Living with the Line: How Hanoi Residents are Navigating the Infrastructural Politics of Two New Urban Railway Lines

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Abstract

In Vietnam's capital city Hanoi, an ambitious public transport development strategy is underway. This envisions an evermore 'green, civilized, and modern' (*xanh, văn minh, hiện đại*) future for the capital, with a city-wide urban railway system being central to this vision. The first urban railway line, Line 2A, or the Cát Linh – Hà Đông Metro Line, finally began operations in November 2021, after a near decade-long construction fraught with multiple controversies and delays. So far, Line 2A is the only operational line; Line 3, or the Nhổn-Hà Nội Line, is under construction but has also experienced significant delays and setbacks. Against this context of the state's 'modernization' discourse and contentious construction, the aim of this thesis is to investigate how the first two lines of Hanoi's urban railway system are impacting the livelihoods, physical environment, and mobilities of residents, those working nearby, and railway users, and how these groups are negotiating these infrastructures. To do so, I draw on conceptual debates from the infrastructure turn, mobilities paradigm, and the urban spatial politics literature. My findings are based upon in-depth qualitative fieldwork conducted over 16 weeks in Hanoi, drawing on semi-structured interviews, photovoice, surveys, and ethnographic filmmaking along the length of Line 2A and a case study of an alley that has been transformed by the construction of Line 3. I demonstrate how individuals – particularly informal workers who use spaces around the line to make a living – navigate and negotiate the Lines' immediate neighbouring environment, focusing on the encounters, entwinements, and tensions that have emerged at different locales along the line. My research contributes to the literature on Hanoi's urban mobility transition and provides an increased understanding of the perceptions and impacts of the city's two urban railway lines. I demonstrate how residents' everyday acts of living with the lines offer insights into the ways top-down transportation plans and policies are experienced and contested on-the-ground, in ways that sometimes enforce, but oft-times deviate from state plans and visions of 'modernity' in Hanoi.

Résumé

Dans la capitale vietnamienne Hanoï, une stratégie ambitieuse de développement des transports publics est en cours. Cette stratégie envisage un avenir de plus en plus « vert, civilisé et moderne » (*xanh, văn minh, hiện đại*) pour la capitale, avec un réseau ferroviaire urbain au centre de cette vision. La première ligne du réseau, la ligne 2A, ou la ligne de métro Cát Linh – Hà Đông, a finalement ouvert en novembre 2021, suite à une construction de près d'une décennie chargée de multiples controverses et de retards. Jusqu'à présent, la ligne 2A est la seule ligne opérationnelle. La ligne 3, ou la ligne Nhọn-Hà Nội, est en construction mais a également connu des retards et des revers importants. Dans ce contexte de discours de « modernisation » étatique et de construction controversée, l'objectif de ce mémoire est d'étudier comment les deux premières lignes du réseau ferroviaire urbain de Hanoï impactent les moyens de subsistance, l'environnement physique et les mobilités des résidents, des travailleurs locaux et des usagers de la ligne 2A, et la façon dont ces groupes négocient ces infrastructures. Pour ce faire, je tire des concepts des études d'infrastructure, du paradigme des mobilités et de la littérature des politiques spatiales urbaines. Mes résultats reposent sur un travail de terrain qualitatif mené sur 16 semaines à Hanoï. Pour ce faire, j'ai réalisé des entretiens semi-structurés, un projet de « photovoice », un questionnaire et une création cinématographie ethnographique le long des deux lignes de métro, ainsi qu'une étude de cas le long d'une allée qui a été transformée par la

construction de la ligne 3. Je démontre comment les individus – en particulier les travailleurs informels qui utilisent les espaces autour de la ligne pour gagner leur vie – naviguent et négocient l'environnement autour des deux lignes, se centrant sur les rencontres, sur les enlacements et sur les tensions qui ont émergé à différents endroits le long de la ligne. Ma recherche contribue à la littérature sur la transition de la mobilité urbaine à Hanoï et fournit une meilleure compréhension des perceptions et des impacts des deux lignes du réseau ferroviaire urbain de la ville. Mon mémoire illustre comment les actes quotidiens des résidents qui vivent avec ces lignes offrent un aperçu de la façon dont les plans et les politiques de transport descendantes (ou « top-down ») sont vécus et contestés sur le terrain, d'une manière qui impose parfois, mais s'écarte souvent, des plans et des visions de la « modernité » à Hanoï.

Tóm tắt

Hà Nội đang triển khai chiến lược phát triển giao thông công cộng đầy tham vọng. Chiến lược này với tầm nhìn trọng tâm là hướng tới tương lai vì một thủ đô "xanh, văn minh, hiện đại", với hệ thống đường sắt đô thị trải khắp thành phố. Tuyến đường sắt đô thị đầu tiên, Tuyến 2A, hay còn được gọi là tuyến metro Cát Linh - Hà Đông, đã chính thức đi vào hoạt động vào tháng 11 năm 2021, sau gần một thập kỷ xây dựng đầy rắc rối với vô vàn tranh cãi và trì hoãn. Cho đến nay, Tuyến 2A là tuyến đường sắt trên cao duy nhất đã đi vào hoạt động; Tuyến số 3, hay Tuyến Nhổn - Hà Nội, đang trong quá trình xây dựng nhưng cũng đã gặp phải những trì hoãn và thách thức đáng kể. Trong bối cảnh "hiện đại hóa" và quá trình xây dựng tuyến đường sắt đầy rẫy tranh cãi, mục tiêu của luận văn này là để tìm hiểu hai tuyến đường sắt đô thị đầu tiên của Hà Nội đang ảnh hưởng như thế nào đến sinh kế, môi trường vật lý và khả năng di chuyển của cư dân, những người làm việc dọc tuyến đường sắt, và người sử dụng đường sắt, và làm thế nào những nhóm này đang dần thích nghi với cơ sở hạ tầng mới. Để làm được điều này, tôi dựa vào các cuộc tranh luận về một số khái niệm như bước ngoặt cơ sở hạ tầng, lý thuyết di động, và tổng quan chính trị không gian đô thị. Kết quả nghiên cứu của tôi dựa trên phỏng vấn sâu tại thực địa kéo dài 16 tuần tại Hà Nội, bao gồm phỏng vấn bán cấu trúc, photovoice, khảo sát, và làm phim nhân chủng học dọc theo Tuyến 2A và nghiên cứu trường hợp một ngõ phố đã được biến đổi bởi việc xây dựng Tuyến 3. Tôi minh họa cách mà các cá nhân – đặc biệt là những người lao động tự do sử dụng không gian xung quanh tuyến đường để kiếm sống – điều hướng và đồng hành với những biến đổi tức thì của môi trường xung quanh các tuyến đường sắt, tập trung vào những cuộc gặp gỡ, sự đan xen, và những căng thẳng nổi lên tại các địa điểm khác nhau dọc theo tuyến đường sắt. Nghiên cứu của tôi góp phần mô tả quá trình chuyển đổi di động đô thị của Hà Nội và cung cấp sự hiểu biết thêm về nhận thức và những ảnh hưởng của hai tuyến đường sắt đô thị của thành phố. Tôi minh họa cách thức các hoạt động hàng ngày của cư dân sống dọc tuyến đường sắt, cung cấp cái nhìn sâu sắc vào về các kế hoạch và chính sách vận tải với cách tiếp cận từ trên xuống được triển khai và ứng phó trên thực tế, theo những cách mà đôi khi trong quá trình thực thi chính sách thường xuyên chệch khỏi các kế hoạch và tầm nhìn về "tính hiện đại" của chính quyền tại Hà Nội.

