-operations, or by their timing, their personnel, and equipment. While small conflicts around tram-driving seem to have erupted on a daily basis during the 1890s (ibid., 238), the summer of 1898 represented the culmination of these tensions. After a driver had refused to carry a passenger who did not hold the correct change, people inside the carriage started attacking him. When other tramway personnel interfered to defend their colleague, the situation finally escalated, and the São Francisco square [then: praça Coronel Tamarindo] in Rio’s center transformed into what the local newspaper *O Paiz*⁹¹ described as a “real battlefield” (*O Paiz*, 17/06/1898, 1). Traffic around the square completely paralyzed for about 40 minutes, while those waiting at the crowded station started partaking with “punches and kicks” in what quickly evolved into a mass brawl (ibid.).

However, as Terra (2012, 240) argues, the main conflicts around the bondes erupted because of the frequent accidents that involved drivers, passengers and pedestrians alike. Between the last decade of the 19th and the first decade of the 20th century, the city’s newspapers reported accidents almost on a daily basis – to a certain extent a reaction to the statistics, which reflected an increase in people injured and dead “by bonde” of more than twelve times in 34 years, rising from 41 victims in 1872 to 507 in 1906 (ibid., 241). In 1890, the local *Diário de Notícias*⁹² concluded that

⁹¹ *O Paiz* was a daily newspaper, published between the 1st of October 1884 until the revolution of 1930, strongly associated with the Brazilian movement against the monarchy, in favor of abolitionism, and the Republican Party. All following quotes are retrieved from the digitalized archive of *El Paiz*, provided by the Brazilian National Library (BN Digital 2019b).

⁹² Between 1868 and 1970, at least four newspapers of the name *Diário de Notícias* circulated in Rio de Janeiro. The one from which the following quotes are taken was republican and anti-military. It disappeared again

a recent incident, which had led to the death of a child, had been caused by “one of those terrible destruction machines [máquinas de destruição] that they call bondes” (*Diário de Notícias*, 14/07/1890, 1). A few days earlier, the same newspaper had reported on protests organized by “a multitude” of people – some relatives of the victim, some merchants and residents of the street where the accident happened. This group of people gathered at the place of the accident, and, while calling for “justice”, even tried “to tear out the tramway tracks from the narrow street” (*Diário de Notícias*, 08/07/1890, 1).

Altogether, the first electrified bondes were not welcomed as objects of desire by the whole population of Rio de Janeiro. A comic, published in 1895 by the popular (yellow press) newspaper *A Notícia* (1894-1930), well exemplifies the tramways’ swift transition from promissory to threatening things:

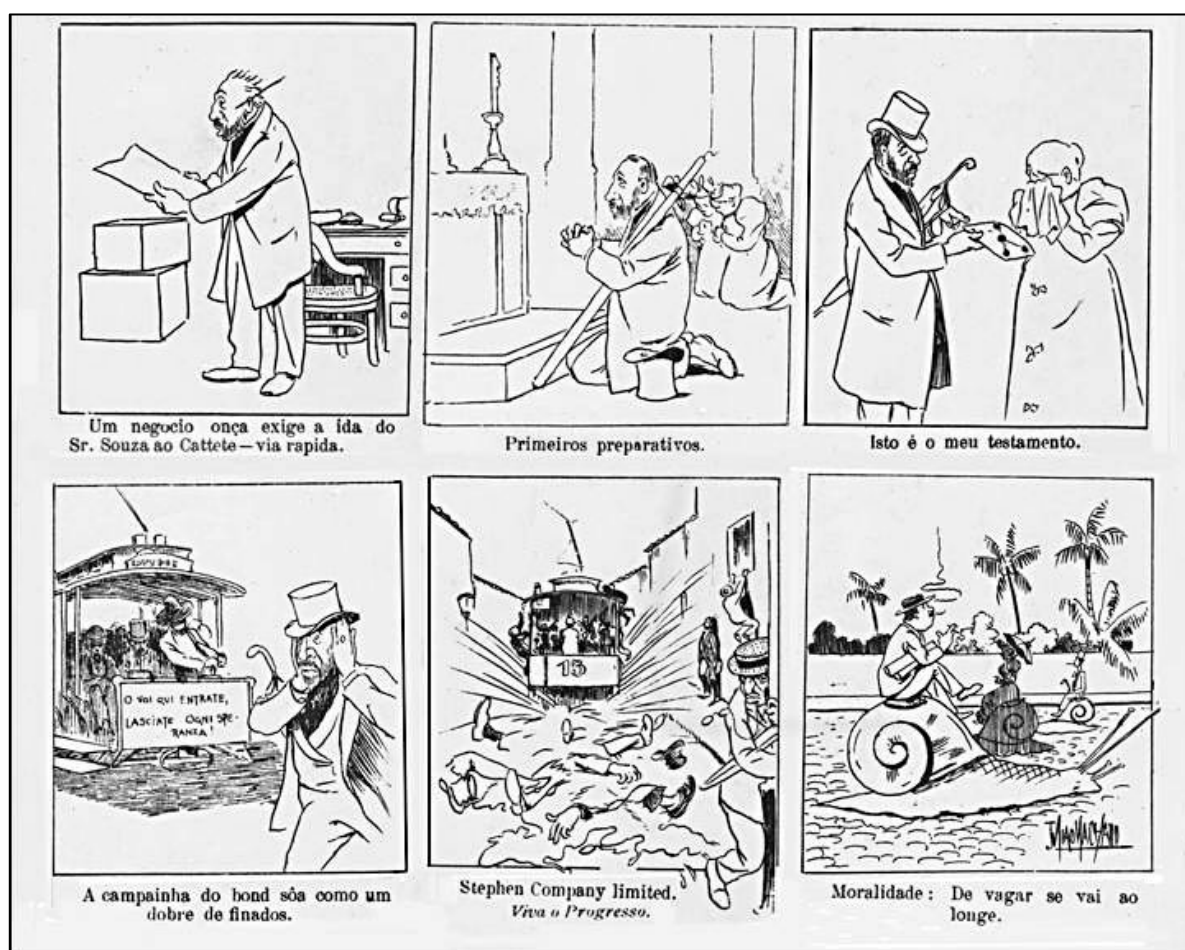


Figure 14: “Electric Journeys”

in 1910. All following quotes are retrieved from the digitalized archive of the *Diário*, provided by the Brazilian National Library (BN Digital 2019a).

The comic, entitled “Electric Journeys. From Carioca to Cattete”, tells the story how “[a] business urges Mr. Souza to travel to Cattete [today: Catete]”, one of Rio’s central neighborhoods, by the fastest possible means [via rapida] (picture one). The “first preparations” of Mr. Souza include a prayer, in picture two, followed by handing over his testament to a woman, in picture three. Finally, in picture four, we see Mr. Souza approaching the “bond”, whose bell “sounds like a death knell”. On its front, the vehicle carries an announcement, featuring the (Italian) slogan which Dante famously ascribed to Hell’s Gate in the *Divina Commedia*: “Leave all hope behind, Ye who enter”. Picture five sarcastically cites “Stephen Company Limited: *Long live the Progress*”, while showing the tramway rushing through a street covered with human limbs. Picking up on the progress-promise of the first e-trams, but illustrating this message with symbols of death, the comic plays with the closeness of promise and threat, and as morality, in picture six, summarizes that “slow and steady wins the race”.

Finally, the different forms of protest, from spontaneous upheavals in reaction to accidents like the one described above, to newspaper columns and comics, seemed to show some effect. Towards the end of the 1990s, the city mayor and the head of the Rio police department signed an agreement with the directors of the Botanical Garden Railroad Company, determining that the bondes would only move at walking pace in designated streets of the center (Terra 2012, 244). However, the reaction from authorities and companies did not calm down the masses for long, and small conflicts continued to erupt around the e-trams in the years to follow.

In 1902, a seemingly “minor” event caused one of the biggest mobilizations so far. On the 15th of April of that year, during the rush-hour between 5-6 p.m., the bondes of the Botanical Garden Railroad stopped due to a power outage and electricity returned only at 7:30 p.m. While blackouts were quite common at the time, the prolonged duration of this particular event and uncertainty generated by the missing reaction from the company caused a growing revolt, which spread from Catete neighborhood to the city hall, located at the central Largo da Carioca (Jornal do Brasil, 16/04/1902, 1). As the pro-monarchy *Jornal do Brasil*⁹³ reported, the protesters started to tear

⁹³ The *Jornal do Brasil* was founded in 1891 as a pro-monarchy and anti-republican journal and existed, in various forms and political orientations, until 2010, when it became purely online-published. All quotes in this chapter are retrieved from the digitalized archive of the *Jornal*, provided by the Brazilian National Library (BN Digital 2019b).

down first the tramway curtains, then the bell pull. Similar acts of destruction happened at various places in the city simultaneously, leaving the glass of broken ventilator-cases and ripped curtains on the streets. The continuity of protests during the night – which cumulated in the burning of two bondes (carried by protesters in front of the government palace) – earned them the name of *quebra-quebra* – “break-break.”⁶

The term “quebra-quebra” as designation for protests was used again two years later, when inhabitants of the city center started what has become known as the Revolta da Vacina – the Vaccine Rebellion (10/11/1904-14/11/1904). On October 31st, 1904, at the height of Pereira Passos’ violent urban reforms, his health director, Oswaldo Cruz, convinced the congress to convince a mandatory vaccination law against smallpox. While many residents had already lost their houses to the Passos reforms, they felt now additionally threatened by a law which authorized sanitary brigade workers to invade their homes and apply the vaccine by force (Benchimol 1953). A few days after the law passed through congress, mainly poor inhabitants of the central and harbor areas started attacking catenary masts, gas-combustors and other parts of the tramway-infrastructure, tearing out tracks and knocking over the bondes. As the *Jornal do Commercio*⁹⁴ reported on 15/11/1904, in the previous night, the central Rua do Senhor dos Passos had filled with more than 500 people, who, shouting slogans of protest against the obligatory vaccination, “turned over and burned parts of the vehicles no 113, 27, 55, 105, 87, 104, 38, 41, 85, 56, 31, 13, 129, 101, 130, 95 and 140” (Jornal do Commercio, 15/11/1904, 1).

The Vaccine Rebellion is one of the clearest examples for protest against a still-unstable notion of “progress” – as represented by overpassed speed-limits and electricity outages. Looked at as isolated cases, the various residents’ actions against the bondes might be dismissed as a popular skepticism against technical innovations, defended by the “historical *burros* [fools]” of Assis’ description, that is, those people who still had to be convinced by the unstoppable progress of modernity. However, the revolt of 1904 can be seen as the culmination of a series of protests that manifested how closely the promises of the Marvelous City were related to the threats of government-induced revitalization programs.

⁹⁴ The *Jornal do Commercio*, founded in 1872, is the second-oldest newspaper in Brazil. Until the second half of the 20th century, the journal maintained a conservative and strictly commercial orientation.

This constitutive contradiction condensed in a single instance of urban matter, *the bondes*, which provoked both, celebrations and attacks. As detailed above, the Passos administration had authorized tramway-companies to expropriate thousands of poor and working class families who were living in the central and harbor areas. Together with the sanitary reform as pushed through by Oswaldo Cruz, this changed the city's socio-spatial organization irrevocably, laying the foundations for Rio's new trope as the "divided city".

The Santa Teresa neighborhood, today host of the last surviving bonde of Rio, can be seen as an exemplary case for the emergence of the divided city trope. Like many hills of the city, it was inhabited first by escaped slaves from the early 17th century onwards. Between 1800 and 1830, Santa Teresa had the largest slave settlement in town⁹⁵ (Soares 2007, 239). During this time, the neighborhood was still known as "Hill of Exiles" [Morro do Desterro], named after a small hermitage devoted to "Our Lady of Exile" that had been constructed there around 1710. The designation "Santa Teresa", originally referring to a group of Carmelite nuns who had built their monastery on top of the hermitage around 1780, became diffused only during the second half of the 19th century. Over a century later, however, the Passos reforms somehow revived the hilltops' "exile"-reputation. Santa Teresa became simultaneously populated by those poor and working class people who were forced to escape from the center, and by rich tradesmen and upper middle-class families of European descent who were fleeing the "bad airs" and disease-ridden downtown areas. Today, the neighborhood maintains this profile, with a clear distinction between the "favela" settlements which have consolidated at the hilltop flanks, and the already-decaying mansions of European architecture on the ridge.

Already before Passos' mandate, and only one year after the line of Santa had been electrified, in 1897, the name "favela" was first registered in Rio. For a decade, it was only used for one specific part of Rio, today's Morro da Providência in the harbor area – a small hill that faces Santa Teresa on the one side, and the Guanabara bay on the other. The Morro da Providência of the 19th century was a hill similar to Santa Teresa, but poorly populated only by a few escaped slaves, due to its thick vegetation. This vegetation was dominated by one particular plant, the *Cnidocolus*

⁹⁵ Until 1821, free white men made only up to 53% of the city population, and slaves presented 47% of a total of 86.323 inhabitants, making Rio the city with the major contingent of slaves of all Latin America (Soares 2007, 240).

quercifolius that was commonly referred to as “favela” during that time. In 1897, when Brazilian soldiers returned to Rio from a counterinsurgency mission against a Christian fraction that threatened the young republic in the northeast, they started to build an improvised settlement amidst the plants to exert pressure on the government, because they had not received the promised remuneration for their service.

It took until the beginning of the 20th century, when the term favela became used for all kinds of “poor” or “informal” settlements on Rio’s hills, but also for the vast plane areas and rural peripheries that stretch in red brick stone and from north to south. However, Rio’s central city topography maintains a locally specific name for the social fragmentation between rich and poor, and black and white. As consequence of Passos’ displacement policies, residents of the densely settled plane areas of the center had to make space for asphalted avenues, while the so-called *morros* (hills) became more and more populated. With this, the material changes that the new transport-infrastructure brought with it had created – unwillingly – another city concept that since then coexists with the Cidade Maravilhosa. In both public and academic discourse, until today, an image of a city of two sides prevails: *asfalto*/asphalt is strongly connoted with the civilized and state-controlled parts of the city, while *morro*/hilltop stands for the salvage and poor city, entered through dirt-roads and overgrown with thick vegetation.

In anthropological and sociological work on Brazilian cities, and especially Rio, these terms are widely applied in studies that work with the metaphor of “divided city”, as interpretative vein (Arias 2009; do Prado Valladares 2008; Neri 2010; Perlman 2010; Wacquant 2008; Zaluar and Alvito 2006). Rio has first been described as *Cidade Partida* (‘split’ city) in journalist Zuenir Ventura’s eponymous book from 1994, where the author contrasts the life of residents from the poor northeastern areas of the city with members of an Ipanema-based middle class association who protest against an allegedly growing number of raids by favela-residents in their neighborhood. Ventura (1994, 218) was one of the first to attest Rio a deep division between socioeconomic classes and neighborhoods, which he argued “split the city into two parts, which less and less interact, less and less speak to each other.”

Almost two decades later, this image is reproduced in discourse at the edge between academia and practice, for instance by Rio-based planners and economists Fernando Cardoso Coteló and Juciano Martins Rodrigues (2013). In their study, published by the state statistics center and the municipal Pereira Passos Institute, the two authors state that

asfalto is actually a metonymy which refers to territories that are well-served by public utilities, like paved streets, public illumination, water and sanitation, schools, public medical centers and so on, and in opposition the *morro* is a territory where the absolute or relative absence [carência] of these services reigns. (Cotelo and Rodrigues 2013, 24)

Such dichotomous definition has been contested in urban studies ever since the “divided city” was published, and very prominently so by anthropologist Janice Perlman (2010). From her long-term work in Rio’s favelas between the late 1960s and the first decade of the 21st century, Perlman asserts that “the often used descriptor of ‘dual city’ is neither accurate nor useful [because] the two sides of the city have always been intertwined” (ibid., 30). Qualifying the favela by relating it, like Cotelo and Rodrigues above, to a lack or deficit of urban services, according to Perlman is not applicable anymore. However, and referring specifically to the effects of squatter upgrading programs in Rio, she argues that despite the increasingly blurry “visible” (ibid.) boundaries between morro and asfalto, there are other immaterial factors that make the terms applicable:

even after plazas were built at favela entrances, [...] main internal streets paved, muddy hillsides replaced by concrete stairways, [...] and household connections to water, sewerage, and electricity established – there is little doubt as to where the asfalto (pavement) ends and the morro begins.

For Perlman, “shared cultural understandings” are more important for defining whether a part of the city is part of the morro, and one decisive factor is the persistent stigmatization of the favela in Rio’s society and politics (ibid, 31).

Santa Teresa presents a case for both, the constant entwinement and blurring boundaries between *morro* and *asfalto*, but also for the persistence of stigma for the city’s favelas as described by Perlman. It is here where the bonde condenses two of the most persistent tropes for Rio de Janeiro: Until today, the tram is celebrated as an “integrative device”, similar to the promises of accessibility and equal opportunities for all as entailed in the Marvelous City trope for public transport. However, this promise goes hand in hand with the threats of a “divided city”. The boundaries that constitute this second trope were literally drawn by the first bondes, which facilitated the (forced) relocation of poor residents uphill while bringing “asphalt” in the form of i.e. hygienization campaigns and street enlargement to the central districts.

Until today, the bonde provokes new formations of collectivity through its promises and threats. What has been celebrated as “desired object” of those who crave for socio-economic progress is at

the same time burned or opposed by those who refuse to be “governed that way”, to borrow from Foucault’s famous expression. A “historical dimensioning” of the collectivity-generating potential of the bondes, as I have shown in this chapter, has to consider the formation of both, collectivities of people and things that emerge around the preservation of the last remaining “public⁹⁶” means of transport of the city *and* collectivities of protesters and “resistant” materialities that oppose the (transport) policies associated with “asphalt” that the bonde might bring.

The following chapters of the second part provide further examples for how these two formations of collectivity unfold in contemporary Rio de Janeiro.

⁹⁶ As the following chapter will illustrate with more detail, today, all other means of “public” transport – from the monopolized bus service, over metro and trains, to ferry lines over the Guanabara bay – in Rio are in private hands (Rodrigues and Bastos 2016).

Three **Material Resistance**

Where is it that all this begins
 The drift without a stop
 The travelling of a journey
 That other journey that does not end

The first part of this dissertation has evolved around the question how formations of urban collectivity emerge beyond readily ascribable territorial or socio-economic identities such as “favela” or “middle-class district”. The chapters in part one have introduced the variegated actors that assemble around the bonde, from residents’ associations and engineering companies, over tram-shirts and tracks, to urban imaginaries around modernity and revitalization. By following these actors both throughout the tramway’s century-long history, and during its most recent period of suspension, I have shown how urban collectivities emerge from the absence of a specific instance of urban matter, from a momentary intensification of feeling, or from a sequence of broken promises; and how the relations of humans and nonhumans play a central role in the formation of such provisional associations.

In the following, I concentrate on the *political* agency of one specific element of the tramway, namely its footboard. In “The Name of the City” a song which will set the rhythm for the chapters in this second part, Caetano Veloso is driven by the question “Where is it that all this begins?” (Chediak 1997, 106). Similarly, this chapter asks how a single instance of urban matter has assembled collectivities that claim a profoundly different vision of “public transport as public space” than what is mapped out by city authorities, and how urban matters draw people in to a “journey that does not end”, that is, how their relations *endure*, and how this generates ambivalent dynamics of both subversive and conservative attachments.

The footboard emerges as “political matter” (Braun and Whatmore 2010) during a time in which urban mobilities have become highly contested in cities all over Brazil. In 2015, when I first identified the footboard at the heart of collective claims around affordable public transport in Santa Teresa, Rio de Janeiro was still dealing with the political unrest caused by the 2013 mass protests against fare increases, not to mention the contested outcome of a series of major infrastructural investments that the city had ventured into as host of two sporting mega-events.

While more than 4.5 billion dollars have been invested in public transport between the Football World Cup in 2014 and the 2016 Olympic Games (Castro et al. 2015), none of these projects has fulfilled the local authorities' promises to improve accessibility (Odilla 2018). Before the expansion of urban mobility infrastructures became advertised as important legacy of the mega-events, Rio had rather been known as operating one of the most expensive public transport systems (for its users), in addition to counting amongst the cities with highest average commuting times across the globe (Pereira and Schwanen 2013, 29; UN-Habitat 2013a, 113). As Rafael Pereira (2018, 136) has shown from his quantitative study of accessibility metrics in the metropolitan area of Rio, on the verge of the World Cup in 2014, the richest 20% had a 84% higher chance of commuting to work within less than one hour, compared to the 20% poorest population. One year after the Olympics, in 2017, this difference increased up to 116% (ibid.).

Following this story of unequal access, all three investments into transport infrastructure undertaken between the two mega-events have been a deception. The new Bus Rapid Transit (BRT) lines that have been inaugurated in 2014 between the western Barra da Tijuca and the city's international Airport north of the center have been only reluctantly extended, and the overcrowded vehicles are frequently suspended because money for maintenance is lacking. What is more, the same financial crisis that is often cited as main reason for the delay of BRT-works has also been used as legitimizer for a series of austerity measures in as approved with the Olympic bid and which led to the shutdown of more than 90 bus lines (Rodrigues 2018).

The parallel extension of the BRT corridor and reduction of bus service has particularly prejudiced residents of the vast favela areas in the city's northern and western peripheries. Here, passengers have to take up to three different means of transport in order to reach a BRT or a metro station, and, since transport fares are not integrated in Rio, the ticket costs augment with every new ride (J. M. Rodrigues and Bastos 2016). Similar to the BRT, the allegedly "new" metro line number four from 2016 – actually an extension of one of the existing two lines – is often overcrowded, in addition to reaching only the richest tip of Rio's West zone. In the city center, a still unfinished light-rail project (VLT Carioca) which has been inaugurated one month prior to the metro four, has received severe criticism because of the costly investment, which in early 2019 has led the consortium operating the system to threaten to suspend service because the city government has not been able to pay back its debts (Galdo 2019).

History repeats, first, because as part of these projects international capital is addressed through a campaign of “attractive city” that reminds of Passos’ “Marvelous City” imagineering – this time being called out by the Pereira Passos Institute as part of the “Marvelous Port” revitalization. Secondly, because again the building of transport projects contributes to the removal of low-income communities from the favelas of city center and harbor area (Procópio 2016, 73).

What is more, in the context of bus fleet “rationalization”, lines between the poor communities in Rio’s north-east and the richer southern areas have been cut, or even more mainly young male and black passengers have been systematically detained and expelled from busses that approached Ipanema and Copacabana through a series of police raids in 2015, the year before Olympics (McLoughlin 2015). The alleged “transport revolution” that actually has its roots in the 1950s (Brazil) or 1960s (Rio) opening to private capital does in summary “consolidate the processes of socio-spatial segregation” (Procópio 2016).

The underlying reason for the existing inequalities in accessibility – which have led activist scholars like LÊNIN PIRES (2013a) and Eduardo Vasconcellos (2014, 2018) to speak of a structural context of “excluding mobility” – is the regular increase in transport fares that hit all mayor cities over the country. In Rio de Janeiro alone, public transport users have faced a 45% fare increase in the period between January 2013⁹⁷ and January 2019, amounting to a difference from 2.95 to 4.05R\$ (RJ Gov 2019).

In June 2013, when the national record of tariff reached one of its peaks with an increase of 0.20R\$ in São Paulo, the city became the first in a series of mass protests also known as the “Brazilian Spring”, which quickly spread over to other cities and reached 100,000 participants in São Paulo, Manaus, and Belo Horizonte (Vainer et al. 2013). Soon, Rio de Janeiro overtook São Paulo in numbers, counting over 300,000 protesters at the end of that month (Watts 2013). In the city with the largest favela population in Brazil, the main message of the demonstrators was a critique of the growing exclusion of low-income groups from access to public transport

⁹⁷ I have taken this date because the first fare increase after January 2013, in June of the same year (up to 2.95R\$), has mobilized protesters in Rio – even leading authorities to reduce the fare again to 2.75 in late June in an attempt to calm down the masses. However, this reduction had only been temporary and a few months later, the fare reached a new record of 3.00R\$ (RJ GOV 2019).

(Verlinghieri and Venturini 2018). Indeed, as Pereira’s study from 2017 confirms, the poorest ten percent of Rio’s population spend 43% of their income on daily commute (Pereira et al. 2017, 6). Against this background of “excluding mobility”, the *bonde* stands out as the only means of public transport in Rio de Janeiro which has never adopted tariff increases. All throughout its over 120 years of existence, and until its suspension in 2011, the tramway has kept its cheap ticket price of 0.60R\$, thus staying well below the city’s average fare of 2.50R\$ of that time (Morrison 1989).

What is more, while the Free Fare Movement (Movimento Passe Livre) that has grown strong with the 2013 protests still fights for the possibility of a state-subsidized system that abolishes public transport fares altogether (Peschanski 2013), in Santa Teresa, a specific material element of the tramway has long allowed for “free-riding” (Kemmer 2020), that is, for jumping on and off the *bonde* without having to pay for the journey. As detailed in the previous chapter, the wooden footboard which covered the entire side of the open-sided vehicles since the inauguration of the first tramways at the turn of the 20th century has from the beginning been appropriated for staying outside the carriages and riding without ticket.

Apart from low fares and free-riding, the *bonde* – in its material specificity – presents an exception from the current panorama of political mobilizations around public transport issues in yet another way. At first sight, Santa Teresa’s footboard has found a counterpart in the 2013 protests, which also repurposed a material device from the public transport infrastructure to claim free fares. During the June demonstrations, the *catraca queimada*, or burning turnstile, featured prominently on both protest banners and as actual physical presence, while taken from metro stations or bus entries and set on fire on the streets of Brazilian cities.

In March 2016, I attended a meeting of Rio’s “Right to the City” Movement⁹⁸ which had invited one of the spokespersons of the Free Fare Movement, Lúcio Gregori, secretary of transport of São Paulo between 1989 and 1992, who explained the significance of the *catraca* as follows:

⁹⁸ The “Se a Cidade Fosse Nossa” (If the City Were Ours) Movement has been founded in June 2015 in Rio as a sub-section of the left-wing Socialism and Liberty Party (PSOL) which has split from the Brazilian Worker’s Party (PT) in 2004. The movement quotes the Right to the City theories after Henri Lefebvre as its strongest influences (own interview, Zé, Sept. 2015), and has invited, amongst others, David Harvey to speak at the above-mentioned meeting in 2015 (Müller and Brock 2015). Until pausing its activities for an undefined time because of election campaign work in May 2016, and the then-following political instabilities, the movement has experimented with formations of collectivity in local nuclei, addressing issues like housing, security, and mobility. In an interview, one of the founders explained to me that the movement

The turnstile is a symbol of spatial segregation, and of the discrimination by race and income which is structurally anchored in our public transport system. The discourse of the market goes like this: If you don't have money to pay the ticket, you stay where you belong [permaneça em seu lugar] (Gregori 11/03/2016, own notes from public speech).

What makes the footboard a “political matter” is the fact that it has not only been staged as *symbol* of abolishing obstacles to access, but that it has *afforded* uses and passenger practices that lay the basis for collective claims around free public transport. I use the notion of affordances (Hutchby 2001) here as an entry point for analyzing the range of functions that the footboard has provided because of its very material design and technical specificities.

As Sandra Evans et al. (2017) have importantly argued, analyzing a *range* of functions does not assume that an object either enables or constraints, but rather focuses on the relationality of users, design, context, and single material components. The footboard, for example, might allow some passengers to enter the tram carriage, while limiting the capacities to travel by bonde for disabled people, children, or senior adults (cf. section on “swinging-balançar” below). Introducing a more nuanced model of affordances, Jenny Davis and James Chouinard (2017) allow for understanding the footboard as a material device that is designed in a way which strongly demands from passengers to step on it – yet not necessarily obliging them to do so. One can imagine, for instance, particularly sportive users who jump directly into the tram without stepping on the board, although the relatively large distance between curb and carriage of approximately one meter makes such act very unlikely to happen (Morrison 2009).

Moreover, the differentiations introduced by Evans et al. (2017) and Davis and Chouinard (2017) point to additional factors in the footboards' shifting function from offering passengers to use it as foreseen by its original designers, that is, as access assistance, towards its' affording a usage as (free) riding-device. If taking into consideration that affordances operate through gradations (ibid., 241), for instance, the footboards' length becomes decisive: Compared to other historic tramway's around the world, such as the Lisbon and San Francisco lines, the bonde footboard is unique in covering the entire side of the carriage (cf. fig. 15).

had been strongly influenced by the 2013 protests' claims for new forms of democratic participation (Zé Sept. 2015). In Santa Teresa, the group generated a vivid exchange between local residents and activists from the 2013 scene, especially the free fare movement.

