UNDERSTANDING THE MULTIPLE ROLES OF PARTICIPATION IN URBAN MOBILITY: AN INVESTIGATION OF SPACES FOR PARTICIPATION IN RIO DE JANEIRO, BRAZIL

ALINE FERNANDES BARATA, DR TIM JONES, PROF SUE BROWNILL

Aline Fernandes Barata, School of the Built Environment, Oxford Brookes University, Oxford, United Kingdom, amfbarata@brookes.ac.uk

Dr Tim Jones, School of the Built Environment, Oxford Brookes University, Oxford, United Kingdom, tjones@brookes.ac.uk

Prof Sue Brownill, School of the Built Environment, Oxford Brookes University, Oxford, United Kingdom, sbrownill@brookes.ac.uk

Authors Biographies:

Aline Fernandes Barata, School of the Built Environment, Oxford Brookes University, Oxford, UK

Aline is a PhD candidate in Planning and an Associate Lecturer in the School of the Built Environment and Architecture at Oxford Brookes University. She is a Brazilian Architect and Urbanist (UFJF) with a Master's degree in Urbanism (PROURB/UFRJ). Her research interests include participatory planning, mobility justice, research methods, global south and tactical urbanism.

Dr Tim Jones, School of the Built Environment, Oxford Brookes University, Oxford, UK

Tim Jones is a Reader in Urban Mobility at Oxford Brookes University based in the School of the Built Environment. He works at the interface of urban planning, geography, urban sociology and public health. His principal research interests are mobilities, active travel and sustainability. He was the Principal Investigator for the ESRC Healthy Urban Mobility project.

Prof Sue Brownill, School of the Built Environment, Oxford Brookes University, Oxford, UK

Sue Brownill is Professor of Urban Policy and Governance at the School of the Built Environment at Oxford Brookes University. Her work focuses on the relationship between citizens and the state in urban planning and regeneration and she has been involved in, researched and written about community engagement in planning over a number of decades. Prior to working in academia she worked with a community planning organisation in London Docklands. Her recent research includes a co-edited a book on Neighbourhood Planning and Localism, work on planning and affordable housing. She is currently leading a research project on the Hidden Histories of Community-Led Planning.

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ABSTRACT:

After a technocratic period predominating in mobility literature and practice, the rhetoric of participation has been incorporated as a vital condition for the sustainable mobility agenda and, more recently, for achieving transport and mobility justice. Considering the social significance of mobility beyond simple movement and participation as a term that can accommodate a wide range of motivations and implications, this chapter explores the complex interplay of participation and mobility in the global south context. To this end, this study adopts the spaces for participation framework to investigate the multiple roles of participation in urban mobility. With a focus on the Brazilian context, this chapter uncovers the nature, dynamics and reach of invited and claimed spaces for participation in mobility planning. Using Rio de Janeiro as the case study site, the chapter examines the invited spaces for participation enabled by the city's mobility plan and analyses whether marginalised populations engage with and/or create further spaces for participation. This was achieved through document analysis, online photo-elicitation interviews with residents of Favela Santa Marta as well as semi-structured interviews with municipal government professionals and representatives of non-government organisations involved in the development of Rio's mobility plan. The chapter discusses the interconnectedness or lack of, within invited and claimed spaces for participation and the multiplicity of meanings attributed to participation and mobility by different

actors. The chapter closes with a reflection on what this means for participatory mobility planning in Brazil but which may apply to similar regions in the global south.

KEYWORDS:

- 1. Participation
- 2. Mobility planning
- 3. Informality
- 4. Global south
- 5. Rio de Janeiro
- 6. Brazil

Main Body:

1. Introduction

After a technocratic period predominating in mobility literature and practice, the rhetoric of participation has been incorporated as a vital condition for achieving sustainable mobility (Banister, 2007) and, more recently, transport and mobility justice (Pereira et al., 2017; Sheller, 2018). Considering the social significance of mobility beyond physical movement (Cresswell, 2006) and participation as a term that can accommodate a wide range of motivations and implications (White, 1996), within and beyond state boundaries (Thorpe, 2017; Frediani and Cociña, 2019), the complex interplay of participation and mobility remains underexplored, particularly in the global south context, where mobilities are not always fair and inclusive (Vasconcellos, 2001).