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QR Codes and Links for Visual Ethnographic Fragments

QR code for visual fragment 1 / Ethnography of the Line
Visual Fragment I (Link)

QR code for visual fragment 2 / Remnants and Entwinements
Visual Fragment II(Link)

Chapter 1 Introduction

Visual Fragment I

1.1 Introduction

Since the early 2000s, metro projects have come to symbolize 'hyper-modernity' in a number of cities across South and Southeast Asia. By 2025, all six of the largest country members of the Association of Southeast Asian Nations (ASEAN) are expected to have an urban railway service in operation (Koyanagi 2017, online; Sadana 2022).[1] Such plans mark the ubiquity of these infrastructure projects – and the 'modernity' they represent – in the region. This 'metromania', or the prioritization of metro construction as an urban mobility solution, can be seen in Vietnam, where urban railway lines have become central to the upgrading and modernizing of public transportation infrastructure (Sadana 2022). Currently, Vietnam's capital city, Hanoi, and the country's economic powerhouse and largest metropolis, Ho Chi Minh City, are in a race to build their urban railway networks (Koyanagi 2017).

In 2008, then Prime Minister Nguyễn Tấn Dũng of the Socialist Republic of Vietnam approved the 'Hanoi Capital Transport Master Plan to 2020'. This included the construction of an urban railway system to improve the capital's public transportation network and reduce traffic overload while boosting the city's socio-economic development (Leducq and Scarwell 2018; VNA 2022). The same year, the Prime Minister announced that Hanoi's boundaries would expand to incorporate neighbouring Hà Tây Province, Vĩnh Phúc Province, Mê Linh District and four communes of Lương Sơn District, Hòa Bình Province (Leducq & Scarwell 2018). Overnight, the city tripled its size to 3344km² and nearly doubled its population to 6.5 million inhabitants (Leducq & Scarwell 2018; Turner & Ngo 2019). Three years later, the urban railway network was enfolded within the 2011 'Hanoi Capital Master Plan 2030, Vision to 2050'. This Plan was celebrated by officials as a strategy to "lift Hanoi into the ranks of the most dynamic Asian metropolises" while meeting the ever-increasing demands of a rapidly growing urban

[1] Thailand, Malaysia, Philippines, Singapore, Indonesia, and Vietnam are the ASEAN countries expected to have railway services in operation by 2025.

population (Fanchette et al. 2016: 118). Although this was not the city's first Master Plan, this plan was especially significant as it represented a shift from top-down, Soviet-style Master Planning to a far more neoliberal approach driven by foreign and national investment (Leducq & Scarwell 2018).

The initiatives outlined in the Master Plan parallel Singapore's garden city, China's Tianjin eco-city, and South Korea's Songdo smart city, three models of sustainable urbanization in Asia (Leducq & Scarwell 2018). Hanoi's green city strategy, particularly the state discourse which emphasizes a "green, civilized, and modern" (*xanh, văn minh, hiện đại*) future for Hanoi, shares many similarities with China's 'ecological civilization' approach to planning (Coe 2015; Pow 2018). The New Hanoi envisioned in the Master Plan, therefore, appears to be constructed through an "assemblage of imported urban models", blending "technocratic ideals and a compromise between international and Vietnamese standards" (Leducq & Scarwell 2018: 45; Peck and Theodore 2010). Geared towards improving traffic and reducing air pollution, the Hanoi Capital Master Plan aims for public transport to meet 55 percent of the city's needs by 2030, with the railway network posited as fundamental to this mobility transition (Hodal 2017). Together, these plans envision an evermore "green, civilized, and modern" future for the capital, with the construction of an urban railway network posited as fundamental to this vision (Coe 2015).

The first metro line, Line 2A, or the Cát Linh – Hà Đông Metro Line, finally began operations in November 2021, after a near decade-long construction fraught with multiple controversies and delays. Although the opening has been described as a "dream come true" by the Vietnamese media, multiple accidents, contentious contractor choices, and drastic changes to the urban environment surrounding the Line have resulted in high levels of public skepticism regarding the safety, accessibility, and usability of the elevated railway (Hai 2019, online). At the time of writing, Line 2A is the only operational line; Line 3 is under construction but has also experienced significant delays and setbacks. Intrigued by these controversies, and the projects' ties to the city's 'modernization' discourse, my research focuses on how residents navigate and negotiate Line 2A and a case study site around Line 3's immediate neighbouring environment, and investigates people's perceptions and experiences on, and around, Line 2A. My findings are based upon in-depth qualitative fieldwork conducted in 2022, drawing on interviews, photovoice activities, surveys, and ethnographic filmmaking along the length of Line 2A and a case study in

an alley that the construction of Line 3 has transformed. In this study, I consider how Hanoi residents have had to navigate and negotiate Line 2A's implementation and early operations, as well as Line 3's construction, focusing on encounters, entwinements, and tensions that have emerged at different locales along the two lines. My research reveals how the new places that the construction of Line 2A and Line 3 have created, are being used and innovatively adapted by individuals and groups in ways that sometimes enforce, but oft-times deviate from state plans and visions of 'modernity' in Hanoi.