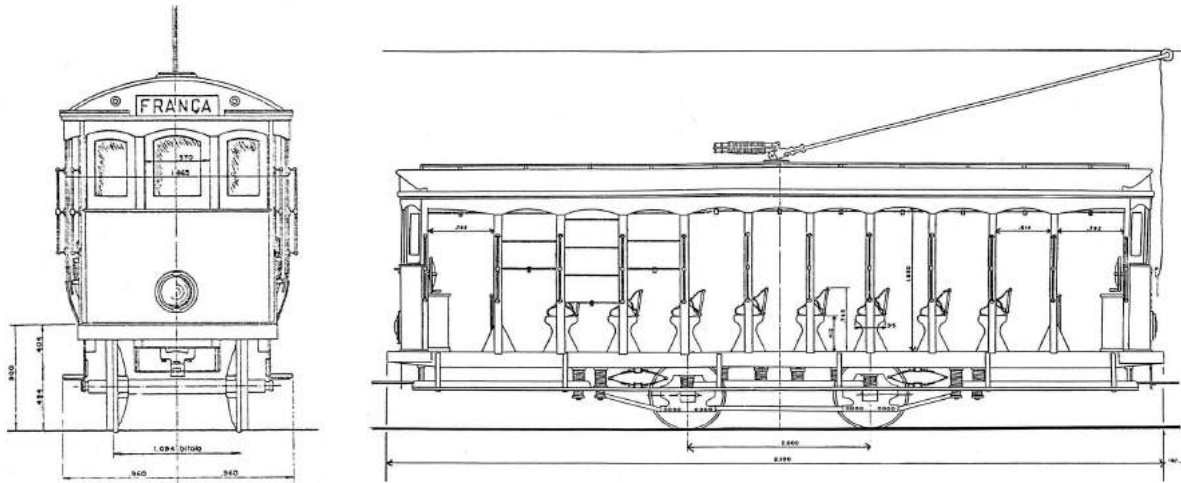


Figure 15: Technical drawings of Santa Teresa tramway

This variation in length, combined with the absence of a central aisle inside the carriages and, importantly, the wooden side handles which are attached besides each of the eight entry slots, encourages passengers to stay on the footboard even during the relatively slow ride. The difference between “strongly demanding” – as in the above access-assistance example – and “encouraging”, here, is that the former expresses an offer to the subject made by the artifact, while the latter describes a relation where the artifact responds to the subjects’ desired actions (ibid.). However, Davis and Chouinard (ibid., 244) also point to how these categories can be read more arbitrarily and how for example the same artifact might simultaneously “encourage” one usage while “discouraging” another. In the case of the footboard, the expectation of a joyful experience or a “free ride” that might bring some passengers to jump on, goes hand in hand with others’ refraining from staying on the footboard because they feel insecure, uncomfortable, or are aware of elevated accident-risks.

In summary, while the analytical development of affordances as cited above offers a fruitful entry point for disentangling a series of material properties and design specificities of the bonde that have brought passengers to ride the footboard (without paying), these theories do not provide sufficient tools for exploring how the relation between residents and this particular device has incited *political* claims for free public transport. This is mainly due to the fact that the origins of the concept of affordances in (ecological) psychology and theories of perception have limited their scope to studies of individual, rather than collective processes (ibid., 241).

Following the interest of part two, however, this chapter seeks to find out more about the relation between residents and footboard and the emergence of political collectivity in Santa Teresa.

A further piece in this puzzle stems from the comparison of this local element of the transport infrastructure with the burning turnstile as cited above. Here, the *catraca* seems to afford in a similar way, as it discourages passenger access to stations or vehicles without a ticket yet at the same time encourages its subversion by jumping over or sharing tickets. However, at second sight, the relation between turnstile-uses and free-fare protests is less straightforward than in the case of the footboard. While the former was rather used for a symbolic “burning down” of access-barriers in a situation where protesters were already on the streets because of fare-rises, the Santa Teresa protests actually surged in defense of the footboard’s removal in the first place, and only then turned into shared claims for free public transport.

This chapter departs from this puzzle, that is, the question which processes happen between people and materiality that might explain the transition from something (a footboard, a turnstile) affording a certain praxis, towards this relation bringing about a political collectivity with the power to subvert the capitalist order governing public transport in contemporary Brazil.

To this end, let me briefly introduce an understanding of “material resistance”, which Adriene,⁹⁹ former president of the neighborhood association AMAST and veteran in the tramway-struggle has shared with me in late 2015 (Adriene 08/12/15). In reaction to my question on whether protests for the preservation of the bonde had surged in Santa Teresa in defense of alternative ways of using public transport, Adriene vigorously shook her head. “[T]his was not because of cheap ticket fares”, she said, “the real reason for [the tram’s] survival is material resistance” [resistência material].

Resistance, for her, did not designate a people’s movement against state authority. Rather, it pointed to the durability or permanence of residents’ relations to the bonde. Its narrow track gauge and flexible chassis had been so perfectly adjusted to the steep streets and narrow curves of the hilltop neighborhood that the tram resisted replacement by busses or other transport alternatives. Following Adriene’s explanation, the interplay of non-human elements, such as the neighborhood’s peculiar topography and the vehicle design were the original reason for why the bonde had survived for over a century.

⁹⁹ For a more detailed introduction of Adriene, please confer the methodology chapter (“Afraid of Things”) in the introductory section. All nine informants who have come to constitute the “core group” of my research between 2014 and 2019 are presented there.

From Adriene's perspective, it was as if the physical resistance of the tramway had been passed on to the residents of Santa Teresa, who "could not do otherwise than defend it." For her, the bonde itself inspired the political mobilization of residents against its suspension in the first place, and only later did the debate on ticket fares and access to public transport in urban Brazil become part of the struggle.

In order to further inquire into the workings of "material resistance", the following sections draw from recent discussions on the originally Deleuzian notions of agencement (Blok and Farías 2016) and the (micro-)politics of mobility (Bissell 2016; 2018; Merriman 2019) in theories of assemblage and affect. To substantiate an understanding on political collectivity as emerging from the relations of residents and urban materiality, the first section of the chapter considers how alongside the tramway, the footboard has forged resistance in the neighborhood through a series of "imprints" (Caldeira 2012) and "inscriptions" (Akrich 1992, 208) which it has left on the pages of newspapers, in local archives, on the walls of the neighborhood and those of its social media-users. The second section draws on filmed accounts of footboard-riding to examine how embodied, affective relations to urban matter generate political claims for alternative ways of organizing public transport and access to the city. In the third part, I argue that the affective attachments to the tramway and its latest technological changes generate ambiguous political collectives, ranging from revolutionary to conservative.

Free-riding Rio: Public transport as mobile meeting place

In this section, I demonstrate how working with conceptual approaches to urban assemblages allows for studying the evolution of collective political claims in Santa Teresa and the material capacities and limitations of the tram vehicles as mutually constituting. The structural context of "excluding mobility" which I have described above is then not taken as explanatory, but rather, emphasis is put on how socio-spatial inequality emerges from the very relations of residents and specific instances of urban matter (Färber 2014a). In the previous chapter, I have shown how throughout its century-long history, the tramway system of Rio de Janeiro has contributed to violent urban reforms, the displacement of thousands of people, including the birth of the first favelas, and the continued discrimination of the urban poor in public transport. At the same time,

I have detailed how, from the early footboard-Flâneurs over the *quebra-quebra* protests, the bondes' specific design elements have allowed passengers to subvert excluding fare systems and transit maps. Recently, this complex human-material relation that generated both segregation and subversion has again translated into shared political claims. Since the suspension of the last bonde of Santa Teresa in 2011 marked the end of "free-riding", the footboard has resurfaced in the neighborhood through a series of drawings, writings, and paste-ups which provide further insights on the formation of political collectivities beyond classical theories of social movements or power structures.

One example of such resurfacing is the new bonde design plan that was presented by the authorities shortly after the "official" beginning of reinstallation works in early 2012. I understand the plan as "inscription", borrowing this terminology from ANT-scholar Madeleine Akrich (1992). From her study of technical objects designed for "development" in Europe and put into operation in Africa, Akrich has argued that "[a] large part of the work of innovators is that of *inscribing*" this [their] vision of the world in the technical content of the new object" (ibid., 208, original emphasis).

From their adaption of Akrich's concept to studies of infrastructural assemblages – and specifically public transport systems – scholars like Sebastián Ureta (2014, 2015) and Andrés Valderrama Pineda (2014) have shown, first, how objects like design plans, blueprints, or models can act as technologies of power (Sebastián Ureta 2015), by enabling a particular vision of public transport and in turn setting limits to alternative imaginaries. Second, such acts of inscriptions always already imply contestation, because the kind of world proposed in, for instance, a plan is not necessarily the kind of world that potential passengers would agree with (Pineda 2014).

In order to further examine these conceptual considerations and their implication for the study of political mobilizations, I will compare the case of the bonde design plan with empirical studies in urban assemblage research.

I first came across plan in 2015, through an article pinned to the notice board of a local café, one of the few gastronomic offers which has survived the various economic crises and rent rises in the neighborhood and has functioned steadily since 1994. This might be one reason why the place is well frequented by residents, in addition to being one of the few cafés in this (central) part of Santa Teresa where people can hang out without spending much, read newspapers, and keep each other posted about all kinds of neighborhood-news.

When I noticed the small technical drawing of a bonde-to-be, its colors had already faded – the article was hanging on the notice board for three years, since its publication in February 2012. It had been cut out of the *Veja Rio* magazine, a lifestyle-supplement of the São Paulo based weekly newspaper *Veja*. The plan that appeared at the lower end of the short article, entitled “see [veja] how the new bonde of Santa Teresa will become” (Neves 2012), was actually a re-print from the official website of Rio de Janeiro’s state government (fig. 16). Patrícia, a mid-aged woman from a poor suburb of Rio de Janeiro who moved to Santa Teresa in 2006 and works in the café ever since, remembered that the plan had appeared on “many walls” (both virtual and actual) back in 2012. Especially the protests “about the bonde” during that time had used the plan in facebook-announcements of manifestations, some had even distributed it as print-out, “it mobilized [mobilizou]” Patrícia said and shrug her shoulders (26/10/15).

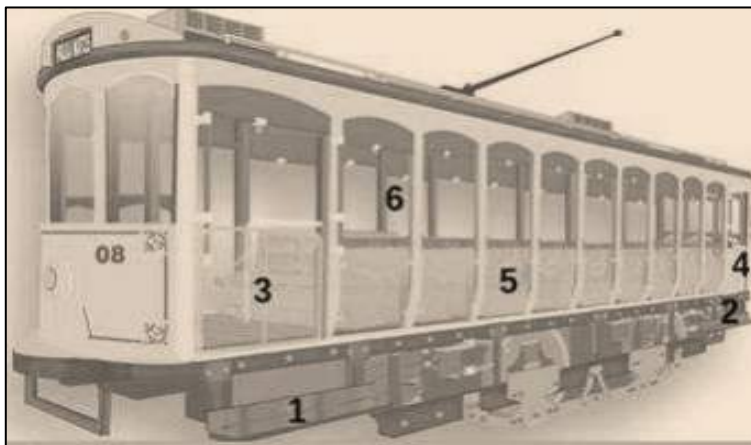


Figure 16: Prototype of new bonde¹⁰⁰

But how could a plan actually “mobilize”, beyond a common sense understanding of the expression? Only one year after my conversation with Patrícia, I found another hint to this question, while working myself through the private archive of the neighborhood association AMAST.¹⁰¹ Here, a newspaper cut-out of the design plan, identical to the one I had seen in the café, was stored inside a plastic pocket, followed by various copies of the original article and filed under the header *atos*, or “(political) action” or “event”.

¹⁰⁰ Translation of the legend as printed in *Veja* magazine as follows: (1) and (2) retractable footboard at entry and exit areas; (3) and (4) swing doors; (5) polycarbonate closing at lateral side; (6) reduced seat number.

¹⁰¹ For a more detailed introduction of the AMAST, see chpt. one

When I asked Adriene, who had also been one of the first AMAST-presidents in the 1990s¹⁰² and owner of the archive-house, why these documents were stored in the *atos*-folder, she explained:

Because when we uploaded them to our facebook-page [in March 2012], immediately, many residents shared them, they were *acting* [atuaram]. And it is from here where the movement [movimento] against the distortion [distorção] of our *bondinho* began. Because the plan makes clear what *they* were imagining for *us*. Closed carriages, less passenger seats – and when I say “less” I mean considerably less, because they only let people enter here and here [pointing to the front and back doors], so they need a middle aisle now, so less seats, and then these fools simply cut the footboard, see? So this is how they want us. (Adriene 08/12/15, original emphasis)

According to Adriene, the mobilizing capacity of the plans had to do with its visualization not only of the kind tramway that the public authorities (“they”) projected for the future, but also of the vision they gave of its users-to-be. What this vision was, or how it would be connected to seat numbers and footboard-length however, remained abstract to me at this stage of the research. Only after discussing these questions in further conversations with Adriene, I found more clues to why the design plan should entail a specific imaginary beyond the technical.

The main point of criticism, in her account, was that the public authorities would ignore the residents’ capacity to take care [cuidar] of their safety and to decide for themselves how to make use of the tramway. It would not be possible anymore for residents to linger on the footboard during the ride, to enjoy the feeling of being “on the street, and on public transport [na rua e no transporte público]” (ibid.) at the same time. “The footboard was an extension of the sidewalk” (ibid.), Adriene explained, people used it to take a stroll through the neighborhood, they jumped on spontaneously to chat with someone they knew inside the carriage. It was up to them whether they ran the risk to fall or to bump into lampposts or tree-branches while standing on the footboard. Similarly, the passengers inside the carriage would have to stand up if the tram was crowded, while the historic design without middle aisle would have only allowed for travelling seated.

In order to better understand the “political relevance” of the new design plan, Adriene suggested I should meet her long-term interlocutor Hindenburgo Pires, geography professor at the State

¹⁰² Adriene has assumed presidency of the association with a certain regularity and at least four times since the 1990s, his latest mandate ongoing since 2018 (elections are held every 2 years).

University of Rio de Janeiro (UERJ), who had recently published several academic articles on the bonde of Santa Teresa (Pires 2012; 2014).

In one of these texts (2014), which compares the modernization of the historic tramway systems of Rio (BR) and Porto (PT), Pires reproduces a picture of the bonde design plan and raises a critique similar to Adriene's, arguing that the Rio state government "overpasses" the existing "culture of usage [cultura de uso]" (2012,13) of the bonde. When I asked him about this particular passage of the article, Pires explained to me that he interpreted the tram-prototype as producing [gerar] a new type of user, "one which is merely interested in his [sic!] safety, who doesn't take the bonde anymore to go for a stroll [passear], chit-chat [bater papo]" (Hindenburgo 26/01/2016).

In a certain way, both Adriene and Pires had identified a "material-semiotic agenc[y]" (Blok and Fariás 2016) in the political effects of the bonde design plan. From an assemblage perspective, the agential effect of the plan on wider urban configurations of power or conviviality lies in its capacity to create a particular type of actor, that is, a passenger who prioritizes safety over other routines of usage. In his work on the so-called Transantiago, a large-scale infrastructure project aimed at completely transforming public transport in the Chilean capital of Santiago, Sebastián Ureta (2015: 90), takes up a similar perspective, arguing that the new bus design proposed as part of this plan enacted "a fully rationalized individual", always ready to adapt her behavior to the least costly or time-consuming ways of usage. Similar to Pires, Ureta argues that the new design plan enacted passengers as "entit[ies] without any kind of habits" or "comfort demands" (ibid. 85).

From these accounts, the bonde design plan can be interpreted as a technology of power. It enabled a vision of public transport in which allegedly rational cost calculations and safety considerations limit possibilities for what I call, inspired by Ureta, habits of conviviality – that is, usages of the bonde as place of encounter and exchange.

By creating this particular type of user, the plan exerted an agential effect on urban power relations, which, according to Pires, would have "transform[ed] Santa Teresa into yet another capitalist "niche" of the *Cidade Maravilhosa*" (Pires 2014).¹⁰³ From the perspective of the academic article, it seemed certain that the new bonde was to reproduce Rio's context of excluding mobility. The redesign would impede *caroneiros* [hitchhikers] from jumping on outside stations, it would not

¹⁰³ For a discussion of Rio de Janeiro's "Marvelous City" image and its historic relation to promises of (economic) progress and urban revitalization, cf. chpt. two

allow poor passengers to take a ride without paying, and, subsequently, foster the socio-spatial “exclusion of favela-inhabitants [comunidade]” (ibid.). However, from an assemblage perspective, agency can be conceived of as distributed between several entities, such as a design plan, a group of engineers, construction firms, and transport users (Pineda 2014). Instead of implying a singular cause-effect model, then, Farías defines agency as “the action or force that leads to *one* particular enactment of the city” (Farías 2010, 15, emphasis added). Understood this way, an enactment of the capitalist city through the new design plan as presented in Santa Teresa was in no ways pre-determined.

From their study of ride-sharing in German regional train travels, Alexa Färber and Birke Otto (2016) present one example for understanding transport politics as socio-material co-production. Here, the prescribed usage of a group ticket between a pre-established group is subverted by the interaction of, i.e., a number of strangers, a ticket machine, money and time invested, that constitute what Färber and Otto call a “calculative agencement” (2016, 28). What becomes clear from this example is that transport politics do not emerge from stable, pre-defined human users (or groups of users) alone, but are instead distributed amongst passengers and infrastructural elements across multiple scales.

In Santa Teresa, a space of contestation with the world of ticket-obligations and hitchhiking-preventions as inscribed in the bonde design plan has opened already in advance of its implementation. While it became clear later on that the model from 2012 would never be realized,¹⁰⁴ in the time preceding the inauguration of the new tramway in 2015, surfaces, lampposts, junction boxes, and bus schedules of the neighborhood became covered with all kinds of alternative bonde-“plans”.

In many ways, the walls of Santa Teresa echo what Brazilian scholars early on have identified as new modes of residents’ intervention into mega-cities like São Paulo and Rio de Janeiro (Bentes 2009, 2011; Telles 2006; Tiburi 2011; Vianna 1988). From her study of *pixação* – a set of cryptic and “transgressive” graffiti writings or tags that began covering urban Brazil at the turn of 21st

¹⁰⁴ Why this plan was never realized, I cannot say. One explanation I have encountered in conversations in the neighborhood was that the public authorities were “afraid” of the National Heritage Institute (Iphan), which in the past had already sanctioned attempts to alternate the original design of the historic tramways of Santa Teresa (put under protection by this very institute in 1983). For more information on this process, and for a more detailed reflection on the relations of residents and “patrimony”, cf. chpt. five.

century – Teresa Caldeira (2012: 416) has argued that such “imprints” differ considerably from the integrative claims and repertoires of urban social movements during Brazilian democratization in the 1980s. *Pixar* is an appropriation of the Portuguese “pichar”, which means “to tar” or “to write” on public walls, and, sometimes, “to offend” (ibid.). In their archaic, almost brutal appearance, the bold, black letters break with aesthetical standards and provokes rejection throughout the Brazilian middle- and upper classes (Schweizer, Larruscahim, and Vieira 2016).

While São Paulo is considered as “world capital” of graffiti, with famous local artists like Os Gêmeos¹⁰⁵ being displayed in art galleries from New York to Tokyo, the pixadores deliberately reject to assimilate to the art market. Their similarity to graffiti artists lies in their way of organizing in small groups, usually composed of around 5-10 members, predominantly black, young and male, and often from the urban peripheries – territorial markers are frequently added in form of an extra letter to the pixadores’ name tag, which stands for a specific neighborhood. These groups, the so-called *grifes* or *bondes*,¹⁰⁶ according to Caldeira, have introduced a new form of exposing the deep divisions present in Brazilian society. In Caldeira’s words: “Their aggressive and intolerant interventions reveal that they have little intention to emphasize dignity, citizenship, or the rule of law” (ibid. 216).

In Santa Teresa, the suspension of the tramway in 2011 seems to have marked a similar turning point; a break with an aesthetically “accepted” form of graffiti which inscribes tolerance and inclusionary ideals into public space, towards the open exposure of conflict. This is at least how Jambeiro (30/10/2015) perceives it, an around 40 year-old resident, born and raised in the neighborhood’s favelas and renown author of many emblematic and hyper-realist murals that mirror representative buildings and local street life – often carried out as paid job to embellish hotel façades or “shopping areas” of the main street.

¹⁰⁵ One of the recent works of “Os Gêmeos” (The Twins) makes reference to the bonde-accident of Santa Teresa. The walls of “The Bunker”, displayed at Rio de Janeiro’s Museum Casa do Pontal, are covered with thin-lined sketches of broken carriages and half-standing façades from which blood droops, surrounded by rubble (Santos 2017). The work has been presented by its authors as expressing a “hope for the preservation of popular culture” (ibid.), and, by staging the “popular” bonde, it also hints towards the neighborhood’s fame as street art “hot spot” of Rio (Trip Advisor 2019).

¹⁰⁶ Please find further reflection on the use of the word bonde especially by marginalized groups and youth gangs from the favelas in the conclusion to this work.

“I hold up the tradition of painting this mural every year anew since 2002”, Jambeiro said pointing to a real-life sized painting of the yellow bonde on a crossing between three streets that marked the geographical center of the neighborhood. “I used to always depict some local personalities, hanging [pendurados] outside the carriage”, he continued, “but this year is different” (ibid). In 2015, Jambeiro decided to paint a vacant tramway, solely populated by “heroic” driver Nelson¹⁰⁷ - and he attached a new element that literally sticks out from the two-dimensional mural (fig. 17). The original side handle of the tramway, which Jambeiro gained from one of the ex-drivers over several detours, has since then allowed visitors and residents alike to re-enact footboard-driving while holding on to the piece of wood with one hand and pressing bodies as close as they can get to the bonde-mural.



Figure 17: Re-enacting the bonde

For Jambeiro, the accident has changed the ways the bonde is depicted by the many surface-writers of the neighborhood. Some, like him, have included elements that they remembered and “did not want to be forgotten” (ibid.). One such example might be 25-year old Ana, who has produced a paste-ups [lambe-lambe] as part of her graduation work for the private design university she attended after finishing school in Santa Teresa. Working her childhood memories of how she went “hanging” from the tram [andava pendurado] into a series of silkscreen prints of tram-scenes and

¹⁰⁷ For a more detailed account of how driver Nelson got a monument through the renaming of Carioca station in 2015, see chpt. one

short sentences, Ana has contributed to the vivid bonde museum on the neighborhood's walls (Ana, 17/10/2015).

Another case is a stencil that claims “tramway with footboard for all”, which has appeared on lampposts and at former stations in 2014. Even though the stencil differs from his accurate painting aesthetically, Jambeiro would still consider these works as part of what he called “the old way” of imprinting the bonde on the Santa Teresa walls. The old way, he said, was more about showing the tram as “means of integration” between the local favelas and the middle-class areas¹⁰⁸ of the neighborhood, as a “mobile meeting place” where the residents of different socio-economic backgrounds would come together, because the tram was affordable for some and “*chique*” [elegant] for other (ibid. 30/01/2015).

“Take this stencil for example”, Jambeiro said, referring to the footboard-claim, “this might be different from mine, but it is still not as ugly [feio] as the new *pixos*”. What Jambeiro referred to as “new” were a series of writings that, according to him, had appeared only after the suspension in 2011. For Jambeiro, the writings did not follow the aesthetic “code” he would identify from his activities as *grafiteiro* between the 1990s and 2010s. Their apparent ugliness, for him, was connected to the “emotional intensity” that lingered in the streets of Santa Teresa long after the accident. Before, he explained, bonde-graffiti expressed “joy [alegria]”, but since the accident, these had turned into “negative feelings”.

I showed Jambeiro the two pictures I had recently taken, the first one claiming “BONDE, fuck!” [bonde, porra] on top of a concrete mixer that was parked just opposite the temporary office of the company that had been contracted for the reconstruction of the tramway-system (fig. 7 above). The second expressed “MISSING THE BONDINHO” [saudades do bondinho] in large letters pressed in-between a whole collection of characteristic pixação writings on a wall not far from his bonde mural (fig. 18). Nodding, Jambeiro looked at the pictures, both claiming back the tram, “one angry, one sad”, he summarized.

¹⁰⁸ For more information on the socio-spatial composition of the neighborhood, cf. chapter one.



Figure 18: Bonde-pixação

What was it about the “new” way of exposing negative feelings such as anger and sadness on the walls of Santa Teresa? Did they break with the joy-and-integration language of the graffiti writings pre-accident? Were their more provocative tone and aesthetics connected to what Caldeira has identified as a break with the claims of social movements in Brazil pre-1990s? In the following, I examine these questions more in detail, guided by the message a stencil that appeared in at least ten places in various sections of the main street between 2015 and 2016, and which expressed the topic of “feelings” quite abstractly: “The footboard is the immaterial, cultural, affective heritage of the people of Santa Teresa,”¹⁰⁹ the stencil claimed. The explicit reference to this single material element of the tramway, and its enactment as *affective heritage* prompted me to zoom in, literally, on the relationship between residents and the footboard.

Swinging - balançar: The micropolitics of movement

On a hot afternoon in December 2015, I climbed up the Santa Teresa hill, accompanied by Amin Müller, a German filmmaker my age who was working in London for the advertising industry. A friend and *Deutsche-Welle*¹¹⁰ correspondent from Rio had introduced us to each other, asking me

¹⁰⁹ “O estribo é patrimônio imaterial cultural afetivo do povo de Santa Teresa” in original (the English translation above is my own).

¹¹⁰ The Deutsche Welle is the German foreign broadcasting service. The Brazil-edition counts with two tv-channels, an online radio station, and a broad section of journalist texts, published daily on its website and social media accounts. The headquarters are located in Berlin and Bonn, but the Deutsche Welle

if I could show his colleague Amin around Santa Teresa. On our first walk through the neighborhood, we came up with the idea that Amin and his new portable camera could accompany my fieldwork for a few days. Ultimately, this resulted in an arrangement where I continued to take my daily walks through the neighborhood and to meet those people with whom I had already scheduled interviews or ride-alongs. With the difference that Amin was now walking and sometimes standing beside or behind me, camera focused on the people I talked to and the places I visited, only accidentally catching parts of body when I gestured or talked too vividly.

Our rather tacit “agreement” consisted also of Amin rarely talking during interviews – partly due to the fact that he did not speak Portuguese and thus could not react immediately to something being said – and rarely intervening in the literal “direction” of our walks through the neighborhood. There were a few exceptions, notably when Amin asked me to confirm that my interview partners had stated their name, age, and occupation at the beginning of the interview, or when he liked a specific street setting and asked me to linger on that scene for a while. Amin, who was on holiday then, said he was tired of producing only “fancy ads” and had suggested he would like to make a short film about the bonde which he could eventually submit to British documentary film festivals.¹¹¹ Before Amin left Rio he gave me a hard drive with around 23 hours of film material, featuring the seven video-interviews and some street scenes, including a ride-along with Sheila.¹¹²

The following section concentrates on conversations with two residents of Santa Teresa which I held during the ten consecutive days of filming. The first one was Dario,¹¹³ a 23 year-old employee in a small grocery store located in the middle section of the main street. The interview with Dario emerged spontaneously, as I will explain in more detail below. Six days later, I met my second interlocutor, Paulo, on a scheduled meeting which we had agreed upon prior to Amin’s visit. Paulo, 58 years old at the time of our interview, lives and works just a few meters down the street from the grocery store, in a two-storied mixture of open air workshop and gallery. Attracted by the rusty metal rails that piled up in one corner of his workshop, I had asked Paulo for a meeting, with the

correspondents are distributed across the major Brazilian cities. Cf. <https://www.dw.com/pt-br/about-dw/redação-dw-brasil/s-32444#> (last accessed: 13/05/2019).

¹¹¹ Ultimately, we never made it beyond a first trailer version of the bonde-short film, which I told Amin I disliked because of its “polished” looks and which has since not been submitted anywhere as far as I know.

¹¹² For a detailed description of this go-along, see chpt. one.

¹¹³ Dario and Paulo have been part of my “core group” of research participants, for more information refer to methodology chapter “Afraid of Things”.

hope he would know more about the whereabouts of those parts of the tram-infrastructure that had been “discarded”¹¹⁴ during the reinstallation process. I have chosen these two interviews because, despite the apparent differences between Dario and Paulo, they share a peculiar way of referring to the footboard which makes them not only different from the other five interviews I undertook during this time, but also includes some hints towards the relationship between affects, materiality, and political mobilization.

On that December day in 2015, while climbing uphill, Amin and I stopped several times to catch our breath, chatting with someone I knew on the crowded sidewalks. My companion took pictures of tramway-reminders: tracks shining through the cobblestones, old cabin doors reused as restaurant façade, a banner proclaiming “four years without bonde.” After finally arriving on the hilltop ridge and stepping onto Santa Teresa’s main street, we went into the slightly overpriced grocery store to buy a bottle of water. Leaning from the other side of the counter, Dario took our cash while speculating with me about the newest construction site that had opened a few days ago across the street. “They will finish the Guimarães-section by end of this month”,¹¹⁵ Dario told me. When I asked how he could be so sure about this, Dario (interview 08/12/2015) explained that he grew up in the neighborhood as nephew of a tram mechanic and driver who worked all his life with the bonde. It was this uncle, recently re-employed by the tramway-operators, who had informed him about the planned course of construction works.