This research uses the spaces for participation framework to examine and conceptualise participatory experiences in mobility planning in the global south (Cornwall, 2002; Gaventa, 2005; Miraftab, 2009). The utility of the approach is that it focuses, not only on the channels in which people have been "invited" to participate in decision-making but also on "claimed" spaces which are created by participants themselves rather than conceived for the participation of others (ibid.). Also, by adopting a global south perspective (Watson, 2009; Bhan et al., 2018), the chapter contributes to discussions on the (potential) reach of participatory practices in mobility planning in peripheral and southern contexts.

The chapter focuses on the context of Rio de Janeiro¹, Brazil. Rio de Janeiro is located in the Southeast region of Brazil and is the second-largest city in the country, with over 5,940,000 inhabitants (IBGE, 2011). The city encompasses 763 favelas² (IBGE, 2010) and long dichotomic history of formal and informal planning (Perlman, 2010). Therefore, this study examines the nature and dynamics of spaces for participation opened in municipal mobility planning and explores whether marginalised neighbourhoods engage with or enable alternative spaces for participation, using Favela Santa Marta as a case study site.

The chapter highlights the multiplicity of definitions of participation and mobility as well as the reach of invited spaces for participation and reflects on what this might mean for participatory mobility planning, not only in Brazil but in other regions in the global south. Before analysing the spaces for participation in detail, this chapter outlines the theoretical underpinnings of participation and its relationship with mobility planning. It then describes the research approach used to investigate the "closed", "invited" and "claimed" spaces in Rio de Janeiro.

2. The interplay of mobility and the multiple meanings of participation

Since the late 1960s, public participation gained momentum as an alternative to expert-driven processes in planning and governance (Sandercock, 1998). Although with diverse agendas and

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¹ This research is part of Aline's PhD thesis which investigated the spaces for participation in mobility planning in Rio de Janeiro and Porto Alegre. It examined whether different contexts and traditions of participatory governance strengthen or weaken the capacity for participation in mobility planning and what type of spaces for participation they enable. Favela Santa Marta (Rio de Janeiro) and Vila Tronco (Porto Alegre) were included in the investigation to unpack the nature and dynamics of spaces for participation in marginalised territories. Although with different trajectories of participation and mobility planning, the case study sites demonstrated the challenges of incorporating participation into mobility planning and the existing spaces for participation constantly shaping mobilities beyond the state apparatus.

² Favela is the name designated for the so-called slums, squatter settlements or informal "urban clusters occupying land owned by others", public or private (IBGE, 2009). Sometimes called hill (*morro*) or community (*comunidade*) (Perlman, 2010), official planning terminology often characterises favelas as Areas of Special Interest (Perlman, 2010).

purposes, the emergence of debates on participation represents a shift in planning literature and practice towards more collaborative approaches (Innes, 1995; Healey, 2006). Since then, technocratic approaches that rely solely on planning experts/professionals and neglect public involvement have been criticised. Participation has been viewed as a democratic, inclusive and fair mechanism with the potential to redistribute rights, dilute power structures and bring planning debates "closer to the people" (Cornwall, 2002, p.13; White, 1996; Cornwall and Gaventa, 2001).

However, the focus on consensus-building and conflict-less collaborative planning approaches has been criticised for neglecting social complexities and diversity. The assumptions of homogeneous and universal "communities" as well as a definable and organised "civil society" have permeated participatory debates and have been accused of forging exclusionary planning practices (Miraftab, 2018) and maintaining dominant interests and power structures (Amin and Thrift, 2002). The questions of "whose reality counts?" and "is participation the new tyranny?" have amplified the criticism of the technical, political and conceptual limitations of participation in incorporating multiple realities and knowledge realms beyond professional boundaries as well as the use of participation in legitimating unjust decisions and hegemonic practices (Chambers, 1997; Cooke and Kothari, 2001).

Commentators have fuelled the debate on how to achieve more just and equitable approaches to planning since the 1990s (Fainstain, 2014) and criticised the persistent technical rationality and the role of planners as "the all-knowing expert" (Watson, 2014, p.73; Sandercock, 1998). The growing recognition that "planning is more than what planners do, and participation is more than what planners invite" (Thorpe, 2017, p.577) has boosted research seeking to expand notions of planning and participation. In response, alternative theoretical and conceptual frameworks have emerged in planning literature recognising ongoing efforts of civil society in implementing solutions together with, despite or against the state apparatus (Souza, 2006), seeking more just futures and denouncing blind spots in planning (Frediani and Cocina, 2019).