1.2. Aim and research questions

The aim of my research is to *investigate how the first two lines of Hanoi's urban railway system are impacting the livelihoods, physical environment, and mobilities of local residents, those working nearby, and railway users, and how these groups are negotiating these infrastructures.*

Three research questions guide my aim:

1. *What are the most notable impacts of Line 2A for local residents living alongside the Line or those working nearby, and how do these groups perceive of and negotiate these changes?*

2. *How are Line 2A's users responding to, being impacted by, and negotiating the Line, and in what ways has the urban railway affected their everyday mobilities?*

3. *With Line 3 now under construction, how are local residents and those working along the Line's route experiencing and perceiving this Line? Are there similarities and differences with Line 2A?*

1.3 Thesis Outline

I answer my aim and research questions over eight chapters. Following this introductory chapter, I introduce the conceptual framework underpinning my research in Chapter 2. This framework comprises key ideas from the infrastructure turn, mobilities paradigm, and urban spatial politics literature, which inform my data collection and analysis. In Chapter 3, I situate my study of Line 2A and Line 3 by providing context on historical and contemporary processes of urban change in Hanoi, notably on changes to Hanoi's mobility landscape. I pay specific attention to the urban railway network and the recent push for 'modern' mobilities and provide portraits on the construction of Line 2A and Line 3, and the operations of the former. I introduce the qualitative methods I used to complete my research in Chapter 4: semi-structured interviews, photovoice,

surveys, and ethnographic filmmaking. In this chapter, I also discuss my sampling and analysis strategies, ethical considerations of my research and my positionality as a researcher to demonstrate the rigour of my research.

Chapter 5 is the first of my three results chapters, responding to Research Question 1. Drawing from semi-structured interviews and photovoice, I investigate the perceptions of Line 2A, the physical impacts the Line's construction has had on residents' daily lives, and the appropriations and negotiations taking place in the new urban spaces along the Line. In Chapter 6, I answer Research Question 2 through an analysis of survey data, interviews, and photovoice to determine the uses and barriers to use Line 2A, as well as the mobility disruptions caused by the Line and related transport policies. Drawing on interviews along Line 2A and a case study at a site along Line 3, Alley X, in Chapter 7 I answer Research Question 3 and compare perceptions of the two lines before moving on to the impacts of Line 3's construction. In Chapter 8, I conclude my thesis through a discussion of the infrastructural violence and mobility injustices caused by Line 2A and Line 3. I wrap up my thesis by reflecting on the new urban spaces and opportunities that have emerged along the Line.

Figure 0.1 Line 2A train and platform. Source: Author

Chapter 2 Conceptual Framework

2. 1 Introduction

I draw from three conceptual bodies of literature to structure my research and inform my study of the impacts and effects of Line 2A and Line 3 in Hanoi, Vietnam (see Figure 2.1*).* These include key conceptual ideas from the infrastructure turn (Section 2.2), the mobilities paradigm (Section 2.3), and urban spatial politics (2.4). From the infrastructure turn literature, I specifically focus on the concepts of the politics of infrastructure, infrastructural lives, and infrastructural violence. I draw on these concepts to investigate how locals experience and perceive of Line 2A and Line 3, especially in relation to the state's modernity discourse surrounding these infrastructure projects. Second, by drawing on concepts from the mobilities paradigm, namely the politics of mobility and mobility justice, I investigate the accessibility and usability of Line 2A for different groups. Finally, my review of urban spatial politics provides conceptual tools to investigate how Hanoi residents negotiate power relations and controlled urban spaces, notably Line 2A and its surrounding environments.

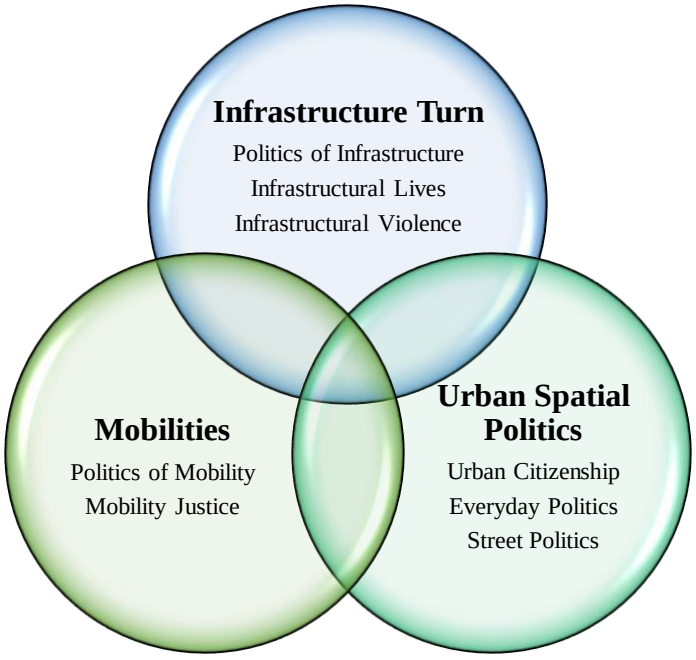

Figure 2.1 Conceptual Framework

2.2 Infrastructure Turn

Over the last two decades, an interdisciplinary 'infrastructure turn' has emerged that challenges the idea of infrastructure as networks of neutral, physical objects and instead conceives infrastructure as complex and dynamic phenomena that have significant social, political, and ecological consequences (Addie et al. 2020; Steele & Legacy 2017). Academics adopting the

infrastructure turn call for a more expansive view of infrastructure that renders visible the processes, practices, and politics embedded within these systems by investigating its street culture and visuospatial dynamics to understand how "it is used, manipulated, and undone by the majority in everyday practice" (Chattopadhyay 2012: 248). The conceptual tools of the infrastructure turn provide a critical approach to understanding how infrastructural projects can be representative of greater discourses and representations of power, and how different infrastructures can become sites of negotiation or tension between a variety of stakeholders and actors (McFarlane & Rutherford 2008). Moreover, Graham & Marvin (2001) have traced infrastructural networks to reveal patterns of uneven socio-spatial development, demonstrating how infrastructure strengthens connections between some places and isolates others. They call into question the "singularity, ubiquity, and taken-for-granted forms of infrastructures, urging us instead to attend to them as dynamic and congealed processes of organizing finance, knowledge, and power" (Angelo & Hentschel 2015; Appel, et al. 2018: 10). Such approaches trouble previous conceptions of infrastructure by incorporating not just the physical, technical components of these systems but also the socio-political relations that constitute them.[2]

Infrastructures can also be considered as tools through which people make sense of change, as "large-scale social transformations – whether marketization, industrialization, deindustrialization or political change – are often experienced as changes in the material qualities of one's everyday life", which are hindered or facilitated by infrastructure (Angelo & Hentschel 2015: 308). For my research, the infrastructure turn provides a critical perspective to examine the ways infrastructural systems such as Line 2A and Line 3 are both productive and disruptive, and how these systems are "open to appropriation and adaptation by individuals and communities in ways that are unanticipated by the formalized logics of urban administration" (Addie et al. 2020: 14). It is these unanticipated uses and appropriations that I aim to examine through my research.

2.2.1 The Politics and Promise of Infrastructure

Prior to the infrastructure turn, traditional accounts of urban politics "often relegated infrastructure to an apolitical context or backdrop" (McFarlane & Rutherford 2008: 364).