When I explained to Amin that Dario had now gotten into memories about tram-driving through the neighborhood, he suggested we should step out “into daylight” for a spontaneous filmed interview. Standing with me on the sidewalk in front of the store, Amin positioning his camera from across the street, Dario continued to sketch what he called residents’ strong “attachment” [apego] to the bonde.

You know where the real heart of Santa is [pointing into the direction of Guimarães square, headshake]? No, not the Guimarães square. It’s behind it. You know about the old bonde-workshop [garagem]? That place made of Santa [Teresa] an autonomous body, an organism independent from the city. The drivers back then were at the same time the bonde-mechanics. And only they knew how to repair the bondes, where to get the materials. Because the original replacement parts were not produced anymore, so they improvised.

¹¹⁴ For a story of the clandestine search for and repair of tramway-parts, please cf. chpt. five.

¹¹⁵ The Guimarães square is located in the center of Santa Teresa. For a map, see figure four.

And they did not need the authorities to keep the system running. So the *bonde* transmitted liberty to the drivers. And to the passengers. Everybody felt at ease [à vontade] during the ride, you could jump on any time, you just made a sign and it [the *bonde*] stopped and took you on board. [...] It became something *carnal* [port./engl.] to the people and to the neighborhood, we had grown together [entrelaçados], *everything was bonde*. And this is and this is what mobilized the people to claim its comeback. (08/12/2015, emphasis added)

Dario's account, in a certain way, complements the story of "material resistance" which I briefly alluded to in the first section of this chapter. What mobilized the residents of Santa Teresa to claim the tram-comeback, in his account, had something to do with the liberating "feeling" of tramway riding; with the "carnal" sensation of growing-together of passengers, drivers, *bonde*; and with a neighborhood-life whose heartbeat was set by the constant hammering and knocking emitted from somewhere behind Guimarães square.

An understanding similar to Dario's – of feelings, emotions, and bodily sensations as political forces – has long been advocated by feminist scholars, and, more recently, has become a shared concern for scholars who contribute to the heterogeneous field of "affect studies" (Anderson 2014; Blackman and Venn 2010; Gregg and Seigworth 2010; Clough 2010; Slaby, Mühlhoff, and Wüschner 2019). Drawing from the Deleuzian readings of Spinoza (1990), most of this literature has come to agree on a minimal definition of affect as the "augmentation or diminution of [a] body's capacity to act" (Massumi 1987, xvi).

The key point I draw from Deleuze and his interpreters is, first, that every encounter a body has increases or decreases its ability to do things and to sense things. Following from this, second, is that rather than seeing residents as self-contained entities that are defined by identity-markers such as class, race, or gender, their bodies can be understood as always transforming, contingent on what is happening around them. To put it differently, affects emerge out of relations. This also implies that they exceed individual bodies and potentially bring about new collectivities (Anderson 2014), while at the same time also aligning them against others (Ahmed 2001). Similar to conceptualizations in assemblage research, political subjectivities are then not taken as predetermined, but as emerging from a distributed set of relations in which the involved "bodies" also include nonhumans.

In this sense, Dario's account illustrates how the *bonde* affected residents of Santa Teresa; how hitherto separated entities came to form a political collectivity as the tramway entered the human

bodies' "flesh" and mobilized them in defense of its material form. Dario's recalling the "liberating" feeling of tramway-riding can be read as a hint towards affect's capacity to disrupt existing social patterns, such as fixed stations or ticket obligations.

"You needed to know how to swing." Paulo (interview 12/12/2015) used the Brazilian word *balançar*, which means both to swing and to balance. We were squeezing into the small space left between shelves full of metal sculptures and piles of "raw material" – cans, spirals, cables – that filled the lower "gallery" part of his house. My first question had led Paulo into a longer explanation: How long he had lived in Santa Teresa? "I came here almost 30 years ago", Paulo started. He had come to Santa Teresa in 1987, shortly after the end of military dictatorship in Brazil, and built this house, choosing a neighborhood that had gained some fame as a retreat for artists, intellectuals and other members of the resistance movement. Born in a rural part of the poor northeastern state of Bahia, Paulo saw himself as "autodidact," one who has worked as actor, painter and photographer. Only since a few years has he concentrated on building sculptures from recycled metal, and yes, this had to do with the bonde, because it was through the re-installation works that Paulo became aware of all the material that was lying around. Many residents left their houses for a nighttime-stroll at that time, he said with a smile, carrying century-old wooden crossties [dormente] and heavy steel tracks in groups of ten, even the ornamented handrails that had been cut to make space at the street-sides.

Most of his sculptures showed scenes from his daily life, Paulo explained, such as his model of the Portinha station, which he pointed at now. Portinha (literally "little door"), has long marked the unique entrance to Santa Teresa via bonde. The miniature model of the station is Paulo's sign of protest:

Everybody is rebuilding the bonde, but the bonde is not for everyone. I decided to build Portinha instead. They call this Portinha because it's the last station before the aqueduct [and now railway-bridge], after that, you can only go downtown, to the center. There is also a staircase here [pointing] which gets you directly to Lapa.¹¹⁶ So I placed this figure with tambourine here, because this is where the *maladragem* [rascality, idleness, cunningness] begins, with all this folly [loucura] and confusion [confusão] that outsiders fear. And, meanwhile, we trained footboard-riding, residents jumped off, then getting back on the moving bonde, making those performances. [...] Almost like a dance between two

¹¹⁶ The Lapa-district is located at the foot of the Santa Teresa hilltop and administratively belongs to Rio's city center (cf. chpt. one, fig. 4). It is famous for its samba-bars, brothels, and cheap street food.

lovers. Those watching liked it. But those who were not used to it, also because of the height of the bonde, were falling when trying to jump on, or they hit their heads with [lamp]posts. *You needed to know how to swing [balançar]*. (Paulo 12/12/2015)

In contrast to the “meeting place”-variant of footboard riding, Paulo’s account rather points to how potential “outsiders” were excluded from entering the tram outside stations, or without a ticket. Where his “knowing how to swing” clashes with Jambeiro’s “drawing” of the tramway as a kind of integrative device, it points to how the politics of the footboard were multiple, unstable and sometimes contradictory. The affective attachment to the footboard not only connected *some* residents of Santa Teresa “with some others,” but it also aligned them “against other others” (Ahmed 2000). However, the quality of this attachment depended not on identifications with a “neighborhood community” or prejudices against “others” in the first place. Rather, the “training” that Paulo describes brought about an ephemeral formation of collectivity, held together only by a series of almost choreographic movements and their repetition.

The idea that tramway-swinging and balancing would precede the level of the individual and bring about some micropolitical formation of collectivity came to me only six months later, when I got back to my fieldwork material at my Berlin-desk. While scouring through the seven video-interviews, I found a striking parallel in Paulo’s and Dario’s accounts.

Only after I had played the two videos in stop-motion, repeatedly and on split screen view, a parallel in the movements and gestures of my interview partners became “visible” (fig. 19) to me. I watched how Paulo’s hand shot to the front, closing around an invisible side handle. The rest of his body swiftly followed this gesture, almost automatically. Meanwhile, in the other video, Dario raised one arm above his head, a short wave, as he turned away from me, towards the shop. Similar to Paulo, he held his first clinched now and was looking downward while stepping on the curb, facing the balustrade that divided upper and lower part of the main street. In the above-quoted interview passages, I have orthographically marked the moments where Dario and Paulo started to “dance” with a series of dots between square brackets. Both had been talking about the footboard and about “jumping” [pular] on and off. They had paused after their respective talking about “making a sign” to the driver, or “training” to ride the footboard. Instead of trying to explain the associated gestural signs and practiced movements to me, Paulo and Dario opted for “showing” me these particularities of tram-riding by suspending talk and engaging with body-language.



Figure 19: Footboard-dance

Following the order of movements necessary to “board” the tram outside stations, both Dario and Paulo had first mimicked the grasping towards the side-handle, necessary to lift one’s body up and onto the footboard. Dario’s performance started a few seconds earlier than Paulo’s, as he first had to “wave” for the bonde to stop, and then turn around, in order to be able to use sidewalks and balustrade as footboard-and-bonde placeholder. In the second video, Amin had chosen to follow Paulo’s gaze downwards. While the camera zoomed onto his rhythmically crossing feet, I recognized the two basic samba steps, which, rather than “steps” consist of a weight shift from the slightly forward left foot to the slightly rising right foot. Dario was beginning a similar movement

on the other half of my screen, only more energetically, now jumping up and down, back and forth between asphalt and curb. Laughing, repeating, for the sheer pleasure of doing this.

What do impulsive movements and outbursts of feelings such as those expressed by Dario and Pedro reveal about the quality of attachment between humans and nonhumans? And how do political subjectivities emerge from them? These and similar questions have inspired various academic engagements with the “molecular” or “micro politics” of bodily movements, originally coined by Deleuze and Guattari (Himada and Manning 2009; Jellis and Gerlach 2017; see also Deleuze and Guattari 2004, 208 ff.).

For the field of mobility studies, scholars like David Bissell (2016b, 2018, 35ff.) and Peter Merriman (2019) have demonstrated how the original Deleuzian conceptualizations provoke an expanded understanding of what constitutes transport politics. Through introducing this new conceptual repertoire to the field, they pretend to move away from influential works in transport geography, who have long concentrated purely on questions of exclusion, accessibility, and socio-spatial patterns of inequality – thus producing analyses similar to those I have outlined for Brazil’s context of “excluding mobility” above (L. Pires 2013; Vainer et al. 2013; Vasconcellos 2018; Verlinghieri and Venturini 2018). As Merriman argues, a refocusing on the molecular, or the micro draws attention to those vital forces that, operating below the threshold of control, incessantly traverse, undermine and potentially break such seemingly stable forms of organization.

Pioneering this shift, David Bissell has drawn from his thorough study on commuting around Sydney, Australia, in order to identify some of the affective forces at play in public transport. As a conflict unfolds amongst the passengers aboard an inter-city train line, Bissell sensitively observes the “timbre[s] of voice, alternations of silence and noise, [...] gestures of swinging and circling around [...], the opening and closing of doors” (2016b, 397). The transformative capacity of such vibrations, rhythms, and movements, he argues, lie in the effects they have on body’s capacity to act. From this perspective, micropolitical, or “moment-to-moment transitions” (ibid., 399), bring about ephemeral formations of collectivity, by enabling consolidation and intimacy between some passengers, while constraining others through feelings of claustrophobia and uncertainty.

From his interviews with inner-city long-term commuters, Bissell adds that the “choreographed” appearance of key moments such as “boarding and alighting public transport” (2018, 43) do not only reveal patterns of social inequality – i.e. exposure to stressful, tiring situations without a choice

– but might as well create new formations, such as “the communion [passengers] made as commuters” (ibid. 43), composed of fleeting alignments and subject to ongoing variations of the material conditions at work.

Instead of revealing the momentary transitions that unfold *inside* a moving transport vehicle, Dario’s and Paulo’s swinging and balancing offer us insights about the political force of a relation to something that is no longer *there*. Drawing from current debates on affect and micropolitics, I have shown how the revolutionary potential of socio-material relations depends on the subtle movements of human bodies that continue to resonate with an already-absent device.

Since Dario and Paulo last entered the tramway, the affective attachments to the bonde have become deeply ingrained in their subconscious, spurring them almost “automatically” to movement – be it for a sidewalk-*balanço*, or for a protest movement against fare-rises and fixed route schedules. The choreography of jumping on and off, here, creates a “communion of footboard-riders” who keeps the radical promises of the footboard – of a free and all-time accessible means of public transport – alive despite the tramway’s suspension.

However, the uncontrollable affects resulting from the interplay of footboard and residents can have not only revolutionary, but also reactionary effects, as I will argue in the next section.

Political Matters? On ambivalent attachments

In December 2015, shortly before I conducted the two video-interviews quoted above, the bonde of Santa Teresa reached the neighborhood’s central Guimarães square again for the first time in four years.

After its official re-inauguration in late July of the same year, the new model had so far only circulated on a test track of 1.7 kilometers between the downtown terminal and the first station uphill, thus covering about 10% of the whole rail network. Because the bonde had been placed under protection by the national heritage institute IPHAN in 1983,¹¹⁷ the new models had to maintain the exact design from the 20th century, including open-sided carriages, wooden rows of

¹¹⁷ The National Historic and Artistic Heritage Institute (IPHAN - Instituto do Patrimônio Histórico e Artístico Nacional) has put the bonde under protection in 1983 (IPHAN Processo No° 83 E-03/31 269/83).

benches (no central aisle), and side-long footboards. The design plan that I have referred to in section one of this chapter (fig. 16) was discarded.

However, the government agencies introduced an important *technical* change: The new footboard was retractable. After all passengers had entered the tram by stepping on the footboard, the driver could now simply press a button to fold it up again. In an interview,¹¹⁸ the director of Rio's public transport company CENTRAL¹¹⁹ explained to me that the decision had been made because of "safety reasons", in order to protect passengers from being injured or falling off during the ride. His statement reminded me of what the president of the neighborhood association and his academic friend had criticized about the redesign of the tramway (cf. section one of this chapter), namely, that public authorities would ignore residents' capacity to decide for themselves how to make use of the tramway and which risks to take. Now, a simple technical change had put an end to the subversive practices associated with the footboard: free-riding and jumping on and off outside stations was no longer possible.

In a meeting with Brazilian social movements in 1982, Félix Guattari speculated on the limits of micropolitical, or as he also called them, "molecular", transitions: "A molecular movement can't survive for long", he argued, "without establishing a politics in relation to existing forces, economic problems, the media, and so on" (Rolnik and Guattari 2007, 200).

Did this mean that also for the case of protest in Santa Teresa, in the long run the political subjectivities and claims emerging from the residents' affective attachments to a specific instance of urban matter would disappear because, together with the becoming-retractable of the footboard, the relation to price politics and exclusionary mechanisms in public transport would be lost? From how Dario and Paulo mimicked the footboard dance even four years after this practice was no longer possible, or from the multiple "imprints" of this device on the walls of Santa Teresa, though, I can attest to how the molecular movements, gestures, and feelings associated with the bonde survived.

Instead of arguing that the collectivity of people and tramway has been de-politicized, I would instead ask *which* kinds of politics the continued relation enables.

¹¹⁸ Interview with Roberto (director of the public transport company) conducted 17/03/2016.

¹¹⁹ For more information on the role of the state company for transport and logistics (CENTRAL), see chpt. one.

To explore this question, the public announcement of new bonde-fares, or rather, the reactions of a local neighborhood association to this announcement are quite illustrative. In December 2016, one year into the test phase, the city government determined a ticket fare of 20R\$ for one tram journey. The disproportionate fare, which is almost five times higher than a bus ride in Rio, was justified by citing the need to balance the public budget in a time of crisis. With the new price policy, the state authorities also introduced a two-class system: Only “outsiders” would have to pay, while residents of Santa Teresa, following a registration procedure, were allowed to use the bonde for free (Araújo 2016).

One month before the new price was adopted, the “communications director” [diretor de comunicação] of the neighborhood association made a concluding statement to an internal debate via the association’s mailing list:

The information is clear. Only visitors are charged. We have our position: NOT ONE CENT FROM THE RESIDENTS AS LONG AS THE CONSTRUCTION WORKS ARE NOT FINISHED. The inhabitants of other neighborhoods have their own associations, protest movements, collectives. We cannot defend their cause [protagonizar suas demandas]. We are, at the moment, fighting for the return of our main means of locomotion [locomoção].¹²⁰

Members will continue to lobby for the bonde’s return, as they made clear during various meetings with public authorities, in press declarations and during manifestations, until the system is fully operating again. On the occasion of the sixth anniversary of the tram-accident in 2017, the association asked participants to “verify that the bonde did not return.”¹²¹ With this strategy, affective attachments such as the ones I illustrated above might successfully be sustained. At the same time, “fighting for the return” of the tramway, as the communication director makes clear, is not necessarily coupled with fighting against the recent fare rise.

The subversive uses of public transport and progressive political claims that the struggle for the bonde enabled in the past emerged from the same molecular movements that were now associated with a rather nostalgic claim for its preservation as means of transport for a limited group of actors.

¹²⁰ Quoted from E-Mail, received in October, 2016, own translation.

¹²¹ Quoted from signature list, 2017, own translation.

As I have argued above, an analysis of the affective relations within a collectivity of people and things reveals not only how it disrupts, but also how it stabilizes identity categories, “othering” practices, or capitalist orders. In this sense, there is an important difference between claiming a “main means of locomotion” and a means of public transport. While supporting the affective attachments of residents to “their” tram, the association at the same time differentiated them from “inhabitants of other neighborhoods,” similar to Ahmed’s point, as outlined above. What is more, with the decision not to protest against the new fare system, the neighborhood association (at least temporarily) accepted a development that brought the bonde as far away from “public transport” as it could get. The tendency towards a mere touristic use of the system is enforced by the fact that most passengers from other parts of the city cannot afford to pay 20R\$ for a ride.

Looking at these current developments in Santa Teresa, it seems that the century-long history of “material resistance” has come to a sudden end. The politics of materiality are finally back in the hands of humans, this chapter could conclude. However, the analytical perspective that I elaborated in the previous sections suggests that the structure of this problem should be flipped. Instead of assuming a sudden change from an abstract “progressive” to a “nostalgic” mindset that impels residents to hold fast to footboard and tramway, I would argue that it is the affective attachment in and of itself that has enabled such politics. Bringing together a concept of agency that includes nonhumans and an approach that accounts for the politics of affect, suggests that the bonde was only “powerful enough to magnetiz[e] an attachment to it” (Berlant 2011a), because it potentially guarantees the survival of the variegated desires and urban imaginaries that caused this attachment in the first place.

In other words, the promise of a different kind of public transport that is behind some residents’ attachments to the tramway is also the reason why they “nostalgically” hold on to it, even after this promise has been broken. Writing on *Cruel Optimism*, Lauren Berlant (2006, 21) notes that some subjects try to preserve their desired objects with all their force because “whatever the *content* of the attachment, the continuity of the form of it provides something of the continuity of the subject’s sense of what it means to keep on living on”. According to Berlant:

Any object of optimism promises to guarantee the endurance of something, the survival of something, the flourishing of something, and above all the protection of the desire that made this object or scene powerful enough to have magnetized an attachment to it. (ibid. 2011: 48)

The case of the bonde reveals how urban matter can both enable a political collective to challenge the ways in which public transport is organized *and* limit this collective to a conservative and reactionary politics as soon as the attachment becomes an end in itself. With the recent introduction of a retractable footboard, the collective of people and tram-elements has not been depoliticized. Instead, the attachment has become “cruel” in that it gives rise to a politics of preserving the bonde at the risk of losing its potential to disrupt dominant modes of organizing access to the city. In this sense, the argument put forth by Berlant provides an essential explanation for an observation that Guattari made in Brazil almost 40 years ago, stating that a molecular movement can be at the same time revolutionary *and* still “reveal itself to be reactionary and conservative at the level of the visible structures of social representation” (Rolnik and Guattari 2007, 187).

Four Promissory Things

I reached the name of the city
 Not the city itself, thick
 Rio that is not Rio
 This city crosses me

Through keeping their attachments to the tramway throughout the years of suspension, residents of Santa Teresa have managed to sustain their vision of access to the city around an affordable, “mobile meeting place” variant of public transport. The previous chapter has shown how a particular sense of endurance – of “a journey that does not end” in the lyrics of Caetano Veloso – can emerge from the material resistance of infrastructure, and from the embodied, affective relations that residents uphold to particular elements of such infrastructure through their swinging, balancing, and imprinting them on the city walls. I have argued that by keeping their desires magnetized to the local tramway, by holding on to the possibility of its future materialization residents have managed not to give up on the betterments it might have potentially brought.

But what happened once the tramway returned to the streets? Chapter three has exemplified how swiftly the content of an attachment – in this case the revolutionary potential of the tramway’s footboard for an alternative experience of urbanity where the city can be accessed outside fixed fare systems and route maps – can recede to the background once a promise has materialized. In Santa Teresa, attachments to the tram seem to have become “an end in itself” as soon as residents accepted a retractable footboard and a higher ticket fare in exchange for the long desired return of their particular local means of transport.

Does the realization of a promise then necessarily imply that its potential is lost, pointing out the limits, in other words, of the momentary openness that resides in promises’ evocation of a future that is “not yet”?

In this chapter, I show how potentiality does not only reside in the original, outspoken promise, but how it lives on even after its apparent realization – often qualified as either fulfillment or failure, promise kept or promise broken. Reaching “the name of the city” as Caetano Veloso puts it poetically does not mean reaching the city itself, thick with all kinds of contradictions, ambivalent relations and meanings (Chediak 1997, 106). Similarly, in Santa Teresa the *literal* fulfillment of

the mayors' promise that the tram would be re-installed did not mean that residents had truly "reached" the experience of urbanity promised *by* the tram itself.

The "virtual connectivity" (Chow 2010, 65) that resided in the tramway-promise prior to its realization, I will argue, has spanned between the material and actual on the one hand, and the potential on the other. Interpreters of Deleuze, including the here-quoted Rey Chow, have come to agree on a definition of the virtual as the "realm of potential" (Massumi 2002, 31). From this perspective, the virtual is a condition of productivity and indeterminacy, a kind of energy-"reservoir" (Simondon 2011, 411) from which alternative futures emerge that might or might not have effects on the "actual" – the empirical and material in a strict sense – on collectivities and their relations.

In Deleuze's original understanding (1994: esp. 182ff, 208ff), however, the virtual and the actual are not located on separated spatio-temporal planes (one having effects on the other), but always folded into each other. When developing his thoughts on the mutual unfolding of the virtual and the actual, Deleuze draws from the philosophy of Gottfried Wilhelm Leibniz in order to develop the image of the Baroque house. Roughly summarized, the Baroque house of thought consists of a single virtual plane, actualized by the subjects on the upper floor and realized by matter on the bottom floor. However, this house is not horizontally divided, but the Deleuzian allegory folds top and bottom floors into each other into a single, virtual plane, where every fold constitutes a thin membrane (Seppi 2016, 76) through which both matter and subjects touch upon each other to realize and actualize its infinite potential:

That is how we go from fold to fold and not from point to point, and how every contour is blurred to give definition to the formal powers of the raw material, which rise to surface and are put forward as so many detours and supplementary folds. (Deleuze 2006, 17)

In Santa Teresa, the collapsing of virtual connectivity into infrastructural materialization did not present a break or interruption of the potentiality of the tramway promise. Rather, I argue, the virtual potential of the promise was folded into the actual subjects and material elements on top and bottom (to stay with the Deleuzian allegory) of the main street of the neighborhood. This chapter is guided by the question how the promises that had been attached to the tramway prior to its suspension have survived even after its comeback. To answer this question, I will further

explore the potentiality of the affective bonds (understood here as promises)¹²² that have emerged between residents and urban matter.

Simone Abram and Gisa Weszkalnys (2013a), when pointing to the particular “elusiveness” of promises, provide an entry point to exploring the potentiality of promises. From their particular focus on (urban) planning, they argue that because there is always a period of uncertain waiting that extends until the original commissive speech act, or printed plan has materialized in one way or another. In the meantime, promises produce “a set of relations that should endure through time between promisor [the actors that make the promise], promisee [the addressees of the promise], and the thing or action promised” (2013a, 10) and which is loaded with expectations, obligations, et cetera. In the case of Santa Teresa, the collapsing of virtual connectivity (the potentiality of the promise) into infrastructural materialization (the tramway re-inauguration) did not end these relations, but rather did the realization of the promise span new, *elastic bonds* between local authorities, residents’ desires, and urban matter.

In order to explore the potentiality that lies in such kind of elasticity, in all sorts of spatio-temporal expansions and contractions, this chapter takes a closer look at some of the material elements of the tramway infrastructure that have accompanied the tram-comeback. I show how the footboard has been but one element of the tramway infrastructure that has affectively “bound” residents to instances of urban matter, and how some of these other elements have come to replace the original promisor (the mayor), thus generating particular *temporal* (section one of this chapter) and *spatio-affective dynamics* (section two).

Adding to an anthropological perspective on promises, as put forward by Abram and Weszkalnys, I argue that the affective bonds between residents and infrastructural matter in central Rio did not only survive throughout the period of waiting for the realization of the promise, but that some of these relations have even grown more robust, or tightened, *after* its very materialization. What is more, some of the desires, hopes and ideas that have become attached to the tramway from the 19th century onwards resurged after its re-installation in unexpected ways.

¹²² With Lauren Berlant, “affective bonds” (2007, 282) can be re-conceptualized as promises, a notion which also points to how affective relations reach beyond the conscious or the controllable, evoking hopes and desires that in turn generate strong attachments to whatever and whoever promises.

Borrowing from Sara Ahmed (2010), I argue that such cluster of (virtual) promises¹²³ attached to the bonde during both its 120-year-long history, as much as during its relatively short period of absence, was entwined with (or folded into) a set of (actual) “promissory things” after the tram comeback in 2011. For Ahmed, what is promising exceeds human speech acts, and promises might take the form of all kinds of nonhuman objects. The re-installation process, from this perspective, can be understood as “the slide between ‘I promise to’ and ‘the promise of’” (ibid., 30). Following this slide, in Santa Teresa, specific promissory things have materialized, subsequently superseding speech acts and generating their own affective relations.

While Ahmed (ibid., 30) uses the term “promising things”, by which she means “an idea of something as being promising”, I insist on a slight reformulation. My proposition of the term *promissory things* semantically follows the idea of “promissory notes” (which, one could argue, are just another kind of bonds) but puts emphasis on how material elements can exceed human ideas and utterances. This is mainly because, inspired by approaches to Actor-Network Theory (ANT), and Science and Technology Studies (STS),¹²⁴ I hold that specific instances of urban matter come to make their own promises; they convey an indication of future events; they have promissory properties; they are full of potential (Borup et al. 2006; Thompson 2005).

Accompanying the slide towards the “promise of”, such a perspective also allows for reacting to the prominent criticism of ANT/STS, directed towards these approaches’ flat ontology that supposedly affords a seemingly endless “listing” of material objects (Tonkiss 2011) without according for the hierarchies and power-relations¹²⁵ between them. The case of “promissory things” well exemplifies “how material objects become *urban things*” (Lieto 2017, original emphasis), or, in other words, how seemingly random gatherings of somewhat unspecified objects evolve into instances of urban matter capable of mobilizing political claims and of transforming urban collectivities. The slide from analyzing clusters of promises around particular “objects of desire” (Berlant 2011b, 16; cf. Ahmed 2010, 30), towards focusing on specific promissory things also

¹²³ For a more thorough explanation of Berlant’s notion of “clusters of promises” (Berlant 2011a), and their transformation throughout the tramway’s history, please cf. chpt. two.

¹²⁴ I owe these reflections to a blog entry by Brigitte Nerlich, who has shared her take on the use of ‘promissory’ in STS language: <https://bit.ly/2MmAGCf> (last accessed: 25/03/2020).

¹²⁵ For a good example how “lists” are indeed the opposite of power-neutral, but how they organize processes of dis-/connection, please cf. Stäheli 2012.

means acknowledging that, in the case of Santa Teresa, the persistence of desires that magnetized residents to the tramway post-inauguration no longer depended on the affective dynamics of a kind of virtual plane, which had to be actualized in concrete, empirical realities (cf. previous chpt.), but that the world of material things and human subjects was intrinsically entwined with (or folded into) this kind of virtual connectivity.

By concentrating on how promises have become distributed amongst various material elements of the tram infrastructure, in the following sections, I will make some initial propositions for analyzing the potentiality, that is, the spatio-temporal elasticity of such affective bonds.

Stop sign rumors: The elasticity of affective bonds

In the months to follow the re-inauguration of the Santa Teresa tramline in August 2015, new stop signs featuring the emblematic yellow bonde on blue background were fastened to the lampposts and power poles of the neighborhood. Even before the state transport company officially opened their construction sites, before they tore open the street pavement and started digging out pipes and piling up steel rails, the new signposts this way already anticipated the future course of the reinstallation works. As I walked up and down the streets between September and December 2015, I frequently came across groups of residents who had flocked around a newly installed signpost, exchanging *fofoca* (rumors) and arguing over which sections of the network should be reinstalled first. Since the more general “comeback”-promise of the mayor in 2011¹²⁶ had not specified on which route the tramway would finally take, all kinds of speculation on its future route map had proliferated within the neighborhood during the four years of suspension following the 2011 accident.

While the mayors’ speech had in some ways (re-)enacted the bonde as a promising object in Lauren Berlant’s sense,¹²⁷ the stop signs came to make their own promises about where, how and when this

¹²⁶ The day after the tramway accident, on August 28th 2011, then-mayor of Rio Sérgio Cabral (2007-2014) announced the temporary suspension, thorough renovation and subsequent re-installation of the system until 2012. Standing in front of stunned residents and crying relatives of victims, he pronounced a sentence that many in the neighborhood still remember: “I promise that in 2012, surely, we will hand over this present [the bonde] to the city” (SETRANS 2011). For more details, please cf. chpt. one.