In transport and mobility studies, however, the technocratic and expert-led approaches and debates have a longstanding tradition (Lucas, 2012; Keblowski and Bassens, 2018). With the emergence of democratic, sustainability, justice and equity concerns, public participation has gained attention in transport and mobility studies, particularly since the 2000s. Since then, public participation has been placed as an essential mechanism of governance, transport and mobility planning (Hodgson and Turner, 2003; Dimitriou and Gakenheimer, 2011; Banister, 2007; Sheller, 2018). With the shifts in thinking about mobility beyond technocratic, infrastructural and purely rational approaches, the involvement of people staging their mobility from below, not just people's mobility being 'staged from above' (Jensen, 2013, 2014), has increasingly been promoted in transport and mobility literature as a fundamental component for promoting more just and sustainable futures.

To understand the approaches to participation in mobility planning, the spaces for participation framework is adopted in this chapter. It provides a useful framework to examine and conceptualise participatory experiences as it focuses, not only on the channels in which people have been invited to participate but also on claimed spaces enabled by people establishing their own agency.

2.1. The spaces for participation framework and the multiple dimensions of participation

The spaces for participation framework emerged at the beginning of the new millennium. Largely echoing Henry Lefebvre's (1991) concept of space, studies on participation started to incorporate a new lens to further explore the dynamics and dimensions of participation and power. Through a concrete, metaphorical and abstract approach to the concept of space, participation as a spatial practice unpacks the different meanings of participation as well as the multiple types, motives and impetus across spaces for participation (Brownill and Parker, 2010; Cornwall, 2002).

This framework has been adopted in development studies (Cornwall, 2002; Gaventa, 2005) and planning (Carpenter, 2014) as a way to understand the forms of participation, the sites where engagements take place and the interactions with multiple others. Attempting to distinguish and explore the nature of these spaces, the durability of participatory experiences and the motivation for opening participation, three main types of spaces were identified: (1) "closed spaces", which refer to decision-making processes orchestrated by a limited set of actors behind closed doors, with no extraneous inclusion; (2) "invited" or "created", in which people are encouraged to participate by public authorities or other organisations; and (3) "claimed" or "invented" spaces, created by participants themselves rather than conceived for the participation of others (Cornwall, 2002; Gaventa, 2005; Miraftab, 2009).

Spaces for participation have been interpreted by Gaventa (2005, p.11) as "opportunities, moments and channels where citizens can act to potentially affect policies, discourses, decisions and relationships which affect their lives and interests". Different from more traditional views on collaborative and participatory planning approaches, this framework allows room for conceptualising participation beyond invited, institutionalised and sanctioned forms of participation, and incorporating everyday practices taking place beyond the state and professional borders.

Reviewing transport and mobility literature, one of the first and most enduring approaches to participation in mobility studies relates to invited spaces for participation. Mainly focused on transport decision-making and "stakeholder involvement" (Fouracre et al., 2006, p.329) participation has been often portrayed as a key element for catalysing public acceptability and behavioural change (Banister, 2007; Vigar, 2017), promoting inclusive and participatory governance (Hodgson and Turner, 2003) as well as an opportunity to give voice to people through public consultation and forums (Raje, 2007; Ward, 2001). In the pursuit of inclusive and effective transport planning and policy, participation has often been viewed as a tool for decision-makers to understand people's needs and knowledge (Raje, 2007; Fouracre et al., 2006; Vigar, 2017; Elvy, 2014).

Considering the technocratic tradition and tendency of transport and mobility of being predominantly consensual and conflict-less, these invited spaces for participation have been criticised for lubricating "the pathway towards 'win-win' mobility projects" (Keblowski and Bassens, 2018, p.424). Forms of invited participation are accused of perpetuating privilege and "expert" knowledge and not allowing the "opening up of planning to wider questions of justice" (Sheller, 2018, p.92). Alternatively, a branch of the literature has recently recognised a form of participation beyond professional and institutional boundaries. These approaches usually focus on the role of social movements and civil society organisations in contesting and impacting decisions from below (Verlinghieri, 2019), putting sustainable mobility into practice (Sosa Lopez and Montero, 2018) and shaping sustainable and just mobilities on the ground (Schwanen and Nixon, 2020). Scholars have not only focused on the potential of grassroots and civil society organisations to pressure the state for change through protests, demonstrations and mass mobilisations but also on their role in proposing changes and establishing agency by way of alternative plans and small-scale urban interventions (Karner et al., 2020).