[2] Space constraints prevent a thorough exploration of the Science and Technology Studies (STS) literature and its connections to the infrastructural turn in the social sciences here. However, it is worth briefly noting that these fields provide a distinctive perspective on the convergence of technological progress and infrastructural evolution, with this convergence argued to influence societal structures and individual experiences. For more see (Star 1999; Coutard & Guy 2007).

However, researchers working within a sub-theme of the infrastructure turn, what I will refer to here as the politics of infrastructure, argue instead that "the development of urban infrastructure is always a highly political process" (McFarlane & Rutherford 2008: 366). Rather than viewing infrastructural systems as neutral and apolitical, renewed interest in the politics of infrastructure began to position "them as *the setting and stake of social struggle*", confronting the role of infrastructure in connecting people and localities within shifting power configurations (Addie et al. 2020: 13, emphasis in original). Chattopadhyay (2012: 245) has suggested that "the economic and political importance of infrastructure is manifest in its strategic and symbolic value to the state and its populace", as infrastructures, cities, and nation states are produced and transformed together (McFarlane & Rutherford 2008). The *visibility* of infrastructure, not just upon breakdown, as Star (1999) has suggested, but in how infrastructure is made visible for its strategic and symbolic value to the state and populace, is crucial to this approach (Chattopadhyay 2012). Infrastructure is frequently made visible as a symbol of state modernity, where "infrastructures create a sensing of modernity, a process by which [one] apprehends what it is to be modern, mutable, and progressive" (Larkin 2013: 337). Infrastructures are not neutral, instead, they are "locations through which sociality, governance and politics, accumulation and dispossession, and institutions and aspirations are formed, reformed, and performed" (Appel et al. 2018: 3).

What infrastructure represents, or what Larkin (2013) has called the poetics of infrastructure, is another relevant, often political component of infrastructure. Appel et al. (2018: 19) have argued that "infrastructures are important not just for what they do in the here and now, but for what they signify about the future", as infrastructures "signal the desires, hopes, and aspirations of a society, or of its leaders." In Hanoi, the urban railway network seems to have become a signifier of modernity for some; while motorbikes and other 'outdated' modes of transport are being restricted, state discourse and development projects have become oriented towards 'modern' urban transportation ideals, such as the urban railway. Chattopadhyay (2012: 245) has further discussed the importance of infrastructure to modern nation-states, arguing that "these systems are not merely channels of economic exchange but are, by the same token, sinews of power, lines of control". Infrastructure projects, such as Line 2A and Line 3, have long promised development and progress, as these infrastructure projects signify that the nation-state is advanced and modern (Appel et al. 2018).

However, despite these promises of infrastructure, the lived realities of infrastructure frequently undermine these ideals, "revealing fragile and often violent relations between people, things, and the institutions that govern and provision them" (Appel et al. 2018: 3). This tension "between aspiration and failure, provision and abjection, and technical progress and its underbelly" reveals how infrastructures can become sites of negotiation and struggle as processes of inequality and fragmentation are produced and contested through and with infrastructure (Appel et al. 2018: 3; McFarlane & Rutherford 2008). The politics of infrastructure is particularly helpful in understanding what infrastructures signify to different groups and how they are understood, negotiated, and contested. These conceptual ideas, particularly the idea of infrastructures as sites of tension and signifiers of modernity, will guide my investigation of the impacts and perceptions of Line 2A and 3, which have been pushed as a 'modernization' project by public officials and some local residents.

2.2.2 Infrastructural Lives and Infrastructural Violence

The work of Graham and McFarlane (2015: 12) has explored infrastructure as a dimension of everyday life, where negotiations with infrastructure "are major sites of the production of the everyday". They argue that "it is when these sites break down, tear or collapse that they reveal not only the weaknesses of technology but also the fragilities of those agreements and adjustments that constitute the fabric of predictability in social life" (Graham and McFarlane 2015: 12). In his influential work on infrastructure as a force in shaping the rights of the poor in the city, Amin (2014) has argued that infrastructures are deeply implicated in not only the making and unmaking of individual lives, but also in the experience of community, solidarity, and struggle for recognition. Drawing on the work of everyday politics and centralizing everyday practices and the nuances of "living with infrastructure", these studies conceptualize infrastructure as inherently social and vital to social life, offering insight into how social and cultural practices and infrastructure are coproduced and experienced (Plyushteva 2019).

I will follow others in referring to this sub-theme of the infrastructure turn as infrastructural lives. This concept provides a framework to understand and interpret the entanglements of human and material relations through infrastructure by investigating "how people produce, live with, contest, and are subjugated to or facilitated by infrastructure" (Graham and McFarlane 2015: 2, see also Angelo & Hentschel 2015; Amin and Thrift 2017). Informed by

the concept of infrastructural lives, Plyushteva (2019: 178) has studied how passengers of the Sofia Metro in Bulgaria "not only experience particular metro service characteristics but, in so doing, continuously constitute the meanings and practices that shape the metro and the wider Sofia transport system". In attending to the everyday, seemingly mundane uses of infrastructure and how individuals live with and among them, both the "intrinsic and relational properties can be drawn upon in order to glimpse the ways in which" these systems and their socio-material assemblages shape and are shaped by the conditions and contexts in which they exist (Plyushteva 2019: 180).

Focussing on people's everyday experiences with infrastructure helps to highlight the power relations involved, including who gains access and who is excluded from these sites (Turner 2022). Infrastructural violence is a concept within the infrastructure literature that is used to demonstrate the ways infrastructures "enunciate specific configurations of power that subject the vulnerable to marginalisation, abjection, and disconnection" (Lesutis 2022: 943; Rodgers and O'Neill 2012). Infrastructural violence can take both active and passive forms; active violence occurs when infrastructures are designed to be violent, whether in their implementation or operations, while passive violence encapsulates the harmful effects that may arise from the limitations or omissions of infrastructure (Rodgers and O'Neill 2012; Turner 2022). For active violence, we can think of projects that are created to police and control marginalized or vulnerable communities, like the construction of infrastructure such as highways as 'borders' to prevent low-income residents from accessing wealthier areas with ease, as found in areas of New York and Montreal (Star 1999). Passive violence, on the other hand, is often experienced as an exclusion, as marginalized groups are 'left out' of the visions and services of the infrastructure. Passive violence is frequently experienced as the hardship and suffering that ensues from these exclusions and omissions (Gandy 2006; Rodgers and O'Neill 2012).

This conceptual approach sees interactions with infrastructure as both intimate and affective, and, by 'connecting the dots' between individuals' encounters and experiences with infrastructure, allows us to examine how infrastructural systems lay out patterns of social integration or differentiation, create feelings of belonging or alienation, connection or isolation, and lead to political engagement or lack thereof (Angelo & Hentschel 2015: 311). Specifically, I will draw on the debates in the infrastructure turn to analyse the entwinements and tensions that have arisen at different sites along Line 2A and Line 3, and to determine in what ways residents'

experiences enforce or deviate from state policies, plans, and visions of modernity. The concepts of infrastructural lives and violence will be particularly useful in uncovering the 'underbelly' of Line 2A and Line 3 – such as the accidents, displacements, and delays that accompanied the construction – and how they are experienced and negotiated on the ground.