¹²⁷ For more reflections on how “the bonde” emerged as a “cluster of promises” in Lauren Berlant’s sense at the turn of the twentieth century, see chapter two.

comeback would be realized. Similar to what I have argued above, the slide from the mayors’ “promise to” bring the tramway back, towards “the promise of” the stop signs themselves had a profound impact on the spatio-affective and temporal quality of the connections between residents and urban matter in Santa Teresa.

Appearing at irregular intervals along the streets, some of the new signs were already overgrown, damaged, or plastered with protest-stickers by the time the tramway made its first journey through the neighborhood. The signs that had been installed more recently, that is, after the re-inauguration in 2015, showed the newest “visual identity” of the tramway, a bright yellow tramway graphic with a little heart featuring on its front side. Older signs that had been installed during the 4-year period of suspension at least resembled the ancient “ponto de parada” [stop]-signs in their typeface (fig. 20 below). The originally text-only signs that had announced tram-stops prior to the suspension of the bonde in 2011 still featured the characteristic typeface of all kinds of public announcements in the city (Franca 2015, 38). The “visual culture” of Rio de Janeiro – if we consider the design of street signs as an integral part of it – is indeed strongly influenced by the typical form of letters that has evolved around the early tramways and which has been maintained without alteration for over sixty years throughout the 20th century (ibid.). Shortly after the inauguration of the first electrified tramways, the US-American and Canadian companies that dominated the urban rail sector in Rio back then introduced their characteristic “block lettering” for, i.e. station names, tramway publicity, or ticket prints (ibid., 47).



Figure 20: Examples of bonde-font

This particular North American style of lettering, however, has been modified, adapted, and mixed with other elements between the years 1908-1966 to such an extent that Álvaro Franca (ibid.), in

his extensive study of travelling “tramway-fonts” between North America and Brazil, speaks of a “cultural synthesis” that has resulted in a specifically “carioca”-style¹²⁸ lettering (ibid., 49).

Having known about Álvaro’s work from my conversations with the local tramway drivers, I finally met the young man on August 3, 2018 at around 6 a.m. for an early morning “pão na chapa” [toasted bread] and coffee at Serginho’s, a local bar very close to the recently re-inaugurated tramway-station Curvelo. Back then, Álvaro had recently graduated from the School for Industrial Design at the Rio de Janeiro State University, and the publication thesis, from which I have quoted above, had been received quite positively by the tramway drivers and residents I talked to during the time. Aged 26 when I first met him, he was about to leave the neighborhood for his first time to take a job as graphic designer in Madrid.

“Why people from here like my work?” (ibid. 03/08/2018), Álvaro echoed my question. Because he *was* from here, the design student explained, because he had jumped on the tramway so many times as a child, and, during his student-years, he had caught it at Curvelo and travelled the short distance down to Carioca station every morning around 7.30 am, as he would do today. The tramway was a “mobile meeting point [ponto de encontro móvel]” (ibid.), he affirmed, using the expression that I had grown familiar with during the past three years. Similar to what others had told me before, Álvaro painted a picture of the tramway as a means where both favela residents and the local (lower) middle-class artists and students could “get to know each other [conhecer-se]” (ibid.). So how did he come up with the idea to develop a study of the particular “carioca”-style adaptation of the tramway-fonts that had circulated between North America and Brazil throughout the 20th century, I wondered loudly, did this have to do with his upbringing in this particular part of the city?

Definitely, Álvaro answered. His connection to the tramway and to the city condensed within one figure, meaning that, for him, the bonde of Santa Teresa was “the last living carrier of our visual identity as cariocas” (ibid.). What he meant by this is indeed described in detail in his thesis, where Álvaro shows how the geometry of the carioca-style lettering of Rio’s early 20th century tramways differed from the original block lettering of the North American tramway companies’ that had its roots in the modernist alphabets of Bauhaus disciples such as Herbert Bayer, Josef Albers or Theo

¹²⁸ For a more detailed explanation of the term “carioca”, please refer to chapter one.

van Doesburg (Franca 2015). According to Álvaro, the “bonde-font” was less guided by the search for “an alleged geometrical purity” or “perfectly rational construction” (ibid.) than the original templates of Canadian or US-American origin. This was mainly due to the production context of the tramways themselves. As Álvaro has found out from his archival work, with difference to their North American predecessors, all tramway signs in Rio de Janeiro had been handmade. In 1942, one of the bigger production sites of the LIGHT company in the central district of Triagem employed around 96 people who were occupied only with the painting of all kinds of placards – from station announcements to stop signs (ibid. 57).

Quoting from his interview with Carlos Guedes, one of the former engineers who had been in charge for the supervision of painting letters in Triagem, Álvaro points to the origins of his hypothesis on the Rio-style adaptation of the tramway-lettering. When Guedes is asked about which particular template he had provided his employees with for their lettering, the engineer answers almost irritated “no need for a model, it was sufficient for us to look at the other tramways” (in: ibid.). In other words, the 96 tram-sign painters that shaped the visual appearance of Rio’s early tramways gradually developed their own “Carioca” style of lettering while copying freehand from the city’s already-existing tram-signs rather than using one fixed template to orient their painting.

The goal of his thesis, Álvaro continued our conversation, had been to “rescue” (ibid. 03/08/2015) this specific form of letters that had developed in Rio between 1908 – the year when most of the city’s trams had been monopolized by the LIGHT company¹²⁹ – and 1966, when all but the Santa Teresa line had been abandoned. By adapting the antique tramway letters to the contemporary context of font-styles and by “translating” them into an accessible (open-source) format for the generations to come, Álvaro had done his part for preserving this one tiny trace left from the tramway fleet of Rio de Janeiro.

For Álvaro, however, the typical “bonde-font” as displayed in figure 20 above had exerted a major influence on urban everyday life from the early 20th century to the present day:

¹²⁹ For more details on the process of monopolization of the Rio de Janeiro tramway fleet in the early 20th century, and the particular role of the LIGHT company, cf. chpt. two.

The vehicles have been burned in a violent act of ‘wiping out history’ [apagar história], and with them almost all ‘bonde-font’ stop signs, placards and billboards [letreiros].¹³⁰ But even if the bondes have left the streets of Rio since more than fifty years ago, the *letreiros* survived in museums, private archives, and oral histories. What is more, the letters they carried are still present in everyday life [no cotidiano carioca], both in the visual manifestation of street names on street signs and in the street names as such: If it would not have been for the bondes, maybe today the Rua Almirante Alexandrinho [the main street of Santa Teresa, cf. chpt. one] would carry a different name. (ibid.)

While we were walking along the street he had just mentioned, slowly approaching Curvelo station, Álvaro pointed to the blue street sign attached to the wall above our heads. The sign indicated one of the many *travessas*; the steep stairways and narrow passages that were so characteristic of Santa Teresa. What Álvaro had found from his research into the archives of Rio’s electricity company LIGHT, he explained, was that while residents continued to call the city streets by their antique names in a mundane act of rebellion against the changing of street names that occurred during dictatorship – the Almirante Alexandrinho,¹³¹ with its “military” name being but one example – they would however accept such renaming as soon as it had appeared as station announcement inside the tramways. In his thesis, Álvaro quotes a letter of complaint by a resident of the neighborhood Inhaúma (located in what is today the northeastern periphery of Rio de Janeiro) published in the *Diário de Notícias*¹³² in 1941, who argues that Inhaúma would be destined to remain unknown, since “a neighborhood in Rio will never be recognized by the *cariocas* unless it has not been written on the placards of some tramway-line” (in: Franca 2015, 59).

Shortly before we said goodbye to each other, it was my turn to point Álvaro to one of the “new bonde-signs” attached to a lamppost next to the street sign we had just discussed. “Indeed”, Álvaro said, the new stop signs were in a way “trying to do the same” (ibid.) as the historical tramway lettering:

What they try to do is to introduce again a new visual identity. They have imprinted it on the tickets, and on the drivers’ and engineers’ uniforms, and on top of the screens they have installed at the platforms [replacing the antique placard announcements for stations]. They

¹³⁰ The Portuguese *letreiro*, literally “sign“ is also used to designate stop signs, placards or billboards.

¹³¹ Santa Teresa’s main street had, until dictatorship, carried the name “Rua do Aqueduto”, cf. chpt. two.

¹³² For more information on this newspaper, and some examples from my own research into its archives, cf. chpt. two. The complaint quoted above was published on the 31st of October 1941 and p. 7

have even launched a Facebook fanpage and a twitter profile featuring this same branding in March [2018]. I doubt that they will be successful, however.

What made Álvaro “doubt” that a new visual identity could be seamlessly introduced for the tramway was that, with difference to the decade-long process that had led to the characteristic “bonde-font”, the new lettering and graphics had been developed by a private advertising agency, commissioned by the state company for transport and logistics¹³³ in 2015 (Freire 2015). According to Álvaro, residents had not only grown “fond” (ibid.) of the carioca-style lettering of the old signs which had not been maintained by the ad company, but, even worse, the new graphic also differed considerably from the local version¹³⁴ which figured prominently on the neighborhood walls ever since the 2011-accident.

Whatever the success of the new tramway branding initiative – whether it would become part of Rio’s streetscape, or whether it would simply be tagged over, withering, overgrown, ignored, or replaced by again a new logo – what was clear for Álvaro was that the new stop signs had already changed the everyday of residents in a way that reminded him of how the historical tramway-signs had influenced residents’ perception of the city: “They [the stop signs] tell people that the bonde will come back. They *foretell* its journey [predizem o trajeto].” (ibid., emphasis added)

This last statement of Álvaro resembles the logic of “promissory things” which I have introduced above in at least two ways. First, the formal construction of his sentence makes it apparent that “the mayor” has been replaced as the actor who promises the tramway comeback by “the stop signs”. Second, even though the “virtual connectivity” of a promise that has not yet been realized collapses into material actualization with the installation of these new “promisors”, the potentiality of this relation has however been continued.

With Sara Ahmed, the stop signs’ ability to reproduce potentiality can be explained with a simultaneously temporal and affective dynamic. For Ahmed (2010, 29), the act of promising is an act of “mak[ing] the future into an object, into something that can be declared in advance of its arrival”. This object however, acquires its affectivity exactly by not being “here” yet (ibid., 32) – reminding also of Abram’s and Wieszkalny’s qualification of promises particular “elusiveness” as

¹³³ For more information on this company, cf. chpt. one.

¹³⁴ For more reflections on the local bonde graphic and its significance for protest and commemorative practices, cf. chpt. one.

introduced above. For Ahmed, it is the “gesture of deferral” (ibid.) that is crucial: In this sense, the stop signs act as promissory things in that they continuously postpone the return the bonde, including its when’s and where’s. Through this both temporal and affective dynamic, characterized by uncertainty, waiting, endurance, desire, and expectations, the affective bonds between residents, state authorities, and tramway matter became more *elastic*, they could be tightened and loosened at various degrees as this and the following chapter will show.

In addition to philosophical and affect theoretical reflection on the notion of promise such as Sara Ahmed’s and Lauren Berlant’s, the affective and temporal dimensions of (infrastructural) promises have also been explored throughout a number of anthropological works within the past few years. Notably amongst these is the above-mentioned edited volume on *Elusive Promises* by Abram and Weszkalnys (2013b), but also Gisa Weszkalny’s (2010) monograph on *Berlin Alexanderplatz*, which provides further hints towards promises’ potentiality and elasticity, when showing – similar to Ahmed but from the perspective of an empirical case study – how even after the alleged realization (in this case, failure) of a promise, this promise survives because of its continuous postponement by planning procedures, through contractual changes, building material shortcuts, et cetera (ibid., 90). In her later work on offshore oil exploration in São Tomé and Príncipe, Weszkalnys (2016a) has continued her reflections on the notion of “promise”, exploring in particular the affectivity of promises’ futurity, and its related indeterminacy, which in turn gives rise to all kinds of potentialities (“futures folded into presents”) and speculations (ibid., 8; quoting from Fortun 2008, 285).

In a more recently published edited volume, the anthropologists Nikhil Anand, Akhil Gupta and Hannah Appel (2018) focus more explicitly on *The Promise of Infrastructure*. While initially echoing a common assumption in urban anthropology about infrastructures’ particular promise of progress (ibid., 3), the editors ultimately suggest that ethnographic work “can help redeem the promise of infrastructure” (ibid., 30) by working out the nitty-gritty empirics of their neither linear progressive nor uniform spatio-temporalities, including delay, suspension, repair, (material) resistance, and repurposing (ibid., 16).

Deferral

In anthropological studies of infrastructure, one of the first authors to use the notion of promise not as a mere descriptor, but as an analytical category per se has been Gregg Hetherington. In a 2014 article, published in the *Journal of Latin American and Caribbean Anthropology*, Hetherington argues that for his research participants in eastern Paraguay (research was undertaken between 2004 and 2006), the originally post-dictatorship and characteristically developmentalist state promise of land redistribution¹³⁵ has survived despite continuous disappointments, because it is tightly linked to a specific temporal dynamic of infrastructure which spans between *openness and deferral* (ibid. 2014, 207). From his accompanying so-called “surveyors” – state employees responsible for measuring land that would potentially be re-distributed to the rural poor – Hetherington shows how although the Paraguayan land reform only depended on surveys themselves in the most tenuous of ways, the associated measurement practices “left the conversation open” (ibid., 208) between the rural poor and the representatives of the state.

This unreliability of the promise was exactly its potential, or, in the words of Hetherington: “Ultimately in this story, then, it is not the fulfillment of the promise that mattered so much as the promise itself”. Similar to what I have argued above, even after the “materialization” of the promise, in Hetherington’s case in the form of human surveyors and their polygon drawings, maps and (more recent) GPS data, the future-orientation of this promise was not foreclosed, but remained “radically open” (ibid., 2010).

Such openness had at least two effects. First, and similar to what I have argued above, it guaranteed the survival of the specific potentiality that resided in the promise of land reform. Despite their apparent knowing that the political promises of future prosperity and generally improved living conditions were largely empty, deceptive and conniving, rural residents continued to require measurement operations. Thus “determined to keep the promise alive” (ibid., 208), they also managed to secure all kinds of chances for opportune turnouts, for unexpected breakthroughs and coincidences of political interests that would open new possibilities for land redistribution. Second, the radical openness of the promise generated a series of (unexpected, affective) relations. As

¹³⁵ The promise of land redistribution is very common for a particular era of post-dictatorship and developmentalist thinking in the particular frameworks of Import substitution industrialization (ISI) that has spread over the Latin American subcontinent from the 1960s onwards (Parnreiter, Novy, and Fischer 1999).

Hetherington shows, with every new deferral of a decision on whose land the measured terrain would finally become, relations between residents and the surveyors grew even tighter, playing out in situations of care (cooking, repairing) which were however deeply marked by class hierarchies and power asymmetries between the predominantly male surveyors from the Paraguayan elite and the rural poor (ibid., 202).

Looked at the other way around, though, the state (agents) would be caught in these relations as much as the rural poor, as long as the latter managed to “keep the promise alive”. Finally, as Hetherington argues:

It is not that standardized land measurement was the necessary infrastructure for redistribution, but rather that campesinos [the rural poor] and functionaries could assemble under that premise. [...] Surveying helped sustain a politics of inclusion in a country where the barriers between the rural poor and urban government elites were otherwise intractable. It was a populist promise, forged hierarchically, in this case with the performance of contempt and plausible deniability, which, however thinly, held the state to account for the poor. (ibid., 210).

Similar to the (human and nonhuman) “surveyors” of the Paraguayan land reform, the stop signs of Santa Teresa were not at all necessary or vital for the return of the bonde. However, these signs contributed to the persistence of the tramway-promise in ways comparable to what Hetherington has demonstrated for rural Paraguay. In particular, they reflect the dynamic of openness and deferral that Hetherington has identified as crucial for the survival of infrastructural promises.

After the tramway-promise of Santa Teresa had finally been fulfilled and the system was re-inaugurated in 2015, the stop signs appeared in places that contradicted the original route-plans and timelines published by the state authorities. As I have explained in part one, the return of the bonde had been originally scheduled for 2012, and was continuously postponed in the years to follow (O Globo (n.A.) 2012). Similar to what I have argued above, with Ahmed and Weszkalnys, the prevailing gesture of deferral that filled the period of tram suspension between 2011 and 2014 has forged more elastic affective relations between residents and tramway-matter. The micropolitics of such embodied attachments of residents to, for instance, the tramway footboard, has been subject to the previous chapter three. In this chapter, in turn, I concentrate on how the potentiality of affective bonds in Santa Teresa has survived also after the apparent fulfillment of the mayors’ promise, mainly due to its continuous postponement (Weszkalnys 2010).

Coming back to what I have argued above with Deleuze (1994, 82) about the mutual unfolding of the virtual and the actual, I consider potentiality to involve both a past conserved in the actual form and a future that might at some point be actualized, but also a past that was never present and a future that will never become present. In Santa Teresa, such nonlinear and contradictory temporality of the promise took spatial form shortly before the system was officially re-inaugurated.

In June 2015, the Rio State Department of Transportation (SETRANS) published the first of a series of so-called “cronogramas” – planned schedules for the tramway re-installation (cf. chpt. one, fig. 6). This first map, however, only visualized the planned test-track sections between Carioca and Curvelo, and Francisco Muratori station respectively (with the latter ultimately never functioning) – both marked red in the picture below. Beyond the *cronograma*, there was no official information available about when the system would be inaugurated, however. Besides the short section between Curvelo and Guimarães square, marked yellow, the map did not provide any further information on when, and where, the reinstallation works would possibly proceed once the test-track had been inaugurated.

At this point, it was still completely open which line would be re-installed first: The uphill line one between Guimarães and Silvestre, or line two that leads downhill until reaching the Largo das Neves. It was also during this time that I first noticed groups of residents gathering around the recently installed stop signs to exchange rumors about the planned course of construction works.

Conflict erupted on these occasions over what should be the ultimate priority for the reinstallation work. For over 120 years, the system of tramways had consisted of two lines, of which the second one left the course of the main street after reaching the hilltop ridge and proceeded down again towards the neighborhood’s lower end. After the tramway suspension, residents were divided on the question whether to support the government’s plan to reinstall the uphill line, which mainly passed by the local favela settlements and through rainforest until connecting with the rack railway that brings tourists up to Rio’s emblematic Christ the Redeemer statue, or whether the bonde should first cater to the many restaurants, bars and souvenir shops alongside the lower line which led to a rather bohemian part of the neighborhood, populated by artists, intellectuals and descendants of early twentieth century European migrants who mixed with a fluctuating wave of self-proclaimed “expats”.

Speculation

During one of these occasions I witnessed the following conversation (03/10/2015) between Paulinho, the around fifty year old owner of an infamous samba venue (a decaying, occupied villa) at Guimarães square, Carol, a twenty-six year old employee of the *quentinha* [take-out food] place just across the street from the favela where she lived with her family, and Luciana, a seventy year old retired architect who introduced herself to me as a descendant of European migrants, who lived at Largo das Neves since all her life. The three of them were standing below one of the new stop signs close to Largo da França when I joined them.

Paulinho: So we were talking about this new sign here. It must have appeared over night, I haven't noticed it when I passed by here yesterday with the bus.

Carol: [looking at me] And you know we are always watching out for new signs [sinais] of bonde-return [laughing]. [turning to Paulinho] But yes, this one is new and it is good news indeed. It's a sign of re-integration; [looking at me again] the bonde was a means of integration of the different parts of the neighborhood, you know? I mean, from what we know we only know we can never be sure. I think they leave us like this, uninformed [desinformados] on purpose.

Luciana: Good news, are you joking [to Carol]? The *cronogramas* promised us different. They were going to bring back life to the lower part of the neighborhood finally. You don't know how the Neves [Largo das Neves, a square and final stop of tramline two] feels like these days. It is deserted [abandonado]. The bars and shops are empty, no children playing on the street, and every day we wake up to the sound of gunshots.

Carol: Well, but look, I heard they installed a new sign down at Rua do Oriente [the street leading up to Largo das Neves], so maybe there will be a bonde travelling down to Neves very soon. Also, between Guimarães and Silvestre [final stop of line one] there is only favelas, so this sign here is just something illogical [meio sem lógica] – but who knows, maybe they'll reinstall both lines simultaneously?

Paulinho [turning towards me]: You see, whatever they print on their maps, the people of Santa [Teresa] will continue drawing their own conclusions, that's for sure.

In the months between September and December 2015, I frequently came across residents who exchanged “stop sign rumors” similar to the ones quoted above. What is remarkable from the short excerpt of the conversation I noted above is how, through a specific mode of speculation, residents managed to prolong the tramway-promises' potential: The potential to bring back life to the neighborhood, as Luciana had it – including customers for the local bars and shops, signs of daily

street life and more abstract feelings of security –, or to “re-integrate”, in the words of Carol, the local favelas into the neighborhood by connecting them to an affordable means of public transport.¹³⁶

Reading Carol’s and Luciana’s statements with a Deleuzian (cf. 1994, 82 ff.) understanding of potentiality in mind, they do not only manage to hold on to its promises with in face of a future that might at some point be actualized, but they also resuscitate past promises about integration and socio-economic progress that had already been associated with the first bondes at the turn of the 20th century. In a certain way, their statements also evoke “a past that was never present” (ibid.). This is particularly pertinent in Carol’s idea of “integration”, which reminds of Brazil’s early republican elite’s promotion of a “technological fix” which I have described in chapter one and which presented the first trams of Rio de Janeiro as means of bridging the city’s socio-spatial inequalities. Hers is an evocation of a past that was never “present”, of promises that have proven elusive as soon as the city’s “Marvelous City” image was overshadowed by the mass displacement of poor and working-class residents from the city center in the name of the expansion of the tramway network. In a similar way, Luciana also repeats a never quite realized promise that has been prominent already in popular culture accounts of the late 19th century, where Rio’s chronicler Machado de Assis has been convinced that “Santa Teresa will become fashionable” with the advent of the new electrified tramways (cf. chpt. one). Similarly, for Luciana, the return of the lower tramline promises revitalization of what she calls a “deserted” area.

The kind of *speculative knowledge* exchanged between residents, as Paulinho’s final statement well summarizes, was based on observations of potentiality – both in the sense of commenting on potentiality’s existence, and of producing new facts, of drawing “own conclusions” about it (cf. Weszkalnys 2015, 617). This kind of knowledge relied on the uncertain and partially obscured evidence of printed government maps and stop signs, and on the irrational connections drawn by residents between the one and the other. However, it signified that theirs was no state of passive waiting, but rather a mode of speculation in the Deleuzian sense, which actively kept the final course of the tramway open:

[...] speculation constitutes a struggle against probabilities in the sense that, while it acknowledges and affirms the existence of such patterns, it also affirms the existence of

¹³⁶ For more details on the ticket fare-discussion around the bonde, cf. chpt. three.

what any attempt to determine the probability of a future must set aside, or deem irrelevant – namely, the becoming of novel and unexpected events that, against all odds, transform the very order of the possible, the probable and the plausible. (Wilkie, Savransky, and Rosengarten 2017, 7; cf. Deleuze 2007)

After the tramway-promise seemed to be fulfilled, the stop signs became “promissory things” in the sense that they generated potential “against all odds”. Because their placing often contradicted the planned tramway routes as visualized in the *cronogramas*, they became signs of an “illogical” (Carol) future course of the tramline. The stop signs came to make their own promises, quite different from state authorities’ announcements. They superseded the original speech act promise of the mayor “to bring the bonde back” and came to make their own promises; they conveyed an indication of future events; they were full of potential.

The potentiality of the stop signs’ promise however, did not generate speculative knowledge only for residents. Already in early August of 2015, almost two months prior to the conversation between Paulinho, Carol and Luciana I noted above, I came across an advertisement on one of Brazil’s pertinent real estate platforms “Zap Imóveis”, while looking myself for a flat to rent.



Figure 21: Real estate speculations

The real estate advertisement portrayed an ordinary two-bedroom flat in an apartment building in the Joaquim Murinho street with a rather standard price of around 890 US\$/month – rents had risen considerably in Rio at that time in-between Football World Cup and Olympics. What caught my attention, however, was the first picture that appeared on the apartment’s profile page. Still three weeks into the official re-inauguration of the Santa Teresa tramway network, the website

already portrayed a bonde running up the street just in front of the apartment building. The real estate agency's advertisement materialized a rather classical mode of speculation, striving towards a financial commodification of the future. Not dissimilar to the effect the early tramway of Rio de Janeiro had on property prices,¹³⁷ Zap Real Estates also calculated with rent increases in those areas of the neighborhood that would first be reached by the bonde. The agency capitalized on the uncertainty of a moment where there was still no official announcement of the date of bonde comeback. It speculated on the probability that the Joaquim Murтинho would become the first test track section to be inaugurated, just as visualized on the government map that had been recently published in June.

In one way, the speculative practices of the real estate agency were similar to those of the residents. Limited by the contingency (or unreliability) of the tramway-promise, the agency could also only constitute a “yet-to-come” or “not-yet” rather than reliable knowledge. Just like the stop signs, however, the real estate advertisement bore the potential to orient social action, because, following the logic of promissory things, *it constructed expectations about the future*.

In another way, however, the agency's probabilistic mode of speculation differed considerably from the residents' mode, in that it was based on the presupposition of a linear sequence of time, as if moving “along a modern arrow of progress” (Wilkie, Savransky, and Rosengarten 2017), such that the present state of the government maps upon which their calculations were drawn would be conserved in the future form of the tramway network. This kind of connection between infrastructures and a sort of “developmental time” (Appel 2018, 44), that is, a time based on assumptions of progress, linearity, and teleology, has been associated with the system of tramways of Rio de Janeiro ever since the late 19th century “Haussmanization” of Rio (cf. chapter one).

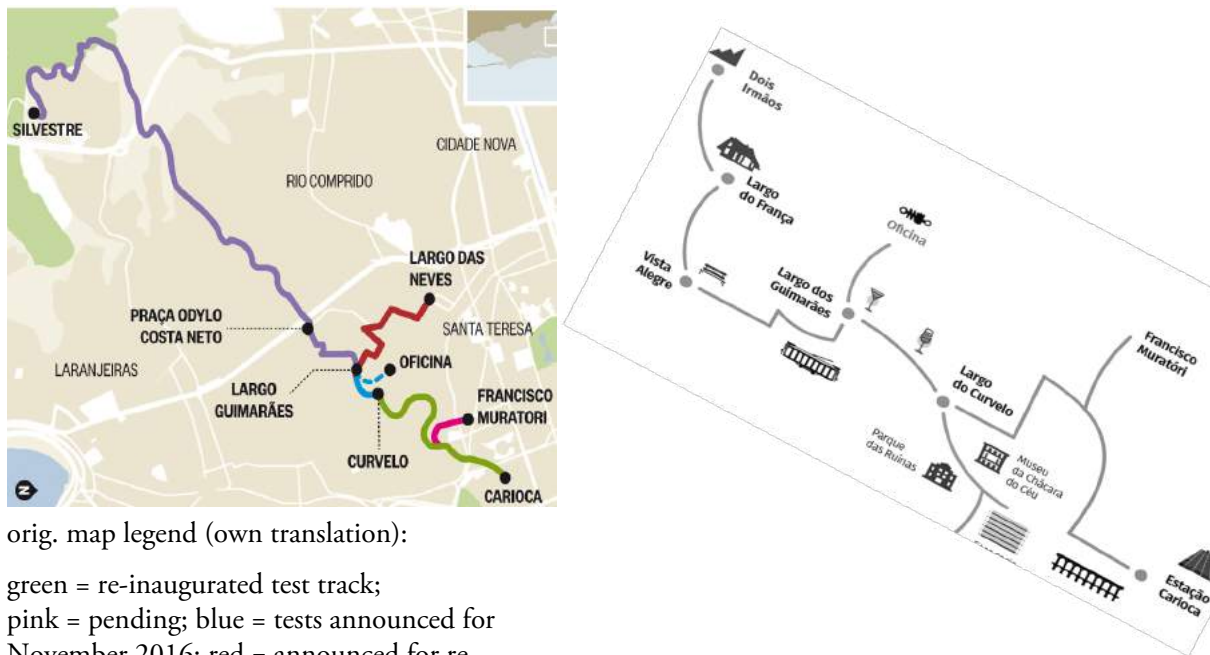
Anticipation

The ways in which “bonde time” – characterized by an unsteady pace of expansion, multiple delays, failures, abandonment, decay, destruction and re-building – has contradicted such logic of linear

¹³⁷ For more details on how international companies speculated on rising property prices, subsequently buying territories that were to be connected to Rio's expanding tramway network of the early 20th century, cf. chapter one.

progressive times, however, is also reflected in the statements of residents as quoted above: “from what we know, we only know we can never be sure”, as Carol put it.