Despite the extensive critiques of communicative and collaborative approaches in planning literature, mobility studies remain rooted in idealised notions of participation and purely invited spaces. Mobility and transport planning continues to be criticised for predominantly amplifying the voices of white, young and middle-class males while the needs and perspectives of the urban poor, women, children, elderly, ethnic minorities and people with disabilities are overlooked and discredited by institutions of power (Oviedo and Guzmán, 2021; Lucas and Stanley, 2013; Sheller, 2018). Marginalised communities are perceived as disengaged from mobility planning processes and unaware of ways to obtain better mobility conditions for themselves and overcome inequalities (Maia et al., 2016). Although contributors of mobility justice and global south perspectives have

expanded the debates on participation in mobility literature, notions of participation have not yet captured whether marginalised populations engage with existing spaces for participation (inside or outside the state) or create alternative ones to improve everyday mobilities.

Having set out the background context and theoretical framework, the next section focuses on spaces for participation in mobility planning in Rio de Janeiro, Brazil.

3. Participation in mobility planning in Rio de Janeiro: Putting the spaces for participation into motion

To explore the role of participation in mobility planning, this chapter focuses on research that investigated the invited and claimed spaces for participation in Rio de Janeiro. The city was selected as a case study as it recently approved (2019) its municipal mobility plan after a series of participatory events. Also, Rio de Janeiro is one of the most unequal cities in the world with a long history of uneven urban development and distribution of public infrastructure (Pereira, 2018; Pereira et al., 2019). This provided a useful example to investigate the extent of invited and claimed spaces for participation in mobility planning and the discourses on participation among key actors. Favela Santa Marta was selected as a case study site to examine the dynamics and significance of participation and mobility in a context of marginalisation.

Fieldwork was carried out between 2019 and 2020 during the SARS-CoV-2 coronavirus pandemic where lockdown measures and public health restrictions were in place. Therefore, the study adopted a combination of in-person and remote interviewing, visual methods and documentary analysis for collecting primary and secondary data. Firstly, to investigate the incorporation of participation into mobility planning and policy, 17 interviews were conducted with municipal and state government professionals, representatives of non-government organisations and academics engaged with mobility and/or informal urban areas. This investigation assessed the experiences and opinions of different professionals mobilising invited and/or claimed spaces for participation in Rio de Janeiro. The interviews were focused on inquiring about the dynamics, limitations and meanings of participation and the role it may play in mobility planning.

Secondly, with a focus on Favela Santa Marta in Rio de Janeiro, the study investigated residents' everyday mobility practices, participatory experiences and the interconnectedness or otherwise with alternative spaces for participation. This involved 12 online photo-elicitation interviews (Rose, 2016) with residents and community leaders as a way to remotely interact with participant-generated images and narratives on mobility and participation. The interviews explored the significance of mobility as well as the challenges, meanings and forms of participation in Favela Santa Marta.

By aiming to unpack the narratives, discourses, meanings and experiences framing spaces for participation in urban mobility, qualitative thematic analysis and discourse analysis were the chosen methods of analysing data (Nowell et al., 2017; Gale et al., 2013; Bryman, 2016). The findings are presented and discussed in the following sections. The first part discusses the opening of public participation in Brazil and the articulations of non-government organisations in this process. Following this, the chapter highlights the mobility experiences of residents living in Favela Santa Marta and the extent to which they engage through spaces for participation (closed, invited and/or claimed) in mobility planning.

4. Invited spaces for participation: The incorporation of participation into mobility planning

After 21 years of military dictatorship in Brazil, the Federal Constitution of 1988 symbolised the reinstatement of democracy and an important legal milestone for establishing the nation's civil, political and social rights. This legal framework opened space for a participatory era to emerge in urban policy (Santos Júnior, 2019) and for the inclusion of mobility planning in 2012.

In 2012, the National Urban Mobility Policy (NUMP) incorporated participation in the planning, inspection and evaluation of the mobility policy as a key feature for improving urban mobility (Brasil, 2012). This national policy marked a shift from understanding mobility beyond transport in Brazilian regulations and through the requirement of all cities with over 20,000 inhabitants to produce their mobility plans. Since then, municipal mobility plans are treated as the main instrument to put the national policy into practice and incorporate democratic, inclusive and participatory procedures. To meet the national guidelines in the planning, inspection and evaluation of the NUMP, spaces for participation were a requirement for the development of mobility plans at city scales.