2.3 New Mobilities Paradigm

The new mobilities paradigm has involved a shift from what has been called a metaphysics of fixity to a metaphysics of flow in the social sciences (Cresswell 2006; Novoa 2015). This paradigm originated in the early 2000s to help address and investigate the increasing number of complex everyday movements across various scales, forms, and speeds (Büscher & Urry 2009: 1). Through investigations of blocked and potential movement, research within this conceptual body of work has demonstrated how movement makes social and material realities (Büscher and Urry 2009: 1; Sheller & Urry 2006). Studies within this approach bring "together a diverse array of forms of movement across scales ranging from the body… to the globe" (Cresswell 2010: 18). It focuses "not simply on movement per se, but on the power of discourses, practices, and infrastructures of mobility in creating the effects of both movement and stasis, demobilization and remobilization, voluntary and involuntary movement" (Sheller 2018: 11). The object of study is therefore not just movement itself, or how people move from point A to point B, but how power and meaning are intertwined with movement (Sheller & Urry 2006; Turner 2020).

In this conceptual approach, time spent travelling is not seen as 'dead time' that people always seek to minimize. Instead, mobilities scholars have argued that the experience of being 'on the move', along with the meanings, practices, and symbolism embedded within this movement, are important to investigate (Sheller & Urry 2006: 213; Cresswell 2006). A central objective of the mobilities paradigm is to track "the power of discourses and practices of mobility in creating both movement and stasis" (Sheller & Urry 2006: 211). In Hanoi, where state officials have been implementing urban "plans and policies to endorse 'modern' mobilities", such as the construction of the Hanoi Urban Railway, the mobilities paradigm provides critical concepts to investigate how mobilities are managed, controlled, or arrested (Turner 2020: 2).

2.3.1 Politics of Mobility

The notion of 'mobility politics', or the politics of mobility, attempts to understand mobility in terms of difference, as it "posits that unequal relations of power shape, and are shaped through mobility" (Nicholson & Sheller 2016: 5; Adey 2006). Cresswell (2010: 19) has suggested a politics of mobility by breaking down the concept of mobility into three aspects: movement, getting from one place to another; the representations of movement that give it shared meaning; and the experienced and embodied practice of movement. As power relations produce mobility, the three aspects of mobility – movement, representation, and practices – "are implicated in the production of power and relations of domination" (Cresswell 2010: 20). Adey (2006: 84) has proposed that the politics of mobility revolves around two ideas: first, that movement is differentiated, or that power is enacted in different ways, and second, that "mobility and immobility are profoundly relational and experiential".

In order to critically engage with the politics of mobility, Cresswell (2010: 26) has suggested that the concept can be examined when the "entanglement of mobility" is analyzed through six variables: the starting point, speed, rhythm, routing, experience, and friction. Each of these variables allows us to "think about mobility in terms of material movement, representation, and practice" (Cresswell 2010: 21). Each of Cresswell's (2010) six variables have a politics to consider. For instance, the second variable, speed, "is at the centre of hierarchies of mobility", as "being able to get somewhere quickly is increasingly associated with exclusivity" (Cresswell 2010: 23), while the final variable, friction, has been used by scholars to investigate unequal mobilities, as friction "draws our attention to the way in which people, things and ideas are slowed down or stopped" (Cresswell 2014: 108; Turner 2020). The six facets of mobility put forth by Cresswell (2010: 26) are particularly useful conceptual tools to analyze movement, as each contributes to the creation of a modern mobile world, to particular kinds of mobile subject identities, and to mobile practices.

2.3.2 Mobility Justice

Sheller (2016, 2018) has put forth a mobility justice framework to understand issues of mobility and immobility with a critical lens. Mobility justice encompasses the macro, meso, and micro-scales, focusing on micro-mobilities at the bodily scale, and considers how embodied differences – such as relations of race, gender, age, disability, and sexuality – relate to larger injustices and inform uneven freedom of movement (Sheller 2019). Mobility justice questions the underlying

power structures that dictate whose mobility is arrested, and who has the right to move freely. Mobility justice, Cook and Butz (2018: 9) have argued, "entails thinking critically about the many scales of justice and their complex interactions, from individual bodies and social groups to national and transnational frames". Sheller (2016: 15) has furthered this idea, explaining that mobility exists in relation to various exclusions from public space, citizenship, and the means of mobility at all scales. By looking at "the power relations among bodies, transport systems" and urban spaces, mobility justice provides a framework to trace and make sense of uneven mobilities (Sheller 2019: 23).

Transportation infrastructure is key to mobility justice in two contradictory ways. It can extend a person's mobility capacities and options on the one hand, while also articulating "relations of social inequality by entrenching the social marginalization of those who lack access to" mobility capital (Cook and Butz 2016: 401). Wellman (2018: 76-77) has suggested that advocating for mobility justice "necessitates a more fulsome understanding and evaluation of the everyday lived social consequences of unjust transportation planning", and advocates for a focus on the inclusion of a range of groups, especially the socially marginalized, in transportation policy and planning. It is important to consider the exclusion of certain groups from transport systems, as "people's ability to access and appropriate potential transport mobility options is constrained by many factors, including residence location, knowledge of the transport system, gender, household composition, access to transport funds and physical ability" (Cook and Butz 2018: 13).

The concept of mobility justice will assist me in investigating the accessibility and usability of Line 2A and Line 3, particularly regarding what groups it serves and who it leaves behind, while the politics of mobility, particularly Cresswell's (2010) six facets of mobility, will help me in my investigation of if and how mobilities are controlled and influenced by state policies in Hanoi. I am particularly interested in the facets of rhythm and friction, as the urban railway has been put forth as a 'fast' and 'modern' form of transportation, in contrast to motorbikes, and its construction has resulted in potential conflicts between state visions and the realities of use.

2.4 Urban Spatial Politics

Scholarship on urban spatial politics focuses on the meanings and motivations behind everyday practices that are expressed in urban spaces, ranging from parks, squares, sidewalks, and alleys, and views these spaces as fertile grounds for the expression of politics (Bayat 2013: 13; Kerkvliet 2009; Lefebvre 1991; Scott 1990). Urban spaces are conceptualized as "not only where people express grievances, but also where they forge identities, enlarge solidarities, and extend their protest beyond their immediate circles to include the unknown, the strangers" (Bayat 2013: 13). Within this broad area of study, I focus on three concepts: urban citizenship, everyday politics, and street politics to investigate how, in cities such as Hanoi where "the state maintains control over avenues of popular political participation and regulates the political discourses in the city", urban citizens navigate and make claims to controlled urban spaces, such as Lines 2A and 3 and the areas around it (Lam-Knott 2020: 94).