Still today, “bonde time” in Santa Teresa is marked not by presuppositions of linearity, or by arrows of progress, but by the unexpected eruptions of the “illogical” (Carol), that is, the impossible of social, political, and economic events that open up possible futures that cannot be managed in advance. “Bonde time”, accordingly, draws (both residents’ and researcher’s) attention to the multiple “folds” of time, to the entanglements of pasts, presents and futures, and it urges us not to ignore their contradictions, but to take them as starting point for new ways of becoming. In many ways, the second and the third *cronograma* that have been published by state agencies in August 2016 and 2017, respectively, evidence such contradictory temporalities.



orig. map legend (own translation):

green = re-inaugurated test track;
 pink = pending; blue = tests announced for
 November 2016; red = announced for re-
 opening in 2017; purple = without date

Figure 22: Schedule of reconstruction works August 2016 and 2017

By the time the last *cronograma* authored by the state agencies had been published, in August 2017, it had become quite evident that the re-construction process did not follow a linear temporal logic. Directly contradicting the 2016 version, which had announced a re-opening of the lower line two (marked red in the picture above), this version also introduced a new layout to the previous map-style publications. A stylized red line connected the main touristic attractions of the neighborhood along the tramway line one, which had by then been re-opened until the uphill “Largo da França” station and would subsequently be expanded until “Dois Irmãos” in 2018. This version, published

on the newly created government website “bondedeSantaTeresa.rj.gov.br”, would probably put an end to all kinds of speculations amongst residents, I thought.

The temporal dynamics of (first) waiting and (later) speculation, respectively, that had marked the period of suspension and the early years of the re-installation period seemed to be replaced by a new temporality of *anticipation*. This time leaving out any hints towards a possible re-installation of tramline two, the latest cronograma presented a break with both the alleged passivity of the waiting years, and with the prolonged state of indeterminacy that had been experienced and sometimes actively promoted by residents throughout the early re-installation phase. During this phase, through holding on to the indeterminacy of arbitrarily installed stop signs, one could argue, residents had managed to keep the tramway promise alive, that is, to make sure the potentialities of integration and revitalization, however arbitrary, would stay “in the air” and become negotiable with public authorities.

“Bonde time” it seemed, had been replaced by the kind of “developmental time” described above, which turned the present into an unfolding anticipation. Similarly, for Hetherington (2016, 5), the characteristic temporality of infrastructural promises can be summarized as future perfect, a tense which is intrinsic to any development project and which “suspend[s] the present as the future’s necessary past.” Hetherington is developing his notion of the future perfect mainly from Reinhart Koselleck (2004), who in his seminal *Futures Past* has shown how progress, as a mode of temporalization, has been accomplished by both eradicating of a plurality of stories [*Historie*] in the name of History [*Geschichte*] and by organizing all other forms of collectivity and modes of knowledge along a single diachronic line by which they would inhabit (Europe’s!) past (Koselleck 2004, 35; cf. also Povinelli 2011, 3).

According to this logic, with the publication of the final government map, residents of Santa Teresa would have become trapped in a present state of the reconstruction process which would inevitably one day have been the past of a better future.

Tight schedules: Proximity and potential

My analysis to this point may be taken to indicate that the future of the Santa Teresa tramway system has been largely predetermined by a succession of three temporal-affective dynamics: While (firstly) the potentiality of the relations between residents and tramway-matter was confined largely to an allegedly passive state of waiting during the period of suspension of the tramway, the appearance of new stop signs that contradicted government plans for the future route network (secondly) opened up for a dynamics of speculation about which of the two tramlines would reopen first that characterized the early years of the re-installation process. With the publication of a final government map which represented the status quo of an already-reopened tramline one without indication of the possibility that the second line would be reinstated, these were replaced by a third, “anticipatory” dynamic that would eradicate alternative stories of the future course of the tram network and condemn residents’ alternative (speculative) knowledges to become that future’s necessary past.

However, if we consider those three dynamics not as successive temporal orientations, one following the other, but also as “affective states” (Adams, Murphy, and Clarke 2009), one folded into another, anticipation becomes more than just a reaction – it generates sense of urgency and need for action.

In Santa Teresa, residents did not seem “trapped” while awaiting the completion of the construction works. When I returned to the neighborhood in 2018 and 2019, respectively, there would still be heated discussions happening around newly installed stop signs. On one of these occasions in August 2018, I met Luciana, the resident of Largo das Neves who had so urgently demanded the reconstruction of the lower tramline three years ago. At this point in time, the upper line two had just been extended until the “Dois Irmãos” station, the penultimate stop before reaching the end of the line. When I confronted Luciana with this news, asking her if she would see any chance for the lower line to reopen one day, she nodded emphatically:

Of course it will come back. Sooner rather than later you will hear its bell ringing in the middle of [Largo das] Neves. You know, we are not simply watching while the construction companies dig unnecessary holes in the Almirante Alexandrino [the neighborhood’s main street along which line one proceeds], we will keep the bonde close to us [ter por perto]. Did you not hear about the stop sign at Dois Irmãos that has disappeared on Sunday night? And what about the one at the Guimarães that has changed sides and is now pointing down to Rua do Oriente [the street that leads to Largo das Neves]? (Luciana, 07/08/2018)

The story Luciana had told me repeated in the accounts of other residents I talked to in the following days (Teresa, Beto, 08/08/2018; Túlio, 10/08/2018; Sheila 16/08/2018). There were rumors about the whereabouts of disappeared stop signs; one that had been seen at the other end of the main street, another one that was found tied to a lamppost at the corner of the Neves square. Most popular amongst these was the story of a clandestine group that moved stop signs to get the bonde also move closer to their parts of the neighborhood. These days, it was like tampering with signposts and weaving stories about their whereabouts became a way for residents to test the grounds between what was actually there and what might potentially have been possible. Those suspected of literally drawing the stop signs near to them (to their homes) not only attempted to shorten the time lag between present and future, they also reduced spatial distances. For Luciana and others, the temporality of anticipation translated into a spatio-affective experience of proximity. Another way of “keeping the bonde close” seemed to be enacted through an affective mode of *caring*, somehow already expressed in Álvaro’s attempt to conserving¹³⁸ the original “tramway font” of stop signs and street names (cf. previous section), but even more apparent in another gathering I witnessed around a new stop sign back in 2015 and which involved Joana, a middle-aged teacher at the local primary school, and Marcelo, a young construction worker known for the neon-green cloth cap he used to wear instead of his orange work helmet, and which seemed to stick out of every construction pit opened since the beginning of the re-installation process two years before. Marcelo was smoothing the concrete he had just poured into a hole around the signpost with his trowel, while looking up at us. Joana explained that she had just brought Marcelo lemonade and some fresh fruit:

[B]ecause these workers are all here to guarantee that stop signs will continue. They are really here for us, not like the functionaries from CENTRAL [the public transport company] or SETRANS [the secretary of transport], who have never set foot in this street. We need to stay close to the signs, we need to care [cuidar] for those who install them; to make sure they will not be removed, that they will become more and more until we finally have our tramway back. (28/09/2015)

Caring for the construction site workers, feeding them, and talking to them became a way of staying close to the stop signs, of closely following their sprouting here and there in the

¹³⁸ The relation between “conserving” and “caring”, and their often-synonymous use has been explored more in depth by Maria Puig de la Bellacasa (2015)

neighborhood. With the comeback-promise becoming distributed across these new elements of the tram infrastructure, affective bonds between residents and promissory things seemed to grow even tighter, drawing near the different parts of the neighborhood with different implications for access to and from the city, for home-work commuting, for real estate businesses, and for local entrepreneurs.

The role of *care* for modulating spatio-affective relations of proximity and distance, of attachment and detachment, by transforming dependencies between the subjects and objects of care, has been widely discussed in recent (anthropological) studies of Science and Technology (Mol, Moser, and Pols 2010). Maria Puig de la Bellacasa (2017, 19), however, has also warned against a premature association of care with an intensification of proximity. If care augments proximity, she argues, it can as well disrupt or challenge a longing for closeness (ibid., 117). I will come back to this point in the next chapter, where I explore modes of “strategic detachment” which have proliferated around the “care for soil”, or rather “asphalt” in Santa Teresa.

In this section, however, I suggest to understand residents’ care for the stop signs as a way of “drawing the city near” similar to how AbdouMaliq Simone (2014, 160) has introduced the notion when calling for analyses of relations between people and things that remain sensitive to all kinds of contingencies, anticipations and intimacies that happen between them:

Things are lured into proximity, and then are held together as constellations, through affective interchange, probabilistic modeling, remote sensing, signaling, coding, random selection, or algorithmic operations. Such constellations individuate ensembles of things, make them hold or endure across different times and situations, while at the same time they are capable of endless variation.

From his inquiries into the ways in which Jakarta’s residents collaborate, trade, and adjust in order to seek out new opportunities for livelihoods and to make their districts and ways of organizing collective life endure, Simone charts out a whole array of practices of *Drawing the City Near* (ibid.). From a series of conversations he undertook with residents who had recently moved from the central city districts to one of Jakarta’s new megadevelopments, Simone remarks that some of them did not see their former home districts as the necessary past of the new housing complex. Rather, they would portray these districts as “repositories of wisdom before its time” (ibid., 78), thus keeping the singular resourcefulness of Jakarta near, by envisioning it as the critical aspect of the

city yet to come. For Simone (ibid., 35), “the ‘near’ refers to an interstitial space, a way of elaborating a sense of intimacy among divergent pasts and futures, practices and potentials.”

In a similar way, in Santa Teresa, *proximity was connected to potentiality*, as it enabled residents to keep “promissory things” such as the stop signs in play in a context where spaces of maneuver for negotiating the how and when of tramway-return seemed to grow narrower and narrower. As Martin Fuller and Julie Ren (2019, 14) remind us, proximity – not necessarily physical “nearness” but rather understood as bound-togetherness of i.e. residents, stop signs, and construction workers – affords potentiality, understood as “collective orientations to the present and future that include but are not reducible to the strategic or the actual.”

The tram as pacemaker

Another cluster of promissory things that materialized in the neighborhood’s streets in the months following the re-inauguration of the tramway system included constantly changing A4 printouts of operating hours and lists of stations in protective plastic covers pinned to signposts and station walls, as well as big metal plates with the bonde graphic announcing that during an unspecified period of “pre-operation” [pre-operação], the tram would function in intervals of twenty minutes.



Figure 23: “Pre-operation” announcement

On social media, Claudia, a frequent conversation partner of mine, posted pictures of the new print-outs, lists and plates asking “will I be able to set my watch by the bonde again?” (own archive of facebook posts, 17/11/2015). Her question reminded me of a number of statements connected to the tramway “schedule” [horário] that I had noted at the various protest events during its suspension. The use of the word seemed to be independent of the fact that an actual timetable had

never really existed – the rail transport had depended too much on the traffic of cars and other motorized vehicles blocking the streets; and the bondes had never respected fixed stations, but had stopped for any passerby waving at them on the streets.

Regardless of these details, protesters recalled the “almost German punctuality” of the vehicles; and the frequent description of the tram as “pacemaker” [marca-passo] acted as a reminder of how daily routine in the neighborhood had adjusted to the rhythm of trains. Sara, a cashier at the local supermarket, a black, middle-aged woman and single mother of four children – a profile she shared with the other (all female) cashiers working at the checkout line – explains this as follows:

It [the tram] gave rhythm, something you could rely on. You know, work starts early, and we [her colleagues] live up there [pointing] in the favelas. You need to hurry to get there on time after getting the children ready, you were happy to catch the bondinho when it still worked. Nelson [a former tram-driver] would always wait for us; he'd drop us just here in front of the rede [supermarket]. Amidst the beep-beep of the cash register and the chitchat [fofoca], and the noise of loading and unloading food, the bonde-sound was different. You counted the ring-rings and thought ‘another working hour has passed’, or ‘lunchtime is approaching’, or ‘work is over for today’. It made all this bearable [suportável]. We could feel the vibration of the rails that announced its nearing [aproximação], our happiness [alegria]. (06/09/2015)

For Sara, the “schedule” of the bonde is something that could be experienced bodily, sensually and emotionally. She had adapted her own work and life rhythms to its circulations, and the vibrations of the tramway made her body pulsate in anticipation. While the beats of the world “out there” that penetrated the supermarket through truck-loads and neighborhood talk amalgamate into one exhausting “noise”, the tram-bell stood out as a soothing sound, as something Sara and her colleagues could rely on and that provided a promise of familiarity amidst confusion. “Setting the watch after the bonde” in this sense also means attuning bodies to count with something, to invest hopes in stability and reassurance. The “nearing” of the tram, in other words, is more than a reduction of physical distances. It describes a spatio-affective closeness, an experience of rapprochement, a drawing nearer of all the positive feelings that the bonde might bring.

In her work on *The Promise of Happiness*, Ahmed (2010, 72) uses similar definitions of proximity, as created through attempts at sharing feelings through a sense of familiarity with things like a family-table (ibid., 97), or through an approximation to “objects” that hopefully transmit

happiness (ibid., 112). In her words, affective closeness to certain objects, for instance by orienting hopes towards them, or by having contact with them, generates a promise of happiness:

We could say that happiness is promised through proximity to certain objects. Objects would refer not only to physical or material things but also to anything that we imagine might lead us to happiness. (ibid., 29)

In Santa Teresa, if residents imagine the tramway will bring a better life to them, then this promise directs them towards their object of desire, like a contraction of affective bonds (ibid., 90). In our conversations, residents commonly attributed the bonde with happiness [alegria]. However, the proximity to this object would always remain relative, because the things it promised were out of reach, lying in an uncertain future (ibid., 51).

As soon as promises like reliability, reassurance, and rhythmicity that had been associated with the “schedule” collapsed into infrastructural materialization, they became unequally distributed within the neighborhood. While printouts, lists, and plates came to make their own promises, residents were affected differently by them.

Clock-in time

On the occasion of an opening of a new track section in 2016, Sara and her colleagues brought a big banner (fig. 24) that stated “We want the bonde at ‘clock in’ time”. They were using the popular expression *hora do batente*, which in this case can be translated as the hour where workers “clock in” or start their working day (Oliven 2011).

What had raised the women’s concern, they explained to the present journalists, were the “new schedules” that had been affixed to stations and signposts, announcing operating hours between 11 am and 4 pm. Unlike the original tramline, which offered non-stop service from 6 am to 8 pm, the new operating hours would exclude passengers who had to get to work early and return home in the evening.

With reference to the new metal plates and station lists, protesters also complained that the tram frequency had been reduced from the former 5-minute intervals to a 20-minute rhythm. Taken together with the restriction of tram stops to fixed stations – spontaneous jumping on during the ride being no longer possible – the new “schedule” would have made the carriages more crowded with tourists and subverted its role as a means of public transport for residents.



Figure 24: “We want the bonde at ‘clock in’ time”

Ultimately, even though promissory things like schedules and stop signs both generated spatio-affective experiences of proximity, the affective bond between residents and these new material elements of the bonde infrastructure would be stretched in various directions. Sara and her colleagues, together with other black working women from the favela parts of the neighborhood could not rejoice at the sight of new timetables and station lists; they could not reach an affective proximity similar to Claudia, they would not set their watch by the bonde. At the same time, any new signpost that popped up on the lower railway line drew shop owners or home renters close to the sign and its promise of tourism and economic upturn.

The commonality between these different degrees of proximities, then, was “the experience of a gap between the promise and how [residents were] affected by objects that promise” (Ahmed 2010, 42). Mismatches became evident between the promise of reliability and an exclusionary timetable, or between a signpost and the promise of reconnecting the neighborhood to the city.

As I have argued in the introduction to this chapter, though, I do not want to conceptualize these “gaps” as breaks or interruptions between residents and urban matter, but rather as elastic bonds which can lead to different degrees of proximity or alienation, depending on whether or not that which is expected is also experienced. My interest in this section has been with the spatio-affective experience of “drawing near”, which I understand as attraction to things “from the neighborhood” that promise familiarity and make the outside city easier to bear. In the following chapter, I will further interrogate the spatialization of affects by asking how people deal with these “interstitial spaces” (Simone 2014, 35), how they are filled with intensities, with things unexpected and inexplicable, and what their effects on affective bonds and new formations of collectivity are.

Five Loose Bonds

Is it that I care about all this?
 Every thing is too much and so much
 Which were my expectations?
 What is threat and what is promise?

In the previous chapter, I have explored the thin line between affect's potentiality and its actual-material dimension. The suspension of a central city tramline in Rio de Janeiro, I have argued, has opened up a gap between a potentially better future and the here-and-now. This gap has filled with all kinds of promises, or rather, affective bonds that attach residents to particular elements of the transport infrastructure. In the first place, these promises generated a kind of "virtual connectivity", that is, a relation between the city government's outspoken promise that the bonde would come back to the neighborhood, and the actual materialization of this promise throughout the reinstallation of the tramway system. Following from these reflections, I have conceptualized the process of tramway-reinstallation not as gap or interruption, but as entry point for sounding out the elastic bond between residents' desires and urban matter. I have explored how, through infrastructural materialization, the desires formerly attached to the bonde became distributed across a cluster of "promissory things" such as stop signs and train schedules.

Especially during an initial period of rediscovering Deleuzian notions of affect in the cultural sciences, there has been a great deal of enthusiasm for the "virtual", that is, the seemingly infinite possibilities that reside in affect's "not yet", to generate other futures and to change the course of actions – potentially for the better (Massumi 1995; Gregg and Seigworth 2010). However, while affect might escape confinement by actually existing things, its indeterminacy,¹³⁹ at the same time, turns it into a threat:

Thus, in the affective bloom of a processual materialism, one of the most pressing questions faced by affect theory becomes: "Is that a promise or a threat?" No surprise: any answer quite often encompasses both at the same time. (Gregg and Seigworth 2010, 13)

¹³⁹ For a more thorough discussion of affects "constitutive vagueness", and its ramifications for a spatial model of affect, see (Krämer 2019).

Because it was never quite sure whether the promises associated with the bonde of Santa Teresa would be fulfilled, whether or not the tramline would be suspended again, or even turn out for the worse (higher prices, restrictive schedules), these promises could always turn into a threat.

“Which were my expectations?”, the third verse of Caetano Veloso’s *The Name of the City* goes (Chediak 1997, 106) — an expression of how the transition from promise to threat is marked by indeterminacy? Of how promises’ “not yet” might never arrive (Gupta 2018)? Of how they might evolve into something completely different, maybe even worse (Berlant 2011, 48)? In Santa Teresa, through the both temporal and affective dynamics of indeterminacy that marked the period of tramway-reinstallation, the bonds between residents, state authorities, and tramway matter became more *elastic* – they could be tightened and loosened into various degrees.

As I have demonstrated in the previous chapter, the passing of promises from the tramway to stop signs and schedules has generated proximity. Such proximity is temporal, where “promissory things” have literally anticipated the advent of the tramway, generating all kinds of speculations. It is affective, as manifest in residents’ care for the stop signs, or in the adjustment of bodily rhythms to tramway-schedules. And it plays out as a spatial proximity, as soon as a set of “promissory things” literally draws different parts of the neighborhood and the city closer to each other.

However, “to keep passing something along”, as Sara Ahmed (2010, 184) suggests, “also requires that each proximity recedes”. With Ahmed, we can read the *passing along* of tramway-promises in Santa Teresa also *as a recession of proximity* between residents and some particular instances of infrastructural matter. If residents had previously been affectively “close” to the bonde, attuning their daily routines to the rhythm of trains, the tramway suspension prompted them to closely follow the movement of stop signs and the re-organization of timetables instead. What is more, such passing along also meant that in the process, a promise could turn into a threat, just like in the case of Sara – the supermarket cashier mentioned in the previous chapter – for whom the tramway’s promise of reliability turned into a exclusive timetable, thus presenting a rather threatening element which further alienated Sara and her colleagues from infrastructural matters.

What these examples from the previous chapter show is that to “stay tuned” to the swift transitions from promises to threats, relations between inhabitants and things in Santa Teresa must constantly alternate, sometimes being tightened, other times stretched. As Simone (2015) has argued, infrastructure is essentially about *Passing Things Along*, it does not only facilitate the movement of

things, but is itself a movement, or rather “a viewpoint constituted in motion”, a perspective that challenges what is considered to be “near” and “far” (ibid., 154). In an earlier piece, Simone (2014, 3) also points out how in urban majority districts¹⁴⁰ like the one where this case study is situated, proximity can actually mean distance:

I consider the urban majority as an assemblage of people of different backgrounds operating in close proximity to each other. The proximity means different things – sometimes closeness, sometimes distance, coordination, or separation – but the oscillation is important.

In this chapter, I will show how oscillations between threat and promise, proximity and distance translate into a *constitutive looseness* of the affective bonds between residents and infrastructural matter in Santa Teresa. Looseness, as Urs Stäheli (2017, 2018) has demonstrated, might indeed serve as a fruitful composition principle for the formations of collectivity.

Similar to what I have argued with Simone for the holding-together of urban majority districts, Stäheli also points to how relationality rests upon a primary disconnect. Such a view on the relations between people and people, and people and things, points to how collectivities emerge from rather indirect connections, abrupt transformations, and the indeterminacy of “time buffers”, or moments of temporal suspension between events (ibid. 2018, 18). Instead of understanding looseness as a marker of the deficiency of relations, Stäheli proposes to understand it as prerequisite for establishing connections – and by this, as symptomatic for the limits of relational theory. In line with contemporary philosophical (Harman 2007; 2010; 2018) and anthropological debates (Jackson and Piette 2015; cf. Strathern 1996, 2011), the author criticizes an understanding of connectivity as “ontological given” (ibid., 20). Such thinking, he warns, would be governed by a “dream of wholeness” (ibid.), which in turn conceives of acts of loosening as merely strategic, aimed at discarding the malfunctioning units of a system.

Instead, Stäheli proposes to conceptualize looseness “as a positive state in itself” (ibid., 18). It is exactly the looseness of the “in-betweens” of things, he argues, that generates their ability to make absent things present (ibid., 14). Promises, I will argue, present a well-suited example for such constitutive looseness. In the case of Santa Teresa, the absent tramway has resurged through

¹⁴⁰ For a more detailed explication of why I understand Santa Teresa as a “majority district”, please refer to the introduction on *tramspotting*.

promises of togetherness, and of access to the city that have filled the in-betweens of residents and infrastructural matter.

At first sight, it seems that such promises have constituted rather tight relations between things and people in the neighborhood. From such a perspective, as most prominently articulated in linguistics and speech act theory, promises constitute a performative articulation of the reliability of a relation between the promisor and the addressees of the promise (the promisee/s) (Austin 1962; Lyotard [1984] 2015). Since they are associated with values such as responsibility, reliability, and trustworthiness, they seem to tighten social relations (Schneider 2005). Reaching beyond the conscious or the controllable, they evoke hopes and desires that in turn generate strong attachments to whatever and whoever promises.

At the same time, though, promises are hard to monitor, the foundations on which their fulfillment can be demanded are brittle, and a deceitful promisor is not easy to be punished. From a juridical perspective, for instance, the un-fulfillment of a promise does generally not inflict legal penalties. From the perspective of linguistics, Manfred Schneider has argued that the *literal fulfillment* [entsprechen] of a promise can also be a strategy of de-fulfillment, of finding a way to keep one's word without having to do what the promisee expected (ibid. 2005). Similarly, from an anthropological perspective, Abram and Weszkalnys (2013) have argued that promises' particular temporality, which evokes something in the present that still lies in an uncertain future, opens a "gap" in which all kinds of things are possible: That the original promise fades away and gets forgotten; that it becomes detached from the originally promising things (because of i.e. a technological innovation), or even from the people that have first called it out (because of i.e. a change in administration). Because of their unpredictability, then, promises also seem to articulate rather volatile, fragile, and "loose" relations between people and things.

This chapter is based on the assumption that through conceptualizing the quality of connections that tramway promises forge as "loose bonds", it becomes possible to reconcile the paradoxical relationship of stiff attachments and purported indifference, of the transitory and the durable that hold together things and people in Santa Teresa. In recent years, a new stream of reflections has formed in urban research around authors who try to capture something beyond the established grammar of the field, looking for "connections" that can be perceived, but not seen; that we can foresee but not (yet/fully) theorize (Amin 2016; De Boeck 2015; Farías and Höhne 2016; Thrift 2008; Simone 2015). While anthropology, sociology and human geography have built a

substantial scholarship around that what is considered “the urban form”, this new scholarship rather focuses on urban change and process, on forces, densities, velocities and affects, and on the hidden forces of urban becoming.

Infrastructures, then, rather than functioning as “traps” in the way I have described in the previous chapter – promising to bring progress and better futures only to capture¹⁴¹ residents’ desires and aspirations and then immobilize them – can also enable specific “cuts” (Strathern 1996) in the never ending stream of relationality that seems to compose the urban, and by this, generate a movement which sets things loose in order to make collectivities persist. In the following, I will provide empirical evidence for how residents’ of Santa Teresa have appropriated infrastructural cuts for a kind of strategic detachment, which allowed them to “stay with” urban matter throughout uncertain times (section 1), and how they have upheld such “looseness” by employing specific modes of care, maintenance and repair (section 2 and three).

Repulsive asphalt: Strategic detachments

Amongst the most attentive witnesses of the tramway-reconstruction of Santa Teresa has been Luciana (introduced in the previous chapter), the long-term resident of the Largo das Neves square who lives close to the still-unfinished end of tramline two. A few months after we had discussed her hopes for the return of the bonde while gathering around one of the newly installed stop signs, in early 2016, Luciana returned to the local neighborhood association. The public meetings of the association are held on a monthly basis, and since its foundation in 1980, its members have become the main interlocutor of the city government for the discussion of bonde-related issues.¹⁴² After the tramway suspension in 2011, they have organized various protest actions in the neighborhood, in addition to issuing a successful court action charging Rio’s former state secretary of transport for the accident (Martins 2015). Luciana had been an active member of the association since the 1980s, but for the past years, her work as an architect had kept her from attending the meetings, as she explained.

¹⁴¹ For a more details on such form of capture, please cf. my discussion of Berlant’s “cruel optimism” in chpts. three and four.

¹⁴² For more information on the Association of Inhabitants and Friends of Santa Teresa (AMAST), please cf. chapter one.

The main reason for coming back, she clarified during the round of introductions that day, was the appearance of a new material element in the neighborhood:

[B]ecause now it's too much, I cannot stand this anymore. The other day I passed by the construction site at Largo do França, and I felt my body paralyzed [o meu corpo paralisado], nauseated [nauseado], disgusted [revoltado] by the sticky, shiny, slimy, black asphalt. It covers [tapar] our cobblestones, our patrimony, the soul of Santa Teresa. It spreads everywhere in the neighborhood like a disease [shivers], it creeps up the walls, slowly burying our beautiful bougainvillea [...]. (Luciana 12/01/2016)

As I have argued in the previous chapter, the intensities generated by infrastructural matter sometimes draw bodies and things closer to each other, but they may as well stretch affective bonds and pull them apart. Luciana expresses a strong sense of revulsion, she is “disgusted”, and her body-shiver and feeling of nausea are caused by a specific instance of urban matter, namely “asphalt”. The official decision to provide a complete overhaul of the tramway system of Santa Teresa after the accident in 2011 required the replacement of countless materials.¹⁴³ In addition to the infrastructural elements that were directly related to the bonde, such as contact wires and railway tracks, the construction workers also tore up several sections of the street over the course of the years in order to exchange century-old water pipes and rusty gas pipelines. While the process involved, in some parts of the neighborhood, a meticulous removing and refitting of every single stone of the traditional street pavement, other construction sites were closed in a less time-consuming manner and surfaced with asphalt concrete (fig. 25).

For Luciana, the expansion of asphalted areas in Santa Teresa is beyond control, her body freezes with a feeling of impotence in the face of a viscous mass that creeps through the streets and up the walls. The thickly textured asphalt threatens to cover-over, to “bury” bougainvillea, cobblestones, or other elements of the rich vegetation and peculiar architecture that are usually evoked as representatives of Santa Teresa’s bucolic atmosphere. Among the different materials that resurfaced in the streets during the reconstruction process, asphalt most clearly points to *the thin line between promise and threat*.

Giving one example of the swift transition from one to the other, Ahmed (2010, 91) quotes the sentence “if you do this, you will get that!” – a sentence which entails both the promise of what

¹⁴³ For a more detailed account of the “piling up” of infrastructure in Santa Teresa, cf. chpt. one.

will follow from a certain action and, simultaneously, the threat “not to do that”. Ahmed uses this sentence as an example of “straightening devices” that pressure deviant, queer bodies (ibid., 88–121), black bodies (ibid., 121–60), or “feminist killjoys” (ibid., 50–88) to stay in line, to comply with the norms of heterosexual conduct, and to assimilate to the dominantly white, cis male spaces of a society. In a similar vein, Ahmed evokes her analysis of “threat” as affective strategy around the figure of the asylum seeker, which has become a “deviant” in many senses across countries of the global North. From her analysis of speeches that circulated in Britain in early 2000, she argues that metaphors such as migrant “floods” or “swamps” – still commonly used by European conservative and right-wing politicians and media – produce the asylum seekers’ bodies as “overwhelming” and, by this, threatening “the space of the nation” (2004, 122).