Between 2014 and 2019, Rio de Janeiro's mobility plan activities were developed by the Municipal Transport Department, including a series of participatory events. The Sustainable Urban Mobility Plan (Rio de Janeiro, 2019), approved in 2019, was developed in a period of substantial urban and transport transformation in preparation for hosting the 2014 FIFA World Cup and the 2016 Olympic Games. At the same time that the SUMP opened spaces for participation in formulating the policies that would guide the future of mobility in the city, a series of urban and transport projects were conceived and implemented despite any open process of participation (Da Silva et al., 2016).

In the interviews with key actors involved in the mobility plan participatory activities, the opening of invited spaces for participation was seen as a challenging and time-consuming activity. In the eyes of those planning mobilities from above (Jensen, 2014), the absent "tradition" and "culture" of participation in Rio de Janeiro and mobility planning posed some internal and external challenges. One challenge was attributed to general scepticism about the opening of spaces for participation where, traditionally, there was little or no room for participation in decision-making.

Additionally, the imprecision of the NUMP in guiding the opening of participation at municipal levels was seen as another challenge. Although the national regulation mentions the need for participation and refers to some mechanisms for promoting it - such as collegiate bodies, ombudsman services; public meetings and consultations; communication, satisfaction evaluation and accountability procedures – the policy lacks clear structure and information on what, exactly, civil society's input concern in mobility policy and planning, as illustrated by the quote below.

"It is very interesting because the federal law says that you have to have participation, but it does not say how. Then you, a manager, trained as an Architect, Urbanist, Engineer, have to cope with this" (Former member of the Municipal Transport Department, 2019).

Even with all challenges, the spaces for participation promoted during the development of Rio de Janeiro's mobility plan extrapolate the conventional participatory mechanisms in the national policy. The participatory tools and events were supported by a public entity called Laboratory of Participation of Rio de Janeiro (Lab.Rio) as well as by non-government organisations. Non-government organisations not only joined the discussions but also supported the development of the mobility plan. Their forms of engagement and "networks of trust", as cited by a representative of a non-government organisation, extrapolate the sporadic invited spaces for participation and indicate the blurred boundaries between invited and claimed spaces for participation in policymaking.

Among the platforms developed, the plan featured digital and in-person spaces and workshops that, according to the interviews, were seen and conducted as a means to discuss mobility and transport, rather than a truly deliberative process. These discussions may have unintentionally limited the participation of older adults and/or low-income groups who do not have access to technology and are not usually provided with opportunities to get involved with debates on mobility or policy.

The policy document generated as a result of these activities contained the proposed transport networks and general guidelines for the development, implementation and review of the mobility

policy. However, the proposed connections already existed within the Municipal Transport Unit (SMRT), Traffic Engineering Company (CET-Rio) and similar strategic plans. This raises some important questions: was participation a means for influencing decisions and addressing uneven mobilities and power imbalances or was it used to legitimise and achieve state objectives and hegemonic practices (Cooke and Kothari, 2001)? Furthermore, the policy and related reports did not mention any mobility principles, maps or images related to the "consolidated informal urban areas" as required by the NUMP (Brasil, 2012, 2017). The research identified a lack of unity in public management in dealing with mobility in "informal" and "formal" areas of the city and miscommunications among departments that could be overlooking mobility realities in informal territories.

The lack of organisations and social movements on urban mobility deriving from consolidated informal urban areas in Rio de Janeiro raises the question of the reach of these spaces for participation and the relevance of the debates on mobility in these territories. Therefore, it was necessary to investigate how everyday mobility is regarded and experienced by residents and to unpack whether/how spaces for participation emerge. This was achieved by investigating residents' opinions on how they move, their interactions and embodied experiences (Jensen, 2014), as well as the tactics they use to accomplish and/or improve mobility for themselves. Do they engage with existing invited spaces and/or create claimed spaces for participation?

5. Interrogating the significance of mobility and shedding light on the spaces for participation in Favela Santa Marta

Considering the little evidence demonstrating mobility initiatives and social movements emerging from informal neighbourhoods in Rio de Janeiro, it became important to question the reach of the aforementioned spaces for participation and the relevance of the debates on participation as well as sustainable and just mobility in these territories.

Focusing on Favela Santa Marta (see Box 1), online photo-elicitation interviews with residents and community leaders provided a deeper understanding of the meanings associated with mobility and participation and how both are experienced. The following presents photographs taken by the participants (with their chosen pseudonyms) as part of the photo-elicitation interviews and follow-up communications that served as prompts to discuss the factors that were significant to supporting and hindering their everyday mobility.