2.4.1 Urban Citizenship

Zhang (2002: 313) has defined urban citizenship as "the package of rights and entitlements associated with legal residency in the city". The concept of urban citizenship is closely related to that of the right to the city, and both concepts "have gained prominence as cities have become salient sites for contesting rights" (Swider 2015: 703). Marcuse (2009: 190) has helpfully defined the right to the city as "an exigent demand by those deprived of basic material and existing legal rights, and an aspiration for the future by those discontented with life as they see it around them". The right to the city is not simply an individual's liberty to access urban resources, rather, it is a common "right to change ourselves by changing the city", since the transformation "inevitably depends upon the exercise of a collective power to reshape the processes of urbanization" (Harvey 2008: 23). As Gillespie and Nguyen (2019: 978) have suggested, a core dimension of urban citizenship is political participation, which is "concerned with local democracy and the associated values of accountability, representation and trust". In some ways, then, urban citizenship can be seen as one of the 'goals' of the right to the city, as people struggle "to exist, to become part of the city and have a secured place" (Swider 2015: 704). However, a significant amount of the literature on urban citizenship focuses on liberal democracies, with fewer studies focusing on "how citizens struggle to influence urban governance in transitional states, such as China and Vietnam, which are shifting from socialist to emergent market forms of urbanism" (Gillespie and Nguyen 2019: 978).

Gillespie and Nguyen (2019), who have analyzed urban citizenship in the non-democratic state of Vietnam, state that "urban citizenship strives for open discussion and debate about how citizens can influence and oppose the reach of the state over urban spaces". Studies from non-democratic contexts, such as Zhang's (2002) study of urban and rural citizenship in China, have demonstrated how urban citizenship is not only related to democratic rights, but also "new practices, identities, and claims-making", as these "practices have to do with the production of 'presence' by those without power and a politics that claims rights to the city" (Sassen 2002: 285; Swider 2015: 704). In her work with street artists in Indonesia, Lee (2013: 307) has defined urban citizenship as the notion that a place is "my city" or "our city". This understanding of urban citizenship, where individuals feel engaged in the politics of self-expression and the creation of the city is of particular interest. Nguyen and Gillespie (2019: 979) have further expanded the idea of urban citizenship to "explain how citizens might claim a right to participate in urban governance by transgressing and expanding the boundaries of the possible, acceptable, and representable". In Vietnam, urban spaces such as parks and streets are the arenas in which the "demands for urban citizenship are expressed and become visible" (Nguyen and Gillespie 2019: 979). To understand the ways in which these demands for urban citizenship are expressed and the kinds of tactics residents engage in to claim their rights to the city, we must pay attention to their small-scale, everyday actions in and uses of urban space.

2.4.2 Everyday Politics and Street Politics

Two similar, yet distinct, concepts are useful in the analysis of the politics of everyday actions in urban space; the first is that of everyday politics, made popular by James C. Scott (1985) in *Weapons of the Weak*; and the second is Asef Bayat's (2013) concept of street politics. First, it is important to show how both everyday politics and street politics differ from *official* politics, or what one might think of when they consider a political act, such as a strike or protest (Bayat 2013; Scott 1985). Contrary to official politics, both everyday and street politics involve "little or no organization, [are] usually low profile and private behaviour, and [are] done by people who do not regard their actions as political" (Kerkvliet 2009: 232). Both street politics and everyday politics are enacted by urban subjects who structurally lack institutional power of disruption, either due to their status in society or a repressive socio-political context, such as the socialist state of Vietnam, a "responsive-repressive party-state" (Kerkvliet 2019: 6; Bayat 2013). Before

focusing specifically on each of these two concepts, it is important to note that everyday politics, though useful and often used in urban geography, is initially rooted in the study of rural peasant societies (Scott 1985), while the concept of street politics was formulated from the study of urban, Middle Eastern contexts (Bayat 2013). These concepts will inform my analysis of the way locals navigate and negotiate the impacts and new urban spaces of Line 2A and Line 3 and help me investigate whether any acts of resistance are practiced and for what purposes (Bayat 2013).

Everyday politics involves "people embracing, complying with, adjusting, and contesting norms and rules…. in quiet, mundane, and subtle expressions and acts" (Kerkvliet 2009: 232). It involves citizens reclaiming politics in ways that stretch far beyond the formal political system (Boyte 2005). Everyday forms of politics are enacted by subordinate groups and include "support, compliance, modifications and evasions, and resistance" (Kerkvliet 2009: 233). Within everyday politics, Scott's (1990: 4) notions of public and hidden transcripts offer insight into how individuals in subordinate positions may modify their behaviour to align with the "hegemony of dominant values". The public transcript refers to the way subordinates act, behave, and interact with those who dominate, and this public transcript is "shaped to appeal to the expectations of the powerful" (Scott 1990: 3). The hidden transcript, however, lurks beneath the surface of these public performances, and "represents a critique of power spoken behind the back of the dominant", consisting of "those offstage speeches, gestures, and practices that confirm, contradict, or inflect what appears in the public transcript" (Scott 1990: xii, 4).

Bayat (2013) has suggested that urban public space serves as the key theater of contentions, with public spaces such as the street being the arena for those that lack institutional power to communicate their thoughts and desires. This active use of public space by subjects – "who, in the modern states, are allowed to use it only *passively*" – is a crucial dimension of street politics (Bayat 2013: 12, emphasis in original). As "urban inhabitants appropriate city streets and sidewalks, navigating the physical space of the city in the course of their daily lives and reshaping it to meet their needs and ends", they are engaging in street politics (Hanser 2016: 364). Bayat (2013: 15) has called these actions of the urban dispossessed – specifically the appropriation of urban spaces – nonmovements, or the "quiet encroachment of the ordinary", as they "encapsulate "the discreet and prolonged ways in which the poor struggle to survive and to better their lives by quietly impinging on the propertied and powerful, and on society at large".

Practices of everyday encroachments allow urban subjects to "inscribe their active presence in the configuration and governance of urban life, asserting their "right to the city" (Bayat 2013: 16; Lefebvre 1991). There are three key features of nonmovements, when focusing on the quiet encroachment of the ordinary: first nonmovements tend to be quiet and action-oriented, rather than ideologically driven; second, nonmovements are "not a politics of protest, but of practice, of redress through direct and disparate actions"; and third, nonmovements are "merged into, indeed are part and parcel of, the ordinary practices of everyday life" (Bayat 2013: 20).