For Luciana, a promise – as in the conjunction “once the street pavement is renewed, the bonde will return” – has turned into a threat for other human and vegetal inhabitants of the neighborhood. Similar to Ahmed’s example, fear is intensified by the disease-like, uncontrollable “spread” of something that transgresses the boundaries between what is organic and what is synthetic, and by this becomes capable of threatening the existence of spaces designated for, for instance, the “preservation” of the former or the proliferation of the latter. In the present case, it is not an unspecified group of people, but an invasive (also unspecified) mixture of bitumen, gravel and sand which menaces Santa Teresa as an “affective space” (Navaro-Yashin 2009, 10), that is, as a space with a specific atmosphere (in this case “bucolic”)¹⁴⁴ generated by the sensations that circulate amongst the bodies populating it.

While asphalt has filled the gap between the promise of bonde-comeback and the full reinstallation of the tramway system, it has also created an interstitial space out of the intensities of Luciana’s shivering body reacting to the slow advance of a sticky substance. However far the affective bond between her body and the infrastructural matter might be stretched, there is also a frightening proximity¹⁴⁵ between them, which ultimately urges Luciana to return to the protest movement and to defend her spatio-affective perception of the neighborhood.

¹⁴⁴ For a discussion of particular “atmospheric” representations and co-creations of Santa Teresa, cf. chpt. one.

¹⁴⁵ Through her insightful discussion of Ahmed’s concepts, and particularly of “disgust” in relation to current right-wing movements in Germany, Christine Hentschel (2019) has also offered a fruitful opening for a reflection on how “disgust” is also an expression of proximity, even “attachedness”.



Figure 25: Asphalt pavement

Asphalt, a cheap composite material of gravel and hot bitumen, has become the most common surface coating used for city streets around the world. As Germain Meulemans (2017) has shown from his anthropological study of the making of urban soils in contemporary France, the turn of the 20th century was marked by the advent of asphalt as “the most advanced material realization of the dichotomy between soil and sky” (ibid, 53). By “waterproofing” the ground, engineers managed to separate it from rain and other liquids that came from above – a technology that soon also made it necessary to install comprehensive urban sanitation system (ibid., 50).

What is more, asphalt also afforded new cultural forms, well described by Tim Ingold (2017, 2018), who has explored how the paving of streets

literally paved the way for the boot-clad pedestrian to exercise his feet as a stepping machine. No longer did he have to pick his way, with care and dexterity, along pot-marked, cobbled or rutted thoroughfares, littered with the accumulated filth and excrement of the countless households and trades whose business lay along them. Dirt is the stuff of tactile (and of course, olfactory) sensation. It could trip you up, or soil your boots. (Ingold 2004, 326)

By transforming the ways in which people move through urban spaces, by “lead[ing] us to look at urban ways as transport surfaces rather than soils” (Meulemans 2017, 53), and by contributing to the separation between urban (where organic matter is evacuated) and rural (where soils are fertilized for cultivation) in “western” mindsets, the asphaltization of the city has spurred at once the erosion of soils (consider landslides that have buried whole city districts), their impermeabilization (consider the health risks caused by waste waters that can no longer be absorbed by the ground), but also the ravaging of interspecies relations, of geographical differences and of plural forms of cultivating (cf. Tsing 2015).

When Luciana speaks about how asphalt creeps up and down the streets of Santa Teresa, the sticky substance does not seem a clear beginning or end. It “washes over” the neighborhood and its particularities, be it a historic means of transport, a specific vegetation, or a set of cobblestones. The feeling of threat that lies in her expressions intensifies because “it can no longer be contained by an object” (Ahmed 2004a).

In Luciana’s account, through a combination of verbal and bodily expressions, threat can be “felt into being” (Massumi 2010, 74), maybe manifest most powerfully in the shiver that traverses some of the protesters around her. Repulsion is not an a-spatial affect, rather, the shivering bodies reveal a directness by which threat “re-establishes distance” (Ahmed 2004a). In other words, *keeping the asphalt “in check” in Santa Teresa also means re-establishing distance* between residents and city authorities, between the things “from here” and the outside city, in order to retain control over the many “informal” modes of organizing spaces and everyday lives.

Asphalt as threat: Understanding the city from its grounds

To grasp the scope of the perception expressed by Luciana, it is crucial to retrace some of the meanings that “asphalt” has acquired in spatial imaginaries that are specific to Rio de Janeiro. In a provocative thought-piece, transport historian Massimo Moraglio (2017) discusses the “movements” of asphalt as a metaphor for recurring discussions in transport studies about the mobile/immobile. Drawing from the example of an experiment about the viscosity of asphalt, started in 1927 by Australian scientists who waited for decades until the “solid” asphalt formed one single drop to drip from a funnel containing bitumen, Moraglio argues that *only through time* can we understand if pitch is a liquid, if it moves. To apprehend the making of movement – i.e. the creeping of a thick black substance over the streets of Santa Teresa, the expansion of state control, or the movements of residents up and downhill – Moraglio argues “we need to use the discipline which deals with time: history” (ibid., 167).

As I have detailed earlier on, through a “historical dimensioning” of the collectivity-generating potential of Rio’s tramways (chapter two), the “bonde” condenses two of the most persistent tropes of the city. It has been celebrated as an “integrative device” which promises accessibility and equal opportunities for all as entailed in the Marvelous City trope – and it has brought the threat of “asphalt” in the form of hygienization campaigns and street enlargement to the central poor and working class districts of the city at the turn of the 20th century. This latter dynamic has been

decisive for the emergence of the second trope of a “Divided City” – couched between the civilized, state-controlled parts of the city [*asfalto*] on the one hand, and the hilltop [*morro*] of muddy streets on the other hand, where the latter have been associated with an absence of public infrastructures, and depicted as reigned by poverty and violence.

Although the simplistic dualism of the Divided City has received (reasonable) criticism, in more recent academic discourses, the use of the “asphalt-hilltop” terminology repeats the (discursive) antagonism of this trope, where *asfalto* indicates areas with taxable properties and “formal” access to gas, electricity and public water and sewage systems; and *morro* stands in for the “informal city”, characterized by a lack of land titling and often-improvised connections to public infrastructures (Gaffney 2016; Pilo’ 2017). The persistent use of the *morro/asfalto* dichotomy in Rio’s everyday language of the 21st century figures through contemporary popular culture.

A sometimes critical, sometimes playful dealing with the theme of social-spatial segregation as expressed in the morro-asfalto dichotomy lives on in the electronic music genre of *baile funk*, which has long left the space of Rio’s favelas to invade the asphalted areas of cities around the world. The baile funk has developed into one of the most important Brazilian subcultures since the mid-1980s, but despite its export into the hip clubs of Berlin, New York, Paris or London, the genre is still “stigmatized in Rio as the expression of an aesthetically inferior ‘culture of poverty’” (Lanz 2013).

Even earlier, the terminology has figured in the popular *samba do morro* songs – literally “samba from the hills”, rooted in the precarious hillside settlements of the urban black poor – which contrast the morros with the asphalted-cum-“civilized” parts of the city. The samba do morro was born with the advent of Rio’s first samba school “Deixa Falar” [Let (us) speak] in the central district of Estácio, soon followed by the famous schools of Portela (Madureira district) and Estação Primeira de Mangueira (district). The Mangueira school, winner of Rio’s official carnival contest 2019, has recently referred to the Divided City theme in one of the two sambas (Lucena 2019) it selected for the 2020 competition:

The hilltop comes down the asphalt and this time.
Forget the sadness now...
Today is a day for community [a widespread euphemism for favela].
A new tomorrow, a song of freedom.

As the examples of baile funk and samba do morro also show, the morro/asfalto terminology is strongly tied to Rio's *favelas*. They are also specific to the city's topography, where especially in the central areas of the city members of the poorest classes often populate the hillsides, while the rich and middle-class populations reside in the areas at lower elevation. One of the most provocative uses of the Divided City theme may be found in Wilson das Neves' 1996 composition entitled "The day that the hill [morro] will come down, and it will not be carnival" (L. J. dos Santos 2017). The open promise, or threat, entailed in the first part of this sentence is fulfilled in various ways throughout the song. When the final verse announces that that day, "everybody will dance samba [sambar]", it alludes to both an expression of joyfulness, and the meaning of sambar as "jumping" out of fear. The parade will "swamp [alagar] the asphalt", Neves ends ambiguously, and it will have "the divided city" as its theme (quoted in Santos 2017, 127).

Similar to Ahmed's "swamping" (2004, 122) as mentioned further above, Neves' samba picks up on the theme of the divided city but stretches the meanings of "swamping" as threat, to envision favela residents' appropriation of the "asphalt". What would be if "the hilltop" invaded the city outside the exceptional allowances of carnival – the one time of the year where samba groups come down the hills to parade on the downtown streets? Neves foresees that "there will be shot-guns, machine-guns, grenades and rifles", if the violence and misery which in Rio's spatial imaginary is confined to the favela "will be displayed on the asphalt" (Santos 2017, 127).

A quite different answer has been given by the student's of a high school in Santa Teresa, located close by and frequented mostly by residents of the three local favelas that flank the upper end of the neighborhood's main street (fig. 26). In early May 2016, these students have hung a protest banner down the handrails of Santa Teresa's central Guimarães square. "The favela has come down without being Carnival. And the occupied schools are not samba schools", the banner states. Taking up the theme of "favelas coming down [the asphalt]" as in the samba songs quoted above, the banner ends with the hashtag #OcupaMonteiro, a call for participating in the country-wide strike of students and teachers which during the second semester of 2016 have protested against a cut in government spending for public education, and a law initiative for "nonpartisan schools" which has encouraged students to "report" their teachers for "leftist indoctrination" (Matuoka 2016).



Figure 26: When the favela comes down and it's not carnival

Today, the scenario imagined by Wilson das Neves is far from exceptional for the organization of spaces and lives in Rio. In a certain sense, “the favela” penetrates the city every day anew, most obviously through the bodies of predominantly black workers who enter the spaces of a white middle class, as in the contested figure of the female domestic worker (Wasser 2019). In this sense, it seems important to recall what Janice Perlman has asserted from her long-term ethnography in Rio’s favelas from the late 1960s up to the first decade of the twenty-first century, namely that “the often used descriptor of ‘dual city’ is neither accurate nor useful [because] the two sides of the city have always been intertwined” (Perlman 2010, 30).

What is new, however, is a heated discussion has evolved over the past few years about what happens when “the asphalt invades the hill” (Gombata 2013; Torres Pereira 2014). Recently, more and more young, white inhabitants of the Copacabana and Ipanema districts are joined by an increasingly international urban class of hipsters, who climb up the city’s hills in search of cheap flats with spectacular views, hence contributing to a process of displacement of the urban poor that has led some scholars to speak of a specific Rio-style type of “gentrification”, or even “asphaltization [asfaltização]” (Gaffney 2016).

Asphaltization as touristification?

The “asphaltization” of Santa Teresa has been an issue of protest not just since Luciana’s rebellion against the renewal of street pavement in 2016. In an interview I took in September 2015, Alfredo Britto, a retired architect in his eighties and founder of the “Amigos do bonde” (Friends of the tramway), the predecessor of today’s neighborhood association, talked to me about how Santa Teresa had been like for him when he moved uphill in the 1960s:

For me, and many others actually, Santa Teresa was a discovery [achado]. It was right in the center, one could get to the whole city from here, but affordable, and there was a palpable promise of escape [refúgio] for people like me who were resisting the government or simply had a different aesthetics you know. But also not only for people like me, unfortunately. And this is how the asphaltization [asfaltização] began. In the years and decades to follow, the neighborhood walls became plastered with plates announcing ‘for sale’ or ‘we buy’. (ibid. 02/09/2015)

While the “Friends of the bonde” had mobilized against rising rents and real estate speculation in the neighborhood, with Britto himself becoming renown for his engagement to preserve the city’s architectonic patrimony, he nevertheless acknowledged that residents of Santa Teresa had played some role in the process of what later evolved into “asphaltization”. In reaction to an explosion of violence in the whole city with strong repercussions for Santa Teresa in the first half of the 1980s, a small group of 12 inhabitants including Britto came up with the initiative for an event called “Portas Abertas” (Open Doors), where local artists literally opened the doors of their ateliers and workshops in order to attract visitors and to revive the neighborhood from its image as dangerous and degraded (Rodrigues and Camargo 2015, 18). The Portas Abertas has since grown considerably and went into its 29th edition in 2019, with more than 60 artists exposing their work (Fábio Júdice 2019).

The first announcement for the Portas Abertas in 1980 clustered especially around the promise of authenticity. The event flyer encouraged visitors to “walk down sloppy stairs into picturesque ateliers, through stucco portals into bucolic mansions, [and] to discover [an] authentic, bohemian neighborhood” (AMAST, private archive). Events like this have attracted every year more visitors from outside the neighborhood, and like the Lonely Planet Edition from 2011 states “They [the artists] opened studios and hosted creative events [...] that gave the district its reputation as a vibrant, but still edgy, arts district.” (St. Louis 2011). International tour guides have picked up on the image that the new residents of the 1980s created and promote “The other side of Rio: bohemian Santa Teresa” (ibid.), and “artist neighborhood with small streets, tram and original shops” (Trip Advisor 2018) and the commercial hospitality service platform Airbnb advertises its “folkloric charme” (Comen 2018). According to critical geographers around the (mainly western) world, “touristification” evokes promises of an “authentic experience” through the “densification of a desiring want” which ultimately transcends the sphere of the special and becomes daily routine, a corporeal-subjective experience (Blickhan, Bürk, and Grube 2014, 171). Touristification is an

established term in urban studies already since the 1990s (Bhandari 2008; Urry 1999; Jansen-Verbeke 1998) and roughly refers to a process where neighborhoods like Santa Teresa are “discovered *by* tourists and exploited *for* them”, through a “marketization” of both the cultural landscape and the history of a place (Borries 2011, 161, own translation).

It is also during the time of the *Portas Abertas* that it became common amongst residents to call the bonde itself a “postcard” [cartão postal] of Santa Teresa. The private archive of the neighborhood association features a survey from 1983 carried out by members of the very association. Here, residents are asked whether “the bonde has been transformed into a tourist destination” [destinação turística] (AMAST, private archive). The around 115 answers feature the words *cartão postal* 62 times, mostly in the style of “the bonde has become [virou] postcard” and always in combination with a mentioning of Santa Teresa as “touristic destination”. Similarly, the digital archive of one of the major Brazilian newspapers, the *Globo*, returns more than 120 articles where the bonde is described as “postcard”, none of them dating before 1979 (“O Globo” archive, 2018). More than the introduction of a new metaphor for designating its touristic function, the bonde has also become a postcard in the sense of a souvenir from Santa Teresa. As local artisan Túlio remembers:

I came to Rio from Minas Gerais [region] in 1971, looking for jobs in my profession, I am tinsmith, because I was single father with two children. Santa [Teresa] saved me. I came here exactly 33 years ago [1982]. I installed a shop made of wood and some metal I found on the street and I started to offer my ability to repair stuff, right here, in front of the supermarket, I thought it would be a good place. And I ended up observing the bonde very closely, because it passed by right here [pointing] below my shop, right? It was very handsome with the little red hearts painted on it and I started making some miniatures [miniaturas] out of the remainders from my work. Ah, you can’t imagine, it was success! Everyone wanted them, of course, it was a postcard, I sold many, many (...). There is a bonde by Túlio all over the place now, like, in France, Germany, United States, Sweden, just everywhere.” (Túlio, 12/09/2015)

During the early 1980s, Túlio has been a pioneer in producing souvenirs featuring the tramway, and soon after creating the small wooden model, he built a life-size bonde from plastic, paper, rubber and other materials he collected from the nearby waste deposit. And it was not long before the “bonde by Túlio” was joined by many more. Today, there is a bonde “by Paulo”, made of steel, aluminum and used electricity cables; the bondes by Sheila and ZOD, who sell t-shirts with tramway-print on the streets; the hyper-realistic tram murals by local celebrity “Jambeiro”, and the

innumerable paintings, cups, key rings, and children’s toys by nameless artists sold in the local shops along the main street.¹⁴⁶ Arguably, these examples also point to how “touristification” indicates a temporary state, a product of the momentary valorization of urban areas as touristic places through leisure activities or consume oriented practices.” (Blickhan, Bürk, and Grube 2014, 168)

Throughout the 1980s, the tramway as touristic object has become contested in new ways. While there is a long history of bonde-protests¹⁴⁷ in Rio, the lines of conflict did not evolve between state and citizens, but along new antagonism between “locals” and “strangers”. Authors like Nils Grube et al. (2014, 169) have associated touristification directly with a so-called “blaming approach”. In Santa Teresa, in 1983, the neighborhood association AMAST distributed a flyer in the neighborhood which asked car-drivers not to park their cars on the tramway-tracks, as this impeded the bonde-flow through the streets (AMAST, private archive).

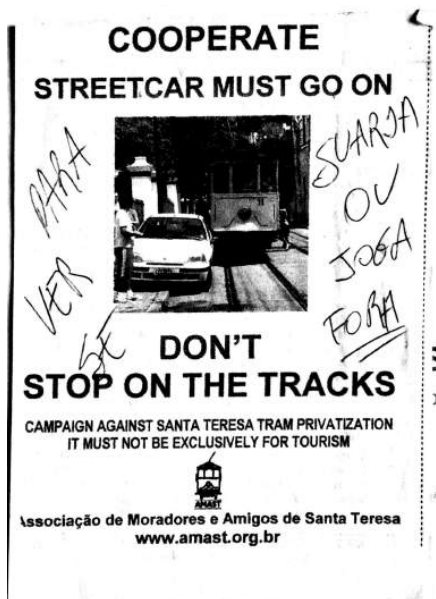


Figure 27: “Don’t stop on the tracks”

This is the only public document to be found in the associations’ archive which has been printed in both Portuguese and English (fig. 27). On the lower part of the flyer, the association claims that the bonde “must not be exclusively for tourism” and alludes to the threatening “privatization” of

¹⁴⁶ Sheila and ZOD are introduced in chpt. one, Paulo and Jambeiro in chpt. three.

¹⁴⁷ These protests have been mainly against fare-rises and government policies in general. For more details cf. chapter three which inquires the bonde as “political matter”.

the tram, which was discussed during that time as consequence of a planned modernization of the lines and building of new tram-models by a private company. For Britto, who had been involved in the protests against “stranger’s cars” (ibid. 02/09/15) parking on the tracks, both the becoming-attractive for tourists of the neighborhood and the bonde had facilitated the threatening asphaltization of Santa Teresa.

Since the 1980s, the bonde has never lost its touristic signification. However, also in Santa Teresa “asphaltization” does not equal “gentrification” – thus pointing to the limits of the concept as interpreted by authors like Christopher Gaffney presented above. Contemporary Santa Teresa quite obviously qualifies as a touristic space of desire. On weekends, the neighborhood’s daily life is marked by “leisure and consume oriented” activities (ibid.), and along the main street, restaurants open their doors, street vendors offer bonde-souvenirs, and groups of tourists take pictures from the panoramic viewpoints. This rather “lifestyle variant” of touristification, although pushing the further fragmentation of the city into differentiated spaces of desire, however is not automatically related to a rise in real estate prices (cf. Blickhan, Bürk, and Grube 2014, 169).

According to Britto “the first time that touristification and asphaltization actually became synonymous was when the state opened the Muratori [section] again” (ibid.). What Britto knew about the tramline re-opening already in September 2015 – because of the contacts he maintained with the city’s administration from his long-time engagement as architect/activist – would only become official half a year later. On the 27th of January, the state secretary of transport Carlos Roberto Osorio (01/2015-02/2016) inaugurated the rail section along the Muratori street which already had been abandoned even before the accident of 2011. For the first time since 1966, when the railbed had been damaged by heavy rains and never recovered, the bonde climbed up the steep street again.

When the test journey began, I sat in the bench behind the secretary and took the opportunity to ask him about his plans for this rail section. “The Muratori [section] will become a touristic corridor [corridor turístico]” (ibid. 27/01/2016) Osorio explained. Because the bonde would now connect Santa Teresa more directly with the downtown Lapa district – a part of the city whose cheap bars and samba venues fill up to the bottom with both foreign and carioca-visitors as soon as the sun goes down – it would install a “corridor” for tourists to reach the neighborhood. “They [the tourists] will follow the asphalt uphill”, Osorio smiled to me. The contrast with both Luciana’s repulsion against the sticky substance that buried local plant life, and the neighborhood initiative

against the asphaltization-cum-touristification of the neighborhood became quite apparent in this remark. Elaborating on his plans to achieve an “exceptional opening” (ibid.) of the Muratori stretch also during the nighttime, the state secretary made it clear to me that “the government [would] now take care of Santa Teresa” (ibid.).

Britto’s successors, however, did not make it this simple for the state secretary to “take care” of their neighborhood. On the day the media gathered on the corner between the Muratori street and the “Rua da Lapa” (Lapa’s main street), residents and members of the neighborhood association had already blocked the tramway’s way uphill with a huge banner, stating “Tourist inside the bonde. Resident on foot. What’s that?” (fieldnotes 27/01/2016).

When the bonde finally departed on that hot day in January 2016, nobody could foresee that this would not only be its first, but also its last journey along the “touristic corridor”. It also remains unsure whether it was the residents’ protest, or the “material resistance” of the tramway itself once again¹⁴⁸ – refusing to climb up this particularly steep street with its still wavy new asphalt pavement, soon to be perforated again by potholes and resurfacing cobblestones – that made the re-inauguration of the Muratori section a one-time event. The state initiative to “take care” of the touristic exploration of the neighborhood, in any case, has failed.

Des-bonde: Cutting links that have grown too tight

After the fuzz around the newly inaugurated tramway section had ended, and the crowd of journalists and state representatives had dispersed into the side-streets, I started a conversation with Túlio (introduced above), who had spontaneously stopped by the Muratori street.

Why residents protested against the re-opening of this street? “Because this is how we have become exposed [expostos]. To everything that might happen to the tramway, and to the neighborhood” (ibid. 06/03/16). What he meant by this, Túlio explained, was that residents had gotten “too close” (ibid.) to “what might happen”, to the hope that the tramway would return, too close to the state-promises of transport. “And by this we have exposed ourselves, and I do not mean to the danger of colliding heads with lamppost during the journey” (ibid.). What Túlio pointed to happened rather in absence of tram-riding, during the years of standstill. Residents had literally “stuck their

¹⁴⁸ For a more detailed explanation for what I mean with “material resistance”, cf. chpt. three.

necks out” while they had manifested their opinions in protest actions and negotiations with authorities. Every time they dug out another map, thought lost, of the century-old sewage system from their jealously guarded private archive and put it on the negotiation table, they showed their precious “cards” without guarantee that the authorities would give them something in return.

The major risk connected to such kinds of exposure during the four-year suspension of the system, Túlio said, was that residents would become hurt, disappointed, exhausted by their faith in the comeback promises. By holding on to the promise, by acting as promisee (as addressee of the promise), by claiming its fulfillment vis-à-vis the authorities, they had entered a relation of confidence, trust or reliability that might have turned out as “too tight”, because the terms upon which the promise had been issued were not at all guaranteed to be met.

This kind of risky proximity, the uncertain “not yet” of urban promises, was the kind of handing yourself over that according to Túlio had made residents most vulnerable, and their situation most precarious. “Those were four years at the mercy of life” (ibid.), he continued, referring to the period of tramway-suspension between 2011 and 2015. While the tram stayed in the promise, the neighborhood had become more and more of an “open wound” (ibid.). Túlio drew vivid pictures of the many construction sites which had left gaping holes in the historic cobblestone pavement, opening to bowels of pipes and cables; of the frequent water spill-outs and locally infamous railway-rivers that run down the steep streets and into ground floor dwellings; the power blackouts and gas leakages released from Santa Teresa as if “evaporating from a sick body” (ibid.).

And what about the new ticket fare of more than five US-Dollar (20R\$), which cost about five times a bus ride in Rio, or the retractable footboard, which now prevented passengers from staying outside during the journey and riding the tram for free, I asked Túlio. In lieu of an answer, the artisan showed his most roughish smile. “*We have attached ourselves to the promise, not to the bonde*”.

His statement connected to conversations I had overheard around the neighborhood during the months before. People were indeed discussing *des-bonde*, or dis-connection from the tramway. Especially during the months to follow the systems’ re-inauguration in August 2015, there had been heated debates at the regular meetings of the local neighborhood association AMAST – and the word “desbonde” refigured through all of them. Some of the members used the word to insist that “the tram did not come back” (fieldnotes 15/09/15). Others referred to “desbonde” when arguing that the modernized vehicle was not to be accepted as replacement (fieldnotes 13/10/15).

And again others went so far to claim that Santa Teresa had been literally “switched off [desligados]”, disconnected *from* the tramway and *through* the tramway from the rest of the city (fieldnotes 10/11/15).

In our conversation, Túlio confirmed that indeed, the neighborhood would be able to detach from that yellow vehicle which, for now, seemed to have no future as “public” transport. Des-bonde’s relation to *des-ligar* [to disconnect] also meant that while formerly, attention [se ligar, coll.] had been intensely focused on the tramway, this kind of attention could as well be redirected if necessary (ibid. 06/03/16). According to Túlio, “the game of promising [jogo da promessa]” had made residents see through the logic of such relations. “We need to continue struggling for what the tram *could be*”, he explained, “but we need not struggle for the tram anymore” (ibid.).

Desbonde, this way, can be understood as a strategy of loosening bonds, that is, as a “social technology for [...] cutting links that are too tight” (Stäheli, 2008: 20). The kinds of strategic detachments described above have allowed for residents to maintain the constitutive looseness of urban promises. As Keller Easterling (2016) has put it, acts of “decoupling” are a matter of political agility, about how to operate in the midst of things so as to steer clear of redundant formatting and to steer sentiment and skill toward undoing the obsession with clear objectives.

Such acts of decoupling between what urban stakeholders are saying and what they are doing constitutes both a particularly insidious form of extrastatecraft and yet a political opportunity for more cunning forms of activism (Easterling 2014). Constantly fleeing from attention to indifference, they do not attempt to stop construction works, they will not reveal too much of their attachments to any of the things promised, and they will be prudent not to become disappointed by their failures.

Infrastructures, then, rather than functioning as “traps” in the ways I have described in chapter three (ambivalent attachments), can also enable specific “cuts” (Strathern 1996) in the never ending stream of relationality that seems to compose the urban, and by this, enable a movement which sets things loose in order to make collectivities persist.

Get out, cockroach: Passing on the promise

Another protest. Another bonde-protest? Three months after she returned to the local neighborhood association, in March 2016, Luciana stepped into the middle of a crowd that had gathered around the recently inaugurated tramway station at the neighborhood's central Guimarães square. She held a microphone and looked back at the around seventy protesters which sat on the curb and stood together in small groups, some of them holding banners that denounced a recent increase in ticket fares by the local bus company (Fig. 28).



Figure 28: Bus protests

I arrived at the square around noon, together with my friend João, a journalist and founding member of the local “Right to the City”-group of the left-wing Socialism and Liberty Party (Partido Socialismo e Liberdade). The first thing I noticed were the protest banners held by some of the sitting protesters. The first picture I took shows three of these banners, the first figuring a “crazy cockroach! [barata louca]”-bus running after a Dollar sign; the second one exclaiming “get out, damned [for malditos]”, written on top of a self-drawn bus-stop sign. The third banner I noticed was actually a play with numbers that only those familiar with Santa Teresa would understand. It had made of the running number of one of the three local bus lines a play with the James Bond “007” logo. Underneath the number, it states “Pay to enter, pray to exit [pague para entrar, reza para sair]”. With these banners, residents protested against the growing number of accidents and generally poor maintenance of busses in the neighborhood, turning the image of “Barata” [Portuguese for “cockroach”] into a bus-cockroach hybrid.

By taking the tramway off the tracks, local authorities have paved the way for the city's private bus company, which increasingly controls transport costs, routes, and schedules in the neighborhood. Since almost half a century, Jacob Barata – note the play of words in the protest banners, where Barata was visualized as cockroach – commonly known as the “King of Busses” (O Rei do Ônibus), controls the completely privatized bus fleet of more than 541 lines in Rio de Janeiro. Amongst them also the three Santa Teresa lines, which opened in the 1980s and have since the mid-1990s been operated by the Barata-owned *Transurb* company – short for “urban transport [transportes urbanos]”. After its foundation in 1968, the Barata-family-run Grupo Guanabara soon fused the 40 private bus companies in town and has since dominated the public transport market not only in Rio but also in other Brazilian cities, from São Paulo to Belo Horizonte, and has even expanded to Portugal (Matela 2014, 133). The city-logo which is placed on all vehicles belonging to Rio's bus fleet evokes an image of Corporate Identity that deliberately distracts from the fact that ticket fares, routes and schedules are all exclusively controlled by Rio's so-called “bus-mafia” (Herrmann 2017). One of the implications of the Baratas' reign is that bus fares have continually risen, in 2018 costing about one Dollar. This is not as cheap as it might appear. Firstly, because a majority of the bus clientele lives on a few hundred dollar per month, secondly because passengers need to buy a new ticket for every line change which means most rides from the suburbs to the city center cost at least three or four Dollar (ibid.).