Box 1: Favela Santa Marta, Rio de Janeiro.

With a population of 3,908 inhabitants, Favela Santa Marta is a hillside favela located in the wealthiest area of the city, the South Zone. Housing was mostly built in risk areas and mobility depended upon self-built staircases and narrow alleys with difficult accessibility due to Santa Marta's high construction density. With its origin in the 1920s and subsequent migrations to Rio de Janeiro, Favela Santa Marta became the largest favela in the Botafogo district.

FIG 1 HERE

The history of Santa Marta is rooted in a series of social initiatives supported by the Catholic Church and residents' collective task forces (*mutirões*) engaged in building houses, staircases and roads to access the favela. After a succession of evictions in Rio de Janeiro and the increasingly favourable governmental measures to the permanence of favelas, Favela Santa Marta was incorporated into the state government's social control, slum-upgrading and

crime reduction projects. In 2008, the state government, through the Public Works Company (EMOP), implemented 340 metres of the funicular (known as *Plano Inclinado* or *Bondinho*), internal urban improvements and the first Peacekeeping Police Unit (UPP) of Rio de Janeiro (Fleury, 2012; Santos, 2014).

In contrast to marginalised areas situated in geographical peripheries, Favela Santa Marta is located in a central wealthy district supplied with a wide range of public transport options, pedestrian infrastructure as well as bicycle-sharing lanes and stations. However, the historical opposition between the "asphalt" and the "favela" represent the symbolic distance that has been established between the "formal" and "informal" city. Considering the different physical and symbolic ruptures between different urban, constructive, class and ethnic patterns, Santa Marta, like other central favelas in Rio de Janeiro, represents morphological and social enclaves within the immediate context where they are situated (Izaga et al., 2019). The linking points between these "two different worlds" (Cunha and Mello, 2012, p.468) are attributed to the streets leading to Santa Marta's entrance from the bottom of the hill and the road connecting the nearby districts to the top.

FIG 2 HERE

These "entrances" delimit the boundaries "where the asphalt meets the favela" (Perlman, 2010) and where the streets cease to exist. Internally, motorised vehicles and bicycles do not have access and pedestrians are restricted to steep staircases, narrow alleys, a few ramps and the funicular. Internally, the five stations of the funicular became the reference points for situating where people live and a way to "measure" how far people and places are from the "asphalt". The top of Santa Marta, known as *Pico*, encompasses the highest point of the favela where the Peacekeeping Police Unit, parking lot and most precarious houses are located.

For the online photo-elicitation interviews, participants were asked to describe how they move inside and outside Favela Santa Marta. They were also encouraged to provide photographs of anything that represents positive and negative aspects of their experience of moving inside and outside of their neighbourhood; and of any improvements that have been made by themselves or other residents.

Initially, mobility was associated with transport at the city scale and participants demonstrated no familiarity with Rio de Janeiro's mobility plan and its participatory events. Santa Marta's geographical location — in Botafogo and close to the city centre - was seen by all participants as a positive factor for moving around the city and accessing transport infrastructure, jobs and leisure activities. The implementation of the funicular (Figure 3) and the internal urban improvements in 2008 were considered the turning point for their mobilities and for obtaining rights, quality of life and dignity. As highlighted during the interviews with residents of Santa Marta, this initiative upgraded the quality of the internal staircases, wooden bridges and urban sanitation which improved residents' accessibility to the "formal" city.

FIG 3 HERE

During the in-depth interviews, the concept of mobility, from the perspective of the participants, was further expanded to encompass accessibility and freedom of movement inside the favela. Participants reflected on how much everyday mobilities and motility (potential movement) are deeply affected by the inadequacy of universal accessibility. This was due to the length and gradient of concrete staircases, and the narrow alleys inside Favela Santa Marta (Figure 4).

FIG 4 HERE

Even with the installation of the funicular, long journey times and fatigue were mentioned as some of the impacts on the daily routine of residents living in the higher parts of the hill. The physical and social distances from the "asphalt" – the city's streets and road networks – pose a series of challenges for mobilities within Santa Marta and capabilities to access rights outside of it in terms of the draw on personal energy levels when conducting everyday lives as illustrated by Mônica.

"If you go up the favela on foot – we say 'on foot', without the funicular – it takes 30 to 40 minutes to get there at the peak where my house used to be. So, if you have this time, you arrive tired, exhausted, then you usually want to do something, we have to wash the dishes, cook food and you are already very tired. If you are going to work, you have to calculate the time it takes to leave the house, to go down the favela, to be able to get to the bus stop and catch the bus. So you have to calculate the time and I think that is the whole difficulty" (Mônica, 36 years old).