As there are many similarities between everyday politics and street politics, especially Bayat's (2013) idea of nonmovements and Scott's (1989) idea of everyday forms of resistance, it is important to differentiate the two. While their "key similarity pertains to the largely individual (rather than collective) nature" of these practices, nonmovements *do*, when appropriate, get involved in collective resistance, and can even turn into organized social movements, while a central tenet of everyday resistance excludes more overt or obvious acts of resistance, such as attending open protests or engaging in civil disobedience (Bayat 2013: 20; Scott 1989: 34). These concepts will inform my investigation of how different groups in Hanoi navigate and negotiate the new controlled urban spaces Line 2A has created, and the spaces Line 3's construction will likely create.

2.5 Chapter Conclusion

In this chapter, I developed the conceptual framework that supports my data collection and analysis. In Section 2.2, I demonstrated how my study draws on aspects of the infrastructure turn literature to interpret how people are impacted by and living with Line 2A and Line 3. The promise and politics of infrastructure will guide my analysis of the narratives of progress and modernity embedded within these infrastructure projects, while the concepts of infrastructural lives and violence will help me untangle the lived, often violent, implementations of the two Lines. In Section 2.3, I defined key concepts in the mobilities paradigm, focussing on the politics of mobility and mobility (in)justice. Two of the six facets of the politics of mobility, rhythm and friction, will guide my investigation of whether Line 2A's opening has impacted the everyday mobilities of Hanoi residents, either through the changing of rhythms or the stopping or slowing down of certain residents and modes of transit deemed 'unmodern'. The literature on urban spatial politics, outlined in Section 2.4, will guide my investigation of how residents are

responding to the infrastructural politics of the two new railway lines and the new urban spaces these projects have created. Finally, I will draw on concepts from the urban citizenship literature and everyday and street politics to untangle the different tactics residents may utilize to use and appropriate the new urban spaces along Line 2A. In the following chapter, I move on to characterize the context for the construction of Line 2A and Line 3 in Hanoi, Vietnam.

Chapter 3 Research Context

3.1 Introduction

In this chapter, I lay the contextual foundation for understanding the processes that have led to the construction of Line 2A and Line 3, as well as the impacts the lines have had on the surrounding environment. First, in Section 3.2, I detail key mobility trends, focusing on the rise of the motorbike, the relative demise of public transport, and the state's promotion of 'modern' mobilities. In Section 3.3, I provide an in-depth overview of the delays and setbacks that have riddled the construction and operations of Line 2A, focusing on three key concerns: problems with land acquisition; controversial tree-fellings; and serious accidents around construction sites. I end with a brief portrait of Line 3 in Hanoi.

3.2 Hanoi's Mobility Landscape

3.2.1 Mobility trends: The Rise of the Motorbike

Prior to the late 1980s, the main mode of transport in Hanoi was the bicycle, with this mode maintaining popularity until the late 1990s. In 1995, the bicycle still accounted for 47 percent of travel (Musil & Molt 2010). However, by the year 2008, the bicycle modal share had dropped to a meagre three percent (Musil & Molt 2010). This fall of the bicycle can be explained by the rise of the motorbike. Since *Đổi Mới*[3], motorbikes have been the main form of transport in Hanoi (and throughout Vietnam), with this mode accounting for more than 80 percent of total annual trips in the city (Hansen 2015; Petsko 2016). The wealth accumulation that came with the liberalization of the private sector meant that many urban citizens were able to afford the predominantly 100-120 cc motorbikes that were either imported or assembled locally (Labbé 2010; Musil & Molt 2010). Since its first introduction in Hanoi during the subsidy era, the "two-wheel vehicle has become a symbol of high personal mobility, an asset value, and one of the most convenient means of transportation in a city the urban fabric of which is dominated by narrow alleys" (Labbé 2010: 21; see also Hansen 2015; JBIC 1999).

The road network in Hanoi represents less than seven percent of the land area – compared to about 15 percent and 11 percent in many European and Chinese cities, respectively – making

[3] The implementation of economic reforms from the mid-1980s, known collectively as *Đổi Mới*, facilitated Vietnam's re-entrance into the world trade economy and opened the country to foreign direct investment, shifting Vietnam in the direction of a market-oriented economy, while socialist political structures remained (Drummond 2000; Geertman and Le Quynh 2010).

motorbikes the ideal vehicle to navigate the city's urban form (Labbé 2010). Nonetheless, car ownership has also been steadily increasing since the 2000s (Pham 2017). Presently, there are approximately 5.7 million motorbikes and 700,000 cars on the streets of Hanoi, with the city said to have more motorbikes than households (Nguyen 2021; Petsko 2016). The dependence on motorbikes in Hanoi, along with the increasing number of cars on the streets, has led to high levels of congestion and pollution, with studies naming Hanoi among the worst in Asia for the latter (Hansen 2015; Musil & Molt 2010). Traffic jams also plague Hanoi and the dominance of motorbikes, as well as the ever-increasing numbers of cars and trucks on the roads, and the poor pedestrian infrastructure in many parts of the city make crossing the street as a pedestrian an arduous exercise (Hansen 2015; Labbé 2010). Despite the logic of moto-mobility in Hanoi, the vehicle "plays a central role in giving Vietnam among the highest number of traffic casualties in the world", and a lack of efficient public transportation leaves few alternatives for traffic-weary Hanoi commuters (Hansen 2015; Nguyen & Nguyen 2021; Short and Pinet-Peralta 2010).

3.2.2 Mobility Trends: Public Transport

Hanoi has the highest proportion of private transportation and the lowest use of public transportation of all Asian capitals (Labbé 2010). However, this was not always the case. Although the motorbike now reigns supreme on Hanoi's streets, the city was once well known for its tramway and trolley bus service (Musil & Molt 2010). Prior to *Đổi Mới*, public transportation played a significant role in the mobility landscape of Hanoi, with the modal share of buses accounting for 25 to 30 percent in the early 1980s (JBIC 1999; Labbé 2010). In the 1990s, subsidies for state-owned enterprises were curtailed following the reforms and restructuring program, and subsidies for the Hanoi Bus Company dried up (Labbé 2010; Musil & Molt 2010). Around the same time, spare parts from suppliers in the Soviet bloc for buses became less available and the Vietnamese government launched a substitution policy for motorcycle manufacturing in Vietnam that provided incentives for foreign direct investment, liberalizing the motorcycle market (Hansen 2015; Musil & Molt 2010). This allowed Japanese and Taiwanese giants such as Honda, Yamaha, Suzuki and Sanyang to establish businesses in the country, thereby getting around import quotas and making motorbikes much more accessible in the capital (Hansen 2015).