Back at the Guimarães square, Luciana shouted:

They have taken our bonde, they have let a barata [both ‘cockroach’ and the family name of the owner of Rio's private bus cartel] take control. This is a rape [estupro] of our neighborhood [people shiver]. How long will we bear this? The asphalt will wash over [inundar] us like a big wave, leaving nothing that is ours [do nosso]. (ibid. 06/03/2016)

Similar to how she had mobilized asphalt as threat swamping the neighborhood a few months ago, Luciana evoked repulsion against a “cockroach”, this time intensifying disgust through her use of the word “rape”. Accidents, ticket fares, speed, accessibility. These premises of what once was the tramway-promise still mobilized. But they were no longer associated with the bonde. While stop signs announcing the tramway-return had generated a both temporal and spatio-affective experience of proximity, literally “drawing the city near” by tightening relations between residents and things, and by installing a sense of intimacy between divergent pasts, futures and potentialities, the abstracted bus-stop sign featuring on one of the protesters banners stretched the bonds between

people and infrastructural matter into quite another direction. Again it had been ZOD,¹⁴⁹ the local DJ who had invented the black-and-yellow logo of the tramway-protesters (fig. 29, left image), to design the picture of choice for this protest. This time, however, he was not playing on the “collective sadness” which had drawn residents closer to each other and to the bonde after its loss. Instead of the aestheticized tramway-with-teardrop version claiming “justice”, this time, ZOD had created an “angry” bus showing its teeth on top of the 2016-protests “get out transurb [fora transurb!]” slogan (fig. 29, right image).



Figure 29: From sad tramway to angry bus

To “get out” the local bus company from the neighborhood, here, recalls a way of “pushback” or “repulsion” similar to the residents’ movement against the touristification-variant of asphaltization. Other than it might first appear, the further stretching of affective relations between residents and infrastructural matter through movements of pushback/repulsion, however, has not completely disconnected people from the tramway. While the articulations of repulsion against asphalt described above point to what I have described as ways of strategic detachment (from too much interference with “local business” by both state and private actors), I will argue in the following that throughout the re-installation process of the tramway, in Santa Teresa, other forms of collectivity have emerged that rather defend a position of “care”, that is, the maintenance of the constitutive looseness that marks the relations between residents and infrastructural matter in Santa Teresa.

One of such “caring” collectivities has been represented by the second speaker to climb up the stage during the 2016 bus-protests. Joana, a teacher of the local high school in her mid-thirties had

¹⁴⁹ For a proper introduction of ZOD, and the story behind his tramway-print, please cf. chpt. one.

recently founded the “mothers of Santa Teresa”. Four months prior to the event, a group of female residents of Santa Teresa had opened a mobile messenger chat under the same name to keep each other updated about “potential threats to their children” on their daily ways through the neighborhood (Joana 15/03/16). Joana’s voice was shrill. “Four months. Four months have passed since the fatal accident”, she shouted, “he was driving on the wrong lane, overtaking one, two other busses, then stopped right on the tracks at the old tram station” (ibid. 06/03/16). Mother, grandmother, baby. One after another left the bus, when it suddenly accelerated, causing the old lady to fall, baby in her arms. That is how Ana ended her story. She cried. “*This was the rupture we needed.* The accident with the tramway happened right here. They scrapped our tram. Now, busses are the new tragedy” (ibid., emphasis added). Again, the tramway resurged through her account. People on the tracks, injured, Joana crying – the audience burst into spontaneous applause.

Then, the crowd fell into a chorus, accompanying Claudia, a 40 year old civil servant and long-term member of the neighborhood organization who had co-organized the event, together with the “mothers”: “Driver, watch the street, that lamppost is not made of rubber, but of steel. This is not right, this is my right. I am a passenger, I demand respect” (ibid. 06/03/16). Receiving recognition as passengers, for Claudia also meant acknowledging that transport is public. “Everyone should be able to use it, from young to old, the poor, the slow ones”, she exclaimed. “What is more”, she continued, “*caring* for your right as passenger makes you part of a wider collective” (ibid., 06/03/2016, emphasis added).

A few days later, in April 2016, the smell of burnt plastic and gasoline led people to Santa Teresa’s main street. As soon as the first pictures of a burning bus which had caused the commotion appeared on social media, a few people commented that they had mistaken it for the tramway. Indeed, the local busses use some of the tramway infrastructure. Their routes follow the railway tracks, they stop at the former tram stations, they hit the same lampposts. Today’s white and yellow mini-busses that have replaced the tramway since its suspension are at the center of all kinds of *fofocal* rumors. Drivers forced to overpass speed limits, decaying vehicles, doors that fall off during the ride, stops are left out, passengers left behind, money for maintenance disappears. It is as if the tram-infrastructure would provide a constant background noise. From time to time, single elements make themselves heard through the sound of a crash, the squeaking of worn-out axes, the chorus at a demonstration against fare-rises.

A less implicit reference to the tramway is the so-called “bondebus” which navigates through the neighborhood ever since the suspension of the tramway in 2011. The bondebus is a mixture of tramway [bonde] and bus only in the metaphorical sense of the word. Without any alteration of its typical design, one of the local public mini-busses that have been introduced to Santa Teresa in the 1980s, has been repurposed as bonde-bus through the simple addition of a discreet, printed sign behind its front panel, announcing a fare of only 0.60R\$. It has gained its nickname from the residents because it maintains the former tramway ticket price. In chapter three, I have argued that in Santa Teresa, material resistance has been passed on to residents who could not do otherwise than defend the tramway because of their shared sensory memories around (free) riding. The example of the bondebus, it seems, refers to another kind of “passing on” the promise.

In Santa Teresa, residents have passed on – consider that the Latin *promittere* means “to send or put forth, let go forward” – the promises of affordable and equal access to the city from the tramway to the busses. In a similar way of unpacking promises’ etymology, Sara Ahmed (2010, 44) has reminded us that this is a kind of transmissions which cannot be fully controlled, where the question what passes through the passing along of promises always “remains an open and empirical question.” Indeed, as the materials analyzed in this and the previous chapter pointed to, in Santa Teresa, the passing on of tramway-promises to stop signs, schedules, and busses has generated both hopeful anticipations and affective closeness as much as threatening matters and modes of distancing – sometimes shifting swiftly from one to another. In this line, Ahmed’s comparing the passing of promises to the game of Chinese whispers, where contents mutate all the time as they pass from one mouth to another, is quite fitting.

In the following section, I will take this as starting point for arguing that that what passes between residents and infrastructural materials in the process of tramway reinstallation “might be affective [precisely] *because* it deviates and even perverts what is ‘sent out’” (ibid.).

Hole counting: How to care for looseness

As I have shown from the erratic movements of asphalt, from its swamping a “majority district” (Simone 2013), and from the contested ownership of public transport infrastructures in a central city place inhabited by mostly (lower) middle class and favela inhabitants, residents’ evocation of repulsion and threat, and their ways of *desbonding*, of disconnecting and passing on tramway-

promises, point to a particular way of managing and maintaining “loose bonds”. Writing about the loosening of relations, Urs Stäheli has called for new vocabularies that allow for an understanding of

such a loosening not simply as a deficiency, as a violation or a pathology, but as a practice in itself – a practice with a positivity of its own, including a *care for looseness*. (Stäheli 2018, 20, emphasis added).

In recent years, *care* has been increasingly conceptualized as a key component of collectivities, in particular regarding the relations of human and techno-material actors (Joks and Law 2017; Martínez and Laviolette 2019; Martin, Myers, and Viseu 2015; Puig de la Bellacasa 2015, 2017; Tironi and Rodríguez-Giralt 2017; Mol, Moser, and Pols 2010, Ureta 2016). Problematizing its traditional view as predominantly intimate and feminine practice, these authors have pointed to the different ways in which care can *bind together* individuals and things into new forms of collectivity – especially in situations where official institutions or state authorities fail. They show how to engage in care through practices of maintaining, repairing, and fixing generates affective formations like endurance, material sensitivity and empathy (Hobart and Kneese 2020; Martínez and Laviolette 2019). Or, as Sebastián Ureta (2016, 4) has concluded from his study of everyday practices around industrial waste produced by a Chilean copper mine, “[t]o care is to enact a particular version of the world, an ecumene populated by all kinds of entities, from the ones we feel most attached to the ones we utterly despise”.

If the care for looseness implies finding ways of how to increase it, including a dealing with the problem of how to manage and maintain it (Stäheli 2018), Santa Teresa offers a very particular set of relations between residents and things that are “cared for”.

Even prior to its ultimate breakdown in 2011, the tramway has generated multiple failures and afforded all kinds of material sensitivities by the people involved with it. During my ride-alongs with Mateus, a tramway-driver in his late forties who lives in one of Santa Teresa’s uphill favelas, I learned about how the drivers had increasingly managed the maintenance of the rolling stock by themselves since the late 1980s. Repeating a story that had been told to me by other drivers and

residents,¹⁵⁰ Mateus argued that the city authorities had lost their interest in the historic tramline after their project to replacing it with “modern” means of transport had failed.

They [government officials] have abandoned it [the tramway], even worse, they have watched it falling apart and not contributed a single cent to replacing its ruined pieces, they have left it for us to take care of it (Mateus 14/11/2015).

When Mateus invited me to join him for a visit to the reopened former tramway-garage, where eight of the previous tramway-drivers gathered for a short meeting just after they had recently been reemployed in 2015, I learned more about how they had “become two jobs in one, driver and mechanic” (03/09/2015), as Mateus would put it. Walking me inside the garage, he explained how this place had served as “unofficial” maintenance site, and how all kinds of people, petty thieves and dealers of vehicle parts, collectors of metal waste from the downtown districts, skilled mechanics recruited from the local residents, self-proclaimed expert “engineers” and others had paid the site regular visits.

“This was a busy workshop” (03/09/2015), Carlos agreed, shifting his faded blue cap back his withering forehead. He had worked with the bonde “all his life”, the 56-year old man affirmed, and only through “try and error” had he learned, slowly, how to look after brakes, how to adjust hydraulics, how to tinker with all kinds of *tampões e peças* [plugs and pieces] that were specific to the tramway. “This is an over 120 year old companion [companheiro], you must know”, he reminded me, while tenderly touching the distorted chassis of an ancient model with the tip of his boot. And this meant that most of the “plugs and pieces” that needed replacement were not being produced anymore, or at least not to be found anywhere in Rio for sure, he went on.

So this was where all the waste-diggers and ‘street’ experts came into play. Mateus winked at Oscar: “They brought us all kinds of stuff, you remember?”. And from odd-sized drills, twisted sleeves, and rolled steel the drivers would make almost everything needed, or else call upon their scouts and spread the word all over the city in search for the fitting piece. “This is also how they [the city officials] tried to get attention away from them after the accident”, Mateus added, “they would try to blame it on poor Nelson for the accident, because they knew he alone had checked the brakes that then caused the tragedy” (03/09/2015). At this point, Oscar jumped in to make sure I got the

¹⁵⁰ For more details on how the bonde of Santa Teresa has “survived” city officials’ attempts to abandon the infrastructure or to replace it with busses, cf. chapter three on material resistance.

whole picture. Because it was here where the authorities had made their biggest mistake, he found, “because they underestimated that by the time *we had all become repairers* [tornar-se reparadores]” (03/09/2015). Since so many people in the neighborhood had been involved in the constant mending and maintaining of the tram system already in the years prior to the accident, he argued, everybody knew that despite all efforts, the slow decay of the vehicles could not be completely prevented, and that the brake failure of 2011 was not “the fault” of driver Nelson, but that such a thing was “bound to happen at some point” (ibid.).

A scene that both drivers recalled, and which I later found documented in the private archive of the neighborhood association (fig. 30), was when residents gathered around the bonde at the Guimarães square (driver Nelson pictured inside the tram) already in 2007, dressed up as doctors and nurses and holding up a stethoscope to take “the pulse of the weakened bonde”, as Mateus put it (ibid. 03/09/2015). “Everybody a repairer” also meant that residents had “diagnosed” the brake failure of the bonde already three years prior to the fatal accident, Oscar added. Inside the garage, they showed me one of the decommissioned historical tramway vehicles, which “back in 2007” had gained an “SOS” painted on the front by some of the drivers who participated in the actions to raise public awareness for the general decay of the vehicles (ibid.).

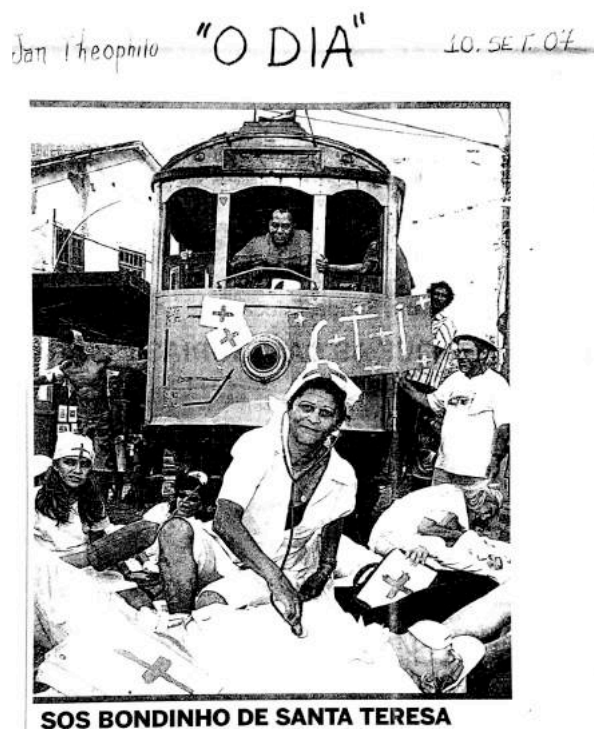


Figure 30: Sending out a “tramway SOS”

After the accident, all these self-made repairers turned jobless then, I asked? This was later, when Mateus was walking me back to Guimarães square. Suddenly he stopped in front of a plant that was growing out from amidst the cobblestones (fig. 31). Nothing I had particularly noted on our way to the garage before. At least it seemed familiar to see powerful Rio plant life conquering back streets and walls from the edges of the hilltop neighborhood, sprouting out from every tiny crack, *micos* (small monkeys) and flower tendrils alike climbing in from the upper parts of the neighborhood, where one of the worlds largest urban forests – the Tijuca National Park, begins.

However, this particular plant that Mateus was pointing me to was different. It had no roots. It must have been put into this hole by somebody, one of the cobblestones had been used to sustain it. Now I remembered that I had first noted the hole a week ago, after one of the heavy afternoon rainfalls that made water stream down the steep Santa Teresa streets like rivers. Exactly, Mateus confirmed, this one had been washed out from the street by rainwater, joining the many other holes that had transformed the streets of the neighborhood into a constant slalom obstacle course for car and bus drivers.



Figure 31: Planting without roots

“Nobody got unemployed, see”, Mateus pointed to the plant. So after the tram-return, Santa Teresa repairers had dedicated themselves to the extended parts of infrastructure, to potholes and their signaling, at least. I discovered more of these strangely filled potholes some weeks later, during a lengthy evening go-along I had marked with Joana, the founder of the “mothers of Santa Teresa” introduced above. Along our walk up and down the neighborhood streets, we encountered a whole series of differently sized holes, their filings ranging from mundane objects like empty boxes or

wooden sticks with alert-signs attached to it, to more creative interventions like a free-box filled with books, or a statue with bonde-face holding a placard that stated she was “not asking for money, just caring [cuidar] for the streets of Santa Teresa” (fig. 32, left hand picture). According to Joana, these holes had not always been there. Different to what I suggested (remembering my conversation with Mateus), she did not agree that rainfalls alone had caused the street to open up.

Instead, the young mother came back to an already familiar substance: “Asphalt”, she said (Joana 11/10/2015). Asphalt, again in the metaphorical sense. In 2011 or 2012, some time after the reconstruction works had begun, she remembered to have noted the first potholes around the neighborhood. The asphaltization, that is, the state-led interventions into the streets of Santa Teresa was the true reason for the pavement to corrode and crack open, according to Joana. When we walked down a streets that had alone three holes in short distance from each other, Joana turned to me triumphantly. She took my arm and took me to the side of the road, then kneeled down.

Looking up the street from this perspective, we could see how street pavement and sidewalk curb had reached almost the same level. “This is because they simply spilled asphalt on top of everything”, Joana explained, meaning that construction workers “had been *careless* [descuidar] enough not to keep the necessary levels” (ibid., emphasis added). Now, everything got inundated by the frequent heavy rainfalls common to Rio weather. Residents knew how important keeping the levels between sidewalk and street was for water to flow down the sides of the road, in order to prevent it from washing out and corroding pavement. They had become repairers again.



Figure 32: Pothole fillings

Coming back to the conceptualizations introduced above, then, care is enacted through these accounts as a set of ordinary, often intuitive and experimental practices which have generated particular formations of endurance, empathy, and material sensitivity between drivers, residents, and infrastructural matter. They range from concrete activities of maintenance and repair, as in Mateus' accounts of tramway and drivers, but also in practices that are less obviously oriented towards "fixing" – as in the pothole-dealings with breakdown and failure that I have discovered with Joana.

Annemarie Mol, from her study of hospitals' multiple human-technological dealings with patient health, has made an argument similar to the try-and-error account of driver Carlos above ("Try again, try something a bit different", Mol, Moser, and Pols 2010, 20), thus underlining that practices of care are never linear, but essentially open-ended and recursive. Such a constant back-and-forth, with Mol can be described as *tinkering*, defined as "a set of constantly unfolding and only partially routinised practices for holding together that which does not necessarily hold together" (ibid., 69).

Translated to the case of Santa Teresa, then, care as tinkering process, first, points to the humble, and sometimes intentionally "discreet" maintenance and repair activities needed to keep an always-tenuous and fragile infrastructural system going. Second, as Sebastián Ureta (2016, 5) has remarked from his study of everyday dealings with waste around a Chilean copper mine, an understanding of care as *affective* quality of relations points to the necessity of "taking into account all the entities involved [in the infrastructure], even the ones [that are] disliked." In other words, the relations between residents and infrastructural matter that have evolved around mundane practices of tinkering in Santa Teresa spur a set of ethical and political obligations that cannot be entirely controlled, and which include tram-part-scouting as much as asphalt-fillings.

Notably, such formations of collectivity essentially also emerge from situations where state authorities have "abandoned" (Mateus) or else "not cared" (Joana) for the material elements sustaining local transport infrastructures. Despite the different affectivity of "promissory" tramway and "repulsive" asphalt, both have been cared for by the human inhabitants of the neighborhood. With Maria Puig de la Bellacasa (2017), it could well be argued that by becoming affectively entangled with such infrastructural "matters of care" (ibid.), residents of Santa Teresa have developed an ethico-political commitment towards them:

[W]hen we care, and commit to care, we are in *obligation* towards something that might have no power to enforce this obligation upon us. In other words, actions of care are performed even if we are not forced to it by a moral order or policy. We have argued that they belong to *other kind of material and affective constraints*. (Latimer and Puig de la Bellacasa 2013, 170, emphasis added)

Some of the political commitments already implicit in Joana's and Mateus' accounts resurfaced during the meetings of the neighborhood association I have attended during this period. "Potholes" made it to the agenda of the AMAST¹⁵¹ for six of nine meetings held between September 2015 and May 2016. At one of the occasions, Claudia, the long-term member of the association who had also co-organized with Joana the protest against the local bus company, was the first to speak:

A shame [uma tristeza – lit. 'a sadness'] what is happening with the cobblestone pavements of Santa Teresa. The Santa Cristina and Cândido Mendes streets are full of holes [buracos], some being very large, opening because of the stones that come out their place [saem do lugar]. Yesterday the Santa Cristina was locked because of this, I don't know what's happening today. All along the Almirante Alexandrino [the neighborhood's main street], the same picture, stones coming out and holes opening, this is the same stretch where previously the municipality mended [remendou] the cobblestone pavement with asphalt. (Claudia, 19/01/2016)

In a way sharing Joana's impression of *des-cuido* [carelessness], Claudia also saw a relation between the municipality's way of treating infrastructural matter and the emergence of potholes. This time however, and differently from how I had known her before – always first row amongst those who complained against the associations' indolence – her statement did not prepare a passionate call for immediate protest. Rather, Claudia informed her fellow activists that the mothers of Santa Teresa had started preparing "campaign for the holes" [campanha pelos buraco] already since the rainfalls of last summer [hence, since December 2014]. Now, they were ready to launch the initiative via a mobile messenger service, asking residents to take photographs "including the address of the hole" and "an amateur diagnostics [diagnóstico amador]" (ibid.) of its possible cause.

¹⁵¹ The Association of Residents and Friends of Santa Teresa (AMAST), is introduced in more detail in chapter one.

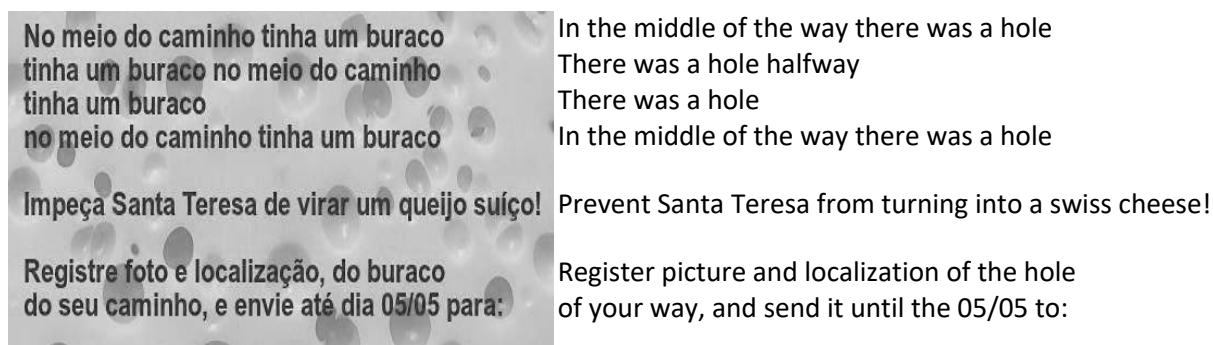


Figure 33: “Prevent Santa Teresa from turning into a swiss cheese”

The speculations about possible hole-causes, Claudia continued, would then be collected by the mothers-group and assembled into “a kind of dossier”. Through “counting holes” systematically, she added, residents would become more “attuned [atenados]” to the “true causes” of their emergence, “like season, rains, asphalt, what’s below the street, pipe leakages, muddy grounds, and so on” (ibid.). Apparently, then, the kind of hole-counting activities that Claudia envisioned were not intended to prepare for a direct interaction with state officials? I had asked her this question over a beer we took together with Joana after the meeting in January 2016. “That’s right”, Claudia nodded, “we’ll just count them. We know about the state responsibilities. But we don’t bother too much with that right now”.

What I want to argue as way of conclusion to this chapter is that the residents’ way of counting holes points to a particular mode of *taking care for looseness*, that is, a way of preventing all kinds of relations – from infrastructural matters to state authorities – from growing too tight. As Francisco Martínez (2019, 122) has argued, from his virtuous exploration of different types of holes in the streets of postsoviet Tbilisi, Georgia:

Often, material failures become a sign of the inability of the state to act or invest in maintenance, but they also convey ‘voids’ in the relationship between state and society, standing as a form of communication or separation, connecting people to the state in qualitative ways.

Other than understanding potholes as part of a state-society relation where residents would automatically expect city authorities to “fix” material failure, Martínez artfully works out how such instances of urban void and material failure do also point to an essential disconnect between the actors involved. Such kind of “constitutive looseness” (2018), as Stäheli would call it, does not lead residents to completely withdraw from activity however. As I could witness in the weeks to follow,

the “Mothers of Santa Teresa”-initiative resulted in a smartphone memory overload of pictures and pothole stories.

In a similar way than Stäheli, the anthropologists Matei Candea, Joanna Cook, Catherine Trundle and Thomas Yarrow (2015, 1) have argued for the need to rethink “the productive potential of disconnection, distance and detachment”. From the case studies assembled in their edited volume, which range from explorations of the becoming-expert of engineers through “virtuous detachment” (P. Harvey and Knox 2015) to modes of “aloofness” (Strathern 2015) in British colonial empire, the editors ask for a more nuanced understanding of how forms of detachment and engagement enable each other: “A focus on detachment forces us to ask ethnographic questions *about the temporality of relations*, their intensity, what makes them stick” (ibid., 4).

In Santa Teresa, the *active passivity* (Kühn, forthcoming) of hole counting has evolved into a particular temporality of relations – one that assembles residents’ speculations on soil matters (“muddy grounds”), techno-material agencies (“leaky pipes”, “asphaltization”), and seasonal rhythms (summer rainfalls). Drawing from Puig de la Bellacasa’s (2015, 16) notion of “care time”, I propose an understanding of such practices of not exactly fixing, but rather standing by and with potholes as “neither a slowed mode of, nor outside, the timescales of technoscientific futurity” (ibid., 2). Ultimately, counting potholes can be understood as a particular way of putting disrepair in action (Chu 2014), tweaking the affective qualities of relation between residents and things in Santa Teresa, and establishing particular modes of connection and disconnection. Holes, in this sense, can act as both an opening and a closure, not simply a rupture but rather a sustained suspension, a kind of standby-moment in the longer temporal frames of progressive modernities (cf. Martínez 2019, Busch and Farías 2019).

From what I have described in as Santa Teresa’s peculiar “island geography” (chpt. one) – manifest i.e. in artist and literary representations of its topographical, architectonical, and aesthetic particularities, as well as residents’ accounts of the neighborhood’s different pace of life, its unruly materialities and plant-lives, and its history of political resistance – the urge to maintain the looseness, that is, the distance, the indifference, or the un-commitment of some of these elements is at least plausible. The spread of asphalt, in this sense, becomes a sign that links have grown too tight, that the city government interferes too much into the neighborhood – that residents might have clutched on too stiffly to the harmful promises of a modernized tramway (as in Berlant’s “cruel optimism”), or that they have else become “trapped” in the suspended timespace of progress

(as in Hetherington's "future perfect"). Asphalt has to be kept "in check" in Santa Teresa because it threatens the fragile balance that makes it a majority district, maintained by the many tacit agreements and outspoken contracts between its different inhabitants.

While they attentively witness the tramway reinstallation process of Santa Teresa, residents enact repulsion against asphalt, organize des-bonde, count potholes, and hold a position of "maybe so" against the volatile classifications of the neighborhood as either dangerous favela or thriving bohème district. Be it modes of strategic detachment, or a less deliberate care for looseness, all these practices serve to keep "the city", with all its attempts to control, formalize, and commodify urban spaces and populations at bay.

After Redemption

Between June 2013 and June 2020, Brazil's president has changed to "Messiahs". The 2013 mass protests that have motivated my research on urban collectivity gave way, first, to a movement for the impeachment of Dilma Rousseff (2016), and then, the election of Jair "M." Bolsonaro (2018). Ever since appearing as the fresh front figure of the country's far right, Bolsonaro has lived up to his (middle-)name. In January 2019, the new president used his inaugural address to reaffirm his "mission" to restore the country by freeing it from "ideological chains", and has since presented various government initiatives that seek to revert the progressive politics associated with the former government of the Worker's Party (PT) – from university quota for black students over the constitutional right to the city to environmental protection mechanisms (Bolsonaro 2019).

In a certain way, Brazil's president acts against everything that theorists like Hannah Arendt (1972, 92) have identified as necessary condition for all political virtues, that is, the capacity to make promises about the future. Promises' potentiality, as I have argued in this work, lies in their capacity to evoke collective orientations to a future which might however never arrive – a dynamic by which they also open up spaces of maneuver in the here-and-now. In contrast, it seems to be the dubious virtue of the far right – not only in Brazil (Berlet 2008; Engström 2014; Sprinzak 1998) – to call out a novel, messianic temporality of *redemption*, which, unlike promises, closes down futures "as waiting for" (Poleshchuk 2014, 60).

As of writing the conclusion to my study, to be submitted in June 2020, the present unfolds most clearly over a combination of endemic suffering and the failed promises of progress. In Brazil, hopes for tearing down barriers to the city, as symbolized by the metro turnstiles jumped over by protesters in 2013, have been disappointed. Like in many cities of the Global South, residents in Rio de Janeiro rely heavily on public transport as means for generating incomes, for engaging new opportunities and new places of everyday operation. Mass movements against fare increases, most recently resurfacing in Chile (2019), have contested the ways in which deteriorating, privatized urban services increase precarity particularly for the poor and working-class residents that make the bulk of populations in these cities.