FIG 5 HERE

Also, participants reflected on the practices and meanings attributed to participation. In general, participation has been mostly perceived as independent of the state. As highlighted by Bianca, participation in city-making has been perceived as an informal, but genuine way that low-income communities in favelas find to solve problems that affect their own lives. This type of participation is less about being engaged to influence policies and projects, but as an alternative avenue to cope with social exclusion, the limits of state actions and the lack of attention given to the problems they face.

"I would like to show, perhaps, what the community contributed. Sometimes there is an elderly person who lives here and his stairs need a handrail, so people go there and put the handrail to help the mobility of certain elderly people. There is a hole that has been open for a thousand years and the City Hall is not going to fix it then people get together and fix it. At the parking lot, there was a task force of the residents who gathered, made crowdfunding and covered the holes. Because we know that the city hall service does not reach here, so we have to do things for ourselves" (Bianca, 24 years old).

The spaces for participation emerging in the narratives and photographs were more of a claimed nature. These refer to protests orchestrated by the residents when the funicular is out of service and internal bonds of solidarity (De Carli and Frediani, 2016). These solidarity networks translate into continuous internal cooperation and improvements that seek to assist people's daily mobilities and overcome the limiting accessibility inside Santa Marta, such as maintenance works and implementation of handrails, constituting another type of claimed space for participation despite the state. It demonstrates that the state is not the only enabler of participation and that claimed or invented spaces can encompass more than what the literature suggests.

Another facet of mobility described was the freedom to circulate. Translated as the right to come and go, known as *direito de ir e vir* in Portuguese, this term is a constitutional right in Brazil that carries a vivid semantic value among the participants' narratives (Schwanen and Nixon, 2020). With the presence of the state through the Pacifying Police Units and armed confrontations between the police and drug gangs, Santa Marta's residents experience occasional police arbitrary behaviour and exposure to violence. In this vein, urban mobility represents more than moving around the neighbourhood and city, it is perceived as the freedom to circulate and "right to exist" (Santini et al., 2021) that are constantly violated, as stated by Senhor das Lutas.

"If there is a police operation in the community I stay where I am until things calm down and I have my right to come and go again" (Senhor das Lutas, 59 years old).

Although Santa Marta is located in a central area of Rio de Janeiro, the temporary or permanent inability to exercise "the right to come and go" consists of an aspect of social exclusion. In this context, the social exclusion resulting from "being prevented from participating in the normal activities of the society in which they live" is not directly attributed to spatial distances, long journey times and transport issues (Atkinson, 1998a, p. 27 quoted by Ureta, 2008, p.270).

Beyond the "idea of a divided city" and the dichotomy between the favela and the city, informality and formality, legality and illegality, the notions of proximity and distance are not limited to physical and tangible barriers (Magalhães and Izaga, 2013; Roy, 2005). The immobility caused by exposure to violence requires routine manoeuvres that affect several dimensions of everyday life. Entangled with racism and ethnic issues, Aquiles disclosed how much police's unequal treatment and oscillating "right to come and go" represents an invisible barrier to black minorities' daily mobilities.

"So, in terms of mobility, it gets in the way in this regard, because as we already know, all those studies, the majority of the population in the favela is black [...] Black people dress that way, they have these characteristics, they have to be separated, they have to be searched to see if there is anything illegal. So, when you run inside a community it is different than when you run outside it, so I can run on the seafront of Botafogo and Copacabana because it is normal. Now, if I run inside the favela I am either a criminal or... it is never going to cross a policeman's mind that this guy is late for university, but he is running away from something, someone, in the matter of the police operation itself" (Aquiles, 27 years old).

Although Favela Santa Marta is often considered the "model favela" for being the first pacified favela in Rio de Janeiro, the process of pacification is seen as an imposition by the state that, after more than ten years of its implementation, still haunts its population. This was evident in residents' narratives and strategies to overcome forms of oppression, to "turn invisible" during armed confrontations, negotiate police operation periods and promote educational projects that remind children and young adults of their right to be anywhere in the city and minimise the effect of racism and social inequalities in their lives.