Whereas Chile might still come out of the contemporary conjuncture with a new, more inclusive constitution (Garcés 2019), post-Mega Event Brazil has been shaken by a deep crisis of progressive politics, as expressed very clearly in infrastructural failure: The “rationalization” of Rio’s bus fleet as part of the Olympic Bid led to the shutdown of about thirty lines in the eastern periphery, thus cutting off inhabitants of the vast favela periphery from their workplaces in the richer southern districts and further aggravating socio-spatial inequalities and segregation (Rodrigues and Bastos 2016), while the shiny new Light Rail Vehicle that has been inaugurated as harbinger of sustainable urban revitalization to the degraded inner-city districts is on the verge of being suspended again as the city government has not paid off its debts with the international consortium that operates it (Galdo 2019). Progress, deeply entrenched with the promise of infrastructure, has once again shown its dark underside (Anand, Appel, and Gupta 2018; Hetherington 2016).

Writing about the dark side of progress, Reinhart Koselleck (2004, 60) has showed how more than a mere ideology of openness towards the future, it has come to form part of the “everyday experience” of populations that needs to be fed continuously by a number of sources, including technological development. But what happens when progress fails us? In urban Brazil, the broken promises of this kind of “technological fix”¹⁵² – the fact that reforms and innovation in, for instance, transport infrastructures have not solved the problems of socio-spatial inequality and segregation – spurred the rise of new messiahs. These are political leaders who instill a new kind of standby mode for territories and populations that, *after progress*,¹⁵³ are now doomed to wait for Bolsonaro and his likes to save them.

Offering a different perspective on the making of urban futures, the present study has shown how in cities like Rio de Janeiro, new collectivities emerge that do neither buy into the messianic times announced by the new government, nor let themselves be swept away by the transitory tense of progress and development that guided its predecessors. “There is no future if we don’t share it, there are no such things as a messiah with a weapon in his hands” (Lucena 2019), sings the city’s champion samba school Mangueira’s in their 2020 carnival competition song. As direct response

¹⁵² In the previous chapters (particularly chpt. one and four), I have introduced the notion of “technological fix” as pointing to how Brazil’s elite has promoted new technologies – from tramways during the early republic (1889-1930), to cars in the era of socialist president Lula da Silva (2003-2011) – as means for overcoming the country’s socio-spatial inequalities (Sevcenko 2006a; Wolfe 2010).

¹⁵³ This is a reference to a note by Martin Savransky (2020), quoted in more detail further below, which has inspired the argument I make in this paragraph (including the reference to Koselleck).

to the bellicose futures foretold by the new local and national political leaders, the song calls for Rio's favela population to "watch out", because what will save them is no form of passive waiting for salvation. The bottom line of this is that for a majority of urban populations for which crisis and disaster are the relentlessly pervasive frameworks of their everyday life, "redemption is not recognized as immanent or expected as forthcoming" (Wool and Livingston 2017, 2).

Here, I have taken a case of infrastructural failure, tuned by the endlessly alternating rhythms of breakdown, re-installation, and suspension of the oldest electrified tramway of South America (the *bonde* of Santa Teresa), in order to collect alternative stories of urban transformation and endurance. This kind of change in perspective is inspired by a note from Martin Savransky (2020), who has argued that "After Progress", one needs to listen to "other stories [...] which offer neither salvation, redemption, or reconciliation", but which might help envisage ordinary acts of making the "shared futures" in the here-and-now. As I have argued in the introduction, infrastructural failure, as much as the broken promises of progressive politics *after redemption* call for a renewed attention to the vicissitude of such new formations of urban collectivities.

The collectivities I have been writing about maintain the ability to swiftly shift operational gears, from grim resistance to externally induced change, over seeming surrender, to ostensible indifference to whatever "the city" holds out as prospects for better lives. They might attach all their hopes to the infrastructural promises of socio-economic progress, then in the next moment stubbornly protest against all kinds of self-proclaimed "saviors", then again turn indifferent to both. They rely upon "minor" things (*the bonde*) and practices (*bonding*) that seem of little use, but which enable a dynamic of constant tinkering and collective, human-nonhuman persistence against urban trajectories of the transitory. When I last came back to Brazil in 2019, I took a picture of an imprint on a São Paulo high-rise I find expresses just this kind of persistence: "O bonde não para – The bonde is unstoppable".



Figure 34: “The bonde won't stop”

Bonde, I have learned, is not only the tramway of Santa Teresa, Rio de Janeiro. Bonde is also slang for a “train of people” [bonde de pessoas], that is, a gang of often young, often favela inhabitants of the city, of people that *stick together* come what may. It is in this sense that *bonding* also points to new formations of collectivity, similar to how Teresa Caldeira (2012) has written about São Paulo “imprints”, that is, graffiti,¹⁵⁴ in the early 2000s. Like I have argued in the introduction, these new collectives’ modes of un/relating differ from the claims for universal citizenship and articulated narratives of inclusion that urban social movements have traditionally been associated with in Brazil and beyond: “Their practices expose inequality but do not imagine that they will diminish it. They claim rights to the city, but most do not ask for inclusion.” (ibid., 416) This points to a process of formation beyond readily ascribable territorial or socio-economic identities such as “favela” or “middle-class district”.

The goal of this thesis was to show how such new formations of urban collectivity emerge, endure, disappear, and re-assemble anew. Following an interest as expressed by Caldeira and others (Bhan 2019; Robinson 2016; Schindler 2017; Simone 2020) who study collective citylife *in and as way of learning from* the Global South, I have examined transportation protests in a popular inner-city district of Rio de Janeiro as source for generative theorizing. Because the local conflict resembles recent protest movements around the world in its spontaneous emergence, heterogeneous

¹⁵⁴ I have reflected on Caldeira’s terms “imprinting and moving around” (ibid.) more detailed in chapter three.

composition and ambiguous demands, I have argued, it confronts us with the necessity to develop new concepts beyond the established frameworks of representational theories. To add to cultural urban studies and human geography's more recent attempts to account for the interlocking infrastructures and affects that organize such latent experiences of urban togetherness (Anderson 2014; Amin and Thrift 2017; Färber 2019; Frichot, Gabrielsson, and Metzger 2016; Katz 2017), I have explored how urban collectivity emerges from the relations of residents and techno-material elements.

Between 2014 and 2019, I have carried out ethnographic fieldwork to canvass the attitudes of residents about the breakdown and subsequent re-installation of the last means of public transport of Rio – the bonde of inner-city district Santa Teresa. Throughout this period of time, I have exposed myself to the tramway in various ways, in order to follow the unsteady course of its comeback along different locations, people, things, and stories. By combining techniques of participant observation and ethnographic interviews with the toolkits of assemblage research, affective and mobile methods, I have approached my theoretical interest in unconscious formations and the embodied and micropolitical modes of un/relating between residents and urban matters.

This kind of “messy” methods mix has prompted me to seriously engage with the bonde, not as merely a symbol of contestation, but understood as a set of infrastructural elements that have assembled protesters in the first place. The result of this thesis, to put it differently, is a turn-around of the classical arguments on (public transport as) public space and collective formations: Some urban collectivities do not emerge around public matters *because* they exist, but precisely *in order to exist*. This is not to ascribe these urban collectivities intentionality or directionality – as in: they choose urban matters to come into existence – but rather to point to the fact that their existence (both their emergence and their persistence) is contingent on these matters, or rather, on their relations to these matters. The turn-around of argumentation is that some urban collectivities emerge not *because* of a previously existing shared condition that they have realized in relation to specific public matters (a fare-increase, a tramway accident), but that there is a quality to this relation that allows for novel actor constellations and uncommon alliances to come into existence and to continue existing. Bonding, then, allows for an analysis of collective formation that is quite different to political economy frameworks and related theories of social movements, in that it does not depart from evidences of socio-spatial inequality and associated political claims as original reason for gathering in public, but from residents' attachments to specific instances of urban matter.

In part one of this work, I have identified two such *formations of collectivity*.

Through the *first* formation, I propose an answer to some of the questions left by new urban movements that have spread throughout the past decade from Cities of the South over the world. How to make sense of the emergence of uncommon alliances between people of conflictive socio-economic backgrounds and political convictions; how to account for their becoming-operable and their persistence despite contradictory claims? *Re-assembling*, as explained in chapter one, designates a formation through which a specific instance of urban matter – the tramway – has brought together every year anew a heterogeneous set of protesters, forging temporary alliances between bourgeois and working-class residents, without requiring repetition (as in rituals) nor relying on shared identity-markers of territory, ideology, or social status.

The becoming-operable of such collectivities, then, pointed me to a combination of two concepts that have become centerpiece of my analysis: affect and material agency. Through following residents' yearly "march along the rails" in inner-city Rio de Janeiro, I have demonstrated that the material debris left by the suspended tramway evoked shared intensities and mobilized collective feelings that led to the formation of the literal "train of people" [bonde de pessoas] described above. Similar to what I have argued above, *in order to exist* this specific formation of collectivity relied on residents' attachments to the rubbles and ruins of the derelict infrastructure. The literal "piling up" of pipes, tracks, and cables during re-installation has been decisive for the specific modalities of institutional actors' presence and the negotiation of agency between residents and other, more powerful actors.

This way, residents' contradictory claims of absence and presence that have emerged over the years can be seen in new light. My finding is that in order to re-assemble, to persist over almost a decade, the local protest collective needed both, the ways in which the tramway could be "felt into being", or "made present" during the period of suspension, *and* to continue enacting its absence even after it had returned to the streets of the neighborhood.

The *second* formation I have identified contributes to the advancement of a temporal perspective on the emergence of urban collectivity: In which ways do past relationships to specific instances of infrastructural matter resurface in urban imaginaries and citylife today? In order to answer this question, chapter two has stayed with the notion of "assembling" – as formation that relies heavily on material instances of the tramway infrastructure – but adding the conceptual layer of *promises*.

Similar to what I have argued above about the promise of infrastructure, this chapter has presented the Rio case as an example of how tramways in particular have become closely entangled with urban promises of modernity and progress.

Travelling back in time to the introduction of the city's first electrified bondes at the turn of the twentieth century, I have demonstrated how these literally transported a promise of "technological fix". Drawing from examples of what has come to be known as one of the largest and most violent urban renewal projects in the Rio's history, I have outlined how local authorities and private companies of the time presented the installation of new tramlines as solution to the detrimental living conditions in the disease-ridden and overpopulated city-center. From my analysis of tickets, postcards, plans of new neighborhoods, tramway advertisements and passenger statistics I have shown that these functioned as "promissory notes", that is, as public displays of shared desiderata around the circulatory and economically competitive, European-style city. To provide evidence for the persistence of associated urban imaginaries, I have referred not only to the re-introduction of a modern tramway-type of vehicle as flagship of Rio's most recent inner-city renewal. Also for the case of Santa Teresa, I have detailed on how the bonde has been projected as "integration device" for the local fragmented social topography, and how its comeback has been imbued with promises that the neighborhood would become fashionable again.

The analytical value take from this is a further refinement of the results of chapter one concerning the persistent re-assembling of particular collectives around the tramway during the past decade. From my analysis of Rio's "tramway century", I have shown how residents, planners and politicians have not simply become attached to "the bonde" as bounded object, but also to a set of desires for economic development and socio-spatial integration that they hoped this new type of machine would allow for them to achieve.

Following up on these findings about the historic dimensions of material and immaterial formations, I have linked my analysis of tramway-related urban renewal in twentieth-century Rio de Janeiro, to the emergence of a Rio-specific imaginary. Here, I have shown how in the context of tramway-related street enlargement and expropriation politics, the "Divided City" has emerged as imaginary that is linked to the re-organization of spaces and populations into asphalted-cum-civilized areas and "salvage", hilltop settlements until today. However, from my analysis of the ways in which the early "citizens" of the republic carried out conflicts with Rio's local government, from complaint letters about speed limits and accidents, over spontaneous fare-dodging, to mass

uprisings that left behind burnt and overthrown tram carriages, I have also demonstrated how the swift transitions between desired object and “threat” forged affective bonds between residents and tramways, designating the formation of collectivities of both passengers, and protesters.

The analytical take-away of this chapter is symbolized by my replacement of “promise” with “premise”, to point to how some of the urban imaginaries, bodily movements, sensory perceptions, desires and fears that un/relate residents and *bonde* today have already emerged at other times in Rio’s history. This way, I also suggest the term premise to confront the out-of-nothingness that promises’ futurity might suggest. *Premissory assemblages* describes a formation that evolves around the “cultural legacy” of a particular type of transition technology – I have presented the case of tramways as particularly revealing for *urban* settings – and that can be analyzed concerning its living legacy not only in structural, socio-spatial inequalities (hilltop/asphalt, favela/rest of the city), but rather in those *everyday cultures* that both reproduce *and* contradict these structures. From my travelling back in Rio’s tramway history, I have prepared for an analysis of how the cultural legacy of such technology has become *distributed* amongst multiple other material and immaterial elements and how this has led to the (ambivalent) emergence of both “conservative” collectivities claiming the preservation of specific elements loosely connected to the *bonde* of Santa Teresa, *and* collectivities of protesters that oppose the (transport) politics associated with “asphalt” that the *bonde* might bring.

In summary, the result of part one is that, first, the process of “re-assembling” points to the *open-endedness* of urban collectivity, while, second, the formation of “premissory assemblages” points to its *duration*.

This only seemingly contradiction is fleshed out in the part two on *modes of un/relating*. Here, I have examined the *bonding* between residents and urban matter in order to reconcile the paradoxical relationship between the reliable and the ephemeral, of tight attachments and noncommittal relations which I believe helps approach the question what holds the city together. More precisely, the chapters in this part work out three particular qualities of relations between residents and *bonde* that have allowed them to uphold the fragile balances of a majority district: Endurance, elasticity, and looseness.

First, I have outlined how a single instance of urban matter has assembled collectivities that claim a profoundly different version of “public transport as public space” than what is mapped out by

the city authorities. In chapter three I have demonstrated that, against an accentuated background of excluding mobility politics in Rio's era of mega-events, the tramway footboard has emerged as a political matter at the heart of collective claims for affordable transport and alternative ways of organizing access to the city. I have introduced the notion of *material resistance* here to point to how the micropolitical quality of relations between residents and footboard in Santa Teresa has brought about a political formation of collectivity. The term "resistance" here does not designate a movement against state authority. Rather, it points to how human-material relations have become more *enduring* and persistent.

Further fleshing out this terminology in the course of chapter three, I have shown that the affective heritage of the footboard, as expressed in embodied memories of hitchhiking and through all kinds of "imprints" on the neighborhood walls, has stabilized a protest collective around impulsive movements, outbursts of feeling, and other habits of conviviality related to the tramway's usage as "mobile meeting place". By this, I have also contributed to the refinement of a terminology that accounts for how the *revolutionary* potential of socio-material relations depends on often subtle movements of human bodies that continue to resonate with already-absent devices.

Such kinds of transition from infrastructural matter affording a certain individual praxis (free-riding) towards this relation bringing about a political formation of collectivity, I have demonstrated, are not straightforward. The affective attachment to the footboard not only connected people and things in the neighborhood, but it also aligned them against residents of other parts of the city and "outsiders" in general. Providing further clues for what I have described as unconscious formations and fleeting alignments, I have demonstrated that the affective quality of residents' relation to the tramway has turned "cruel" as soon as holding on to it has become an end in itself. In other words, I have shown how the same molecular movements that have enabled protests against price politics and exclusionary mechanisms in the past became associated with a rather *conservative* claim for its preservation as means of transport for a limited group of actors.

The result of this chapter, then, is that tight attachments to urban matter bear the potential to both subvert, but also to stabilize identity categories, "othering" practices, or the capitalist logic governing public transport in contemporary Brazilian cities. This way, I have demonstrated how *swiftly* the content of an attachment can recede to the background once a promise has materialized.

Further exploring the *elasticity* of relations between humans and materiality, I have demonstrated that this *second* quality enabled formations of collectivity that engage with their own, “minor” acts of future-making. From my analysis in chapter two, I have shown how potentiality (futures folded into presents) resides not only in the original, outspoken promise, but how it lives on in *promissory things*, regardless of the promises’ fulfillment or failure. In Santa Teresa, the collapsing of virtual connections into infrastructural materialization enabled a movement where the tramway promise was passed on to the actual infrastructural elements that appeared on the main street in the course of tramway-reinstallation. In other words, the footboard has been but one element of the tramway infrastructure that has brought about urban collectivities. Drawing from examples of residents’ interaction with stop signs and schedules, I have demonstrated that these have superseded human speech acts and generated their own temporal and spatio-affective relations between residents and instances of urban matter. Acts of future-making, here, have unfolded in three dynamics: Anticipation, speculation, and deferral.

Anticipation: I have shown how by replacing the originally outspoken promise of tramway comeback, stop signs and scheduled have anticipated the future course of the reinstallation works. The downside of this dynamic, I have pointed out, is that it might trap residents in a passive state of waiting for their infrastructural present to finally turn into the past of a better future. “Bonde time”, however, characterized by an unsteady pace of expansion, delay, suspension, abandonment, decay, destruction and re-building, has contradicted such presuppositions of linear or steady progressive temporalities. By promising residents that the bonde will return, by literally foretelling its journey, stop signs and schedules have also spurred a sense of urgency and need for action, most clearly expressed in the clandestine stories about residents’ moving signposts closer to their parts of the neighborhood.

Speculation: From a series of go-alongs in the neighborhood, I have identified a specific dynamic of speculation has allowed for both, prolonging the promises’ potential, but also for taming it into progressive and probabilistic logics. First, I have demonstrated how by way of exchanging rumors about the placement of stop signs, residents have resuscitated some of the desires, hopes and ideas that have become attached to the tramway from the 19th century onwards; but they have also added new uncertain and obscured evidence about them, thus actively keeping the final course of the reconstruction open. Second, I have shown how real estate advertisements have also been based on speculations about the bonde-comeback, but how this has rather purported urban imaginaries of

renewal and socio-economic development that have been associated with Rio's system of tramways ever since the early twentieth century "Haussmanization" of the city.

Deferral: Through this third dynamic, I have shown how stops signs' and schedules' continuous postponement of the bonde-comeback has allowed for an alternation of loose and tight relations between residents and urban matters that has been decisive for the survival of infrastructural promises. Through "keeping up" dynamics of displacement and rescheduling, residents managed to secure all kinds of chances for opportune turnouts and coincidences of political interests that would open up new spaces of negotiation for them. Here, I have demonstrated how with every new postponement, authorities have been caught up more deeply in the relations forged by promise, a dynamic which in turn allowed for residents to hold them accountable.

Ultimately, I have shown how with the tramway-promise being distributed across new elements of the infrastructure, dynamics of anticipation, speculation and deferral have become more than merely successive temporal orientations and how promissory things have condensed these into a sense of togetherness that bolstered local ways of organizing collective life. Tampering with signposts, weaving stories about their whereabouts, and adjusting bodily rhythms to tramway-schedules translated into a *spatio-affective experience of proximity*, to the positive things that the tram might bring, to other parts of the neighborhood, and the city – but it also enabled residents to keep "promissory things" in play in a context where spaces of maneuver for negotiating the how and when of tramway-return seemed to grow narrower and narrower.

At the same time, however, I have also pointed to how such formations of collectivity have remained fragile, and how bonds between the single entities have been *continually tightened and stretched* again, depending on how residents have been affected differently by promissory things.

Consequently, the *third* quality of relations I have examined more closely has been "looseness". In chapter five, I have shown how infrastructural matter enables specific "cuts" in the never-ending stream of relationality that seems to compose the urban, and by this, generates a movement which sets things loose in order to make formations of collectivity in urban majority districts persist. I have explored the quality of "loose bonds" and similar modes of un-relating through three notions: repulsion, indifference, and care.

Repulsion: If the intensities generated by the tramway's disrupted return have drawn bodies and things closer to each other, they have as well stretched affective bonds and pulled them apart. From

the example of asphalt, I have shown how residents of Santa Teresa have appropriated such infrastructural cuts for a kind of *strategic detachment*, which in turn allowed them to “stay with” the tramway’s promise of togetherness throughout uncertain times. By nurturing collective disgust and by sharing bodily expressions of nausea with the sticky slimy substance, residents have managed to uphold a movement in defense of their spatio-affective perception of the neighborhood. In this line, I have also demonstrated how the stretching of affective bonds through “threatening” things might as well generate (frightening) proximities, thus potentially renewing attachments to urban matters and places.

To point to the historical dimension of why asphalt could be enacted as threat in Santa Teresa, I have returned to the trope of Divided City, couched between its’ civilized, state-controlled parts [asfalto] on the one hand and the muddy hilltop streets of Rio’s favelas [morro] on the other hand. From references to the asphalt/hilltop-dichotomy in present-day culture and protest movements in and beyond the neighborhood, I have elaborated on how favela residents have appropriated these categories in order to expose urban inequality and violence; but also on how bourgeois residents of Santa Teresa have used the terminology to denounce *asphaltization* – a notion that designates a blurry mix of gentrification, touristification and commodification. In other words, enacting repulsion has been a way of keeping asphalt “in check, to re-establish distance between residents and city-authorities in order to regain control over the many “informal” modes of organizing spaces and everyday lives in Santa Teresa.

Indifference: As another way of cutting links that had grown too tight, I have introduced a particular notion of indifference. From my analysis of what has been celebrated as *des-bonde*, or disconnection from the bonde, I have demonstrated how residents have been redirecting attention away from the tramway and towards the local bus company. Drawing from examples of bus-protests that have popped up in the neighborhood after the partial re-inauguration of the tram-network, I have shown that residents have *passed on the promises* of affordable and equal access to the city from the bonde to the busses. Constantly fleeing from attention to indifference, then, becomes a matter of political agility, where residents have taken care not to reveal too much of their attachments to any of the things promised, and not to become too disappointed by their failures. These more cunning kinds of activism, I have shown, relied primarily on residents’ ability to see through the logic of promissory relations, to recognize the form of their attachment to the tramway (the promise) in order to loosen bonds and to steer clear of an obsession with this object.

Care: The third mode of un/relating I have explored is care, understood here as way of managing and maintaining loose bonds. By referring to practices of pothole-counting and to rather strange instances of pothole -fillings, I have shown how new forms of *caring collectivities* emerge especially in situations where official institutions or infrastructural promises fail. What is more, I have demonstrated how drivers' and residents' ways of "everybody a repairer", how their becoming involved in the constant mending, maintaining and scavenging of tramway parts has generated affective formations of endurance, material sensitivity and empathy that have been essential for Santa Teresa to outlive breakdown and failure and to lay the groundworks for alternative futures. In other words, I have contributed to a further theorizing of care as an affective quality of relation that constitutes visceral, material, and emotional connections to all kinds of other human and nonhuman entities, independent from whether they seem promissory or threatening.

Other than developing repulsion, indifference, and care as notions that point to how people either "become infrastructure" or else expect state authorities to "fix" material failure, I have demonstrated how new forms of collectivity have emerged around the necessity to maintain the constitutive looseness that marks the relations between residents and infrastructural matter in majority districts around the world. In other words, the main take away from this chapter is an answer to the question how particular formations of collectivity that best be described as "urban majorities" (Simone 2013) manage to uphold their fragile balances: Through a simultaneous movement of caring for looseness and by putting disrepair in action, residents of Santa Teresa have established particular modes of un/relating that enacted a sustained suspension, a kind of standby-mode in the longer temporal frames of progressive modernities.

Throughout the five chapters composing this work, I have attempted to convey a perspective on those modes of un/relating between people and people, and people and things, that point to how fluid and ephemeral, yet remarkably tenacious and unruly urban collectivities emerge from rather brittle connections, abrupt transformations, and the indeterminacy of spatiotemporal gaps or moments of suspension between the lost past, the projected future of infrastructural development, and the actual here and now. By this, I have drafted a contribution to the recent/reinvigorated quest in cultural urban studies and human geography for new ways in which ethnographic work "can help *redeem* the promise of infrastructure" (Anand, Appel, and Gupta 2018, 30).

Through carving out the nitty-gritty empirics of neither linear progressive temporalities nor foretold futures; through pointing to modes of delay, suspension, repair, (material) resistance, and

repurposing, I have tried to make more *visible* and *political* the formative role of infrastructures for urban collectivities. The promise of (public transport) infrastructure, I have shown, is neither exclusively in the hands of self-proclaimed saviors, nor does it necessarily trap residents in the suspended timespace of progress. Rather, after the transitory tense of infrastructures' "progressive" promise, and also superseding the messianic temporality of closing down futurity as waiting for, a third way of "minor" future-making has emerged in post-crisis Brazil that calls into question the univocal temporalities of modern politics.

This third way relies on human-material relations and on affective mechanisms of articulation and detachment, attraction and revulsion, love for technology and anger and sadness, on bodies swinging and remaining indifferent. *Bonding*, then also points to how urban collectivities rely heavily on matters and forces that spill over and exceed human agency. Through the ethnographic work carried out for this project, I have approached affective relations and techno-material agency by means of exposure, that is, a methodological position that keeps up, and sometimes accentuates the researcher's "fear of things".

The limits of research on more-than-human forces and agents have been most generatively discussed in literatures that develop a critique of "the Anthropocene" as way of sense-making for the present. When Donna Haraway (1992) writes about "The Promises of Monsters", she writes of entities – animals, plants, even machines – suggestive of a critical, posthumanist politics. For Haraway, the promissory potential of the monstrous emerges from these entities' capacity to render the queer and the abnormal visible, *through* their interaction with and amongst humans (ibid., 330). That what she terms a "a regenerative politics for inappropriate/d others" reveals her particular understanding of the monstrous as entity capable of forging deconstructive-but-powerful connections (ibid., 300).

In Santa Teresa, one such Harawayan monster I have encountered is called "the Frankenstein", introduced by the city government in 2009 as a part of a vision for the renovation of the historical tramway system (fig. 36). The name Frankenstein had been invented by the residents, because when these new models were finally realized, they did not much look like the shiny vehicle pictured below. As consequence of some money going into the wrong pockets, the new tramway models came out as strange composites of different pieces, grafted together from the "bonde cadavers" of decommissioned rolling stock and "reanimated" by the use of modern technologies (Adriene 10/09/2015).



Figure 35: The promise of a monster

However, what made them “inappropriate others”, to speak with Haraway, was not so much how these new machines looked like, but rather how they felt differently during the ride, how they moved too smoothly, how they glided through the streets. Residents’ main reason for rejecting the Frankensteins was that they missed the squeaking and jolting of the traditional tramway, the balancing from one foot to another during the ride, the tilting of torsos right and left accompanying the inclinations of the trailer, and the constant preparedness of hands to clinch on to anything that would provide stability against its jerky movements. Are these not stubbornly irrational arguments against technological progress; and why not content with finally having a pleasurable ride inside a modern vehicle? Leaving this question somewhat open, my interlocutors in Santa Teresa have however maintained that they had been right in distrusting the Frankensteins. Because soon after they began operating, the new models needed to be withdrawn again. Their chassis and suspension might have been built for smooth movements, but they were not flexible enough for the neighborhoods’ ups and downs.

Stories of material resistance, of affective bonds, and of unconscious formation that I have been telling throughout the previous chapters resurged through these accounts. Through an interplay of more-than-human elements and forces, of tram trailer with topography, with steep streets and narrow curves, and with the sensory memories of riding-along, the last bonde of Rio de Janeiro had ultimately defied its modernized, monstrous version.

The conceptual offers this research has made on formations of re-assembling and premissory assemblages offer contributions to a further understanding of how urban collectivity emerges not “out of nothing” (cf. the analyses of the mass protests against fare rises), but from the relations of

residents and urban matters. As way of *outlook*, I propose a closer examination of the ways in which the “cultural legacy” of tramways and other kinds of transition technologies (Hodson and Marvin 2010) resurges and becomes distributed amongst all kinds of artifacts, everyday practices, and urban imaginaries; and of how such cultural and material traces consolidate new technologies’ allure but how they also transgress a top-down implementation of contemporary urban restructuring projects.

Such research proposal might also help problematize a widespread imaginary in urban theory and praxis that seems to consolidate currently in the context of climate change (Long and Rice 2019), namely that cities would have to start “from scratch” in order to realize a sustainable transition of their infrastructures, and that the “redemptive power” of new technologies lies in the ways in which they will save decaying districts and cities from the broken promises of progress. The inherent contradictions of such imaginary become very apparent in the context of the contemporary “tramway renaissance” (Ferbrache and Knowles 2016; 2017; Olesen 2019), that is, the return of modern tramway types to the streets of cities worldwide – and most recently to cities of the Global South (Baumann 2018; Beier 2019; Strava 2018) – presented as harbingers of urban restructuring and as indispensable assets for winning the urban race for low-carbon futures.

What if (cultural urban) research summoned the monstrous traces of already-discarded materials and imaginaries from the past that resurface in hypermodern technologies? The present study concludes with the suggestion that these monsters might convey something of the everyday formations that endure out of the way of urban politics redemptive enactments, resisting in a way the attempts to stabilize collectivities, but which stand by a difficult present where citylife is unhinged from the pervasive promise of a better tomorrow.

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