These enduring or episodic strategies operate as silent individual and collective actions, sometimes "not as conscious political acts; rather they are driven by the force of necessity – the necessity to survive and live a dignified life" (Bayat, 1997, p.58). Therefore, participation extrapolates the commonly known invited spaces and claimed spaces concerning urban mobility as they refer to self-built strategies, social campaigns and networks of solidary as practices of "participation as planning" from below (Frediani and Cociña, 2019). Instead of scaling "up", their strategies scale "within" the neighbourhood scale, "from one household to another" (Mitlin, 2021, p.302). These claimed spaces for participation despite the state also disclose perspectives on mobility that are not conventionality captured in prevailing knowledge, planning mechanisms and other claimed spaces animated by nongovernment organisations.

At the other end of the spectrum, participation in mobility planning was also seen as a mechanism for understanding "the reality" and promoting more just mobilities. Despite this, the idea of interacting with the state and impacting public decisions and policy seemed distant for the participants, especially regarding transport and mobility issues. Considering the tangible and intangible components of mobility previously discussed, participants reported a tendency to normalise precarious services, be unaware of the pathways to claim mobility rights and have less time to participate and "fight" for issues that affect their lives. Despite efforts by state authorities, mobilities are experienced beyond the scope of mobility and transport planning and possibilities for change are constantly invented from below.

5. Conclusion

This chapter demonstrated a multiplicity of meanings and experiences associated with participation and mobility that extrapolate the scope of participation in mobility studies and the reach of spaces for participation in mobility planning. Through interviews with authorities and stakeholders involved in overseeing and delivering mobility planning and through photo-elicitation interviews with residents about their experiences, and by applying the spaces for participation approach (Cornwall, 2002; Gaventa, 2005) to the analysis, this chapter has highlighted the closed, invited and claimed spaces impacting urban mobility.

The spaces for participation approach proved to be a useful framework for identifying the multiple roles that participation plays in the context of mobility and analysing the micro-politics within different spaces. Drawing from the experience of Rio de Janeiro's mobility plan, the invited spaces enabled by those staging mobilities from above (Jensen, 2014), despite their historical opening and genuine attempt to allow contributions from below, still reveal some limitations of what is at stake for participation and who can fully access these spaces.

The investigation of mobility experiences and spaces for participation in Favela Santa Marta revealed the disconnections between mobility planning and policy and informal urban areas. In territories traditionally overlooked by institutions of power, other facets of participation, such as claimed spaces despite the state, can become more meaningful for people in these territories as these fill in gaps left by the state and shape people's relationships, lives, environments and mobilities from below. They also subtly denounce the exclusions, injustices and blind spots in mobility planning as well as the inability of certain populations to access and contribute to other spaces for participation.

The residents and community leaders in Favela Santa Marta highlight the claimed spaces invented to survive, resist and improve mobilities within the neighbourhood scale. These claimed spaces deal with the tangible and intangible aspects of mobility – accessibility and freedom of movement– and bring to light the forms of oppression and racism impacting mobilities in these territories. This chapter is then an invitation for scholars and planners to excavate the interplay of spaces for participation and urban mobility and to be more attentive to the challenges, contributions and ways of knowing emerging from marginalised populations and territories.

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Questions for discussion:

What are the multiple roles of participation in mobility planning?

What definitions, dynamics, and forms of participation could exist in the global south and other contexts?

What constitutes mobility justice from the perspective of people on the ground?

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Note to the editors:

This research received the approval of Oxford Brookes University's Research Ethics Committee (Reference numbers 191341 - 6/11/2019 - and 201392 - 17/06/2020) and consent from all participants that quotes and photographs may be used anonymously in published material. Please contact OBU UREC at ethics@brookes.ac.uk for further information.

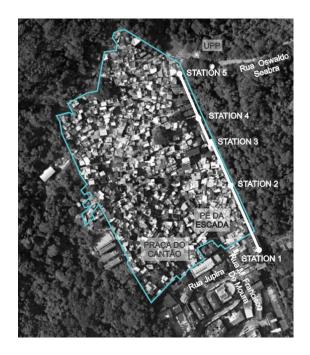
Figures:

Figure 1: Location of Favela Santa Marta in Rio de Janeiro.



Source: Google Earth 2021 edited by the author with favela limit from SABREN (2019).

Figure 2: Access points in Favela Santa Marta.



Source: Google Earth 2021 edited by the author.

Figure 3: Santa Marta's funicular.



Supplied with permission of Catarina (2020).

Figure 4: Inner alley of Favela Santa Marta.



Supplied with permission of Sisi (2020).

Figure 5: Steep staircases in Favela Santa Marta.



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