Local authorities were "unable to keep up with provision of public transport to fulfil the transport needs of an increasingly mobile and rapidly growing urban population", and the city's public transportation nearly collapsed entirely (Hansen 2015: 7; Labbé 2010). In the late 1980s, public transport ridership dropped from around 40 million per year to almost nothing (Labbé 2010). This trend continued until the national government launched a plan in 2002 that prioritized public transportation over other urban concerns (HAIDEP 2007). The plan aimed to establish new bus routes, expand the vehicle fleet, and introduce bus shelters and passenger information schemes, thereby reviving the nearly extinct bus system (HAIDEP 2007; Labbé 2010). This was a massive success – in 2003, just one year after the launch "ridership was more than three times as high as during the peak year of the 1980s" (Labbé 2010: 24).

Yet, despite a dramatic increase in bus ridership from 1.2 million monthly trips in 2001 to over 24 million monthly trips in 2006, public transport still only accounts for 10 percent of total trips in the city (Labbé 2010; Petsko 2016). In recent years, Hanoi has deployed several mass rapid transit routes such as the Bus Rapid Transit (BRT), discussed further below (Nguyen & Nguyen 2021). These initiatives, as well as the construction of the urban railway, are crucial if Hanoi is to achieve the targets set by the national government that call for 50 to 60 percent of trips in 2020 be carried out by public transportation – a target that has yet to be met (HAIDEP 2007; Labbé 2010; Petsko 2016).

3.2.3 Hanoi's Urban Railway & 'Modern' Mobilities

The implementation of a comprehensive and sustainable public transportation system in Hanoi composed of urban railway lines and dedicated bus lanes has been a priority since the early 2000s (Musil & Molt 2010). Geared towards improving traffic and reducing air pollution, Hanoi's Master Plan 2030-2050 sees public transport taking on 55 percent of the city's needs by 2030 (Hodal 2017). The first Bus Rapid Transit (BRT) route, financed by loans from the World Bank, launched in 2016 and cost US$53.6 million (Nguyen 2017). Although the project was expected to reduce traffic congestion and the number of personal vehicles in the city, Hanoi's BRT project has been called a "major failure" (Nguyen 2017; Van 2021). The BRT lanes account for one third to half of most lanes, exacerbating congestion for other road users (Nguyen 2017). Without the presence of traffic police and enforcement of traffic laws, the priority lanes are often occupied by private vehicles, making the buses unable to run at the designed speed

(Van 2021). While proponents of Hanoi's BRT network promised it would cut travel times in half, many do not believe this will ever be achieved due to the challenges of keeping the lanes free (Nguyen 2017).

In 2008, the construction of an urban railway network was approved by the Prime Minster as part of an overall transit development plan to improve Hanoi's public transportation network and reduce traffic overload while boosting the city's socio-economic development (Leducq & Scarwell 2018; VNA 2022). The urban railway network will consist of eight lines with a total length of 318km (see Figure 3.1) (Leducq & Scarwell 2018; Nguyen & Nguyen 2021). Currently, only two lines have been or are under construction: the Cát Linh - Hà Đông Line, or Line 2A, which is completed, and Line 3 or the Nhổn - Hà Nội Line, still under construction as of 2023. Each line is also funded and constructed by agencies from different countries, with Line 2A financed and constructed by China and Line 3 by France and South Korea. Interestingly, station and carriage design also vary between the two lines due to these different contractor choices (see Figure 1.1 for Line 2A's train design and Figure 3.2 for Line 3's).

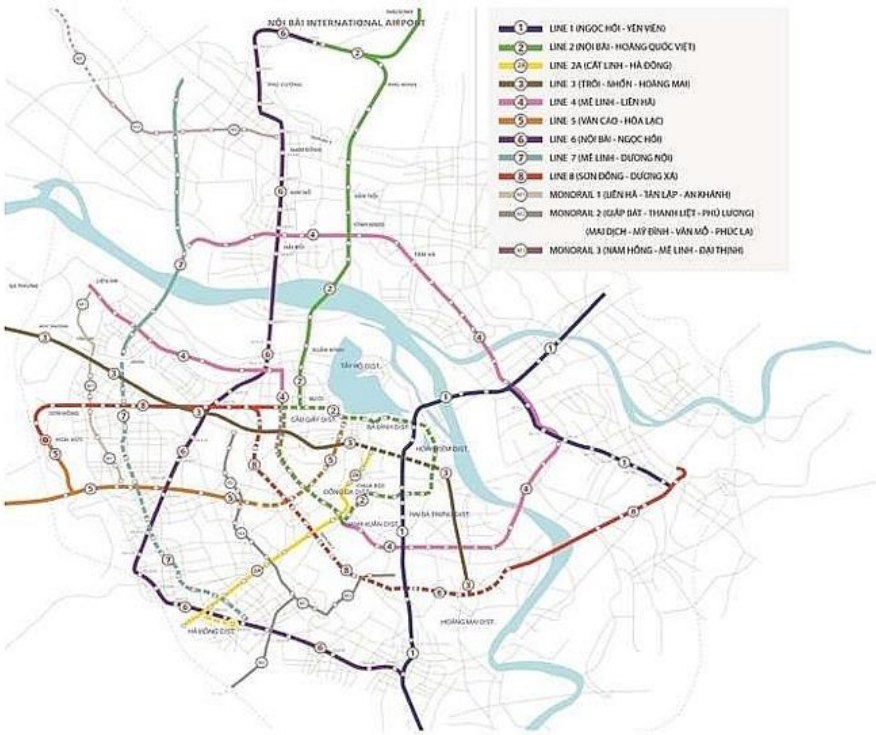

Figure 3.1 Hanoi's Urban Railway System (Line 2A in yellow, Line 3 in brown)
Source: Vietnam Investment Review 2019: online

The construction and operations of Line 2A, which opened in November 2021 after nearly ten years of delays, will be discussed in depth in Section 3.3. The second railway project, Line 3, will be discussed in Section 3.3.4. On top of the construction setbacks, the railway has been critiqued for its poor connectivity between platforms and other transportation nodes, particularly 'soft' modes of transport such as pedestrian paths and buses (Leducq & Scarwell 2018). Although this has left many questioning the convenience and accessibility of the costly project, the construction of the urban railway is expected to increase the number of people using public transport, contribute to regional economic development, and reduce traffic congestion and air pollution in the city (Leducq & Scarwell 2018).

The BRT and urban railway are two projects that exemplify the Vietnamese state's promotion of 'modern' mobilities in Hanoi. These 'ideal' means of transportation are being prioritized while "so called 'traditional' means of moving around the city such as motorbikes, bicycles, or cyclos are being strongly discouraged and increasingly marginalised" (Turner 2020: 1). For example, despite the dependence Hanoi residents have on motorbikes for their everyday mobility, officials are working towards implementing a ban on motorbikes by 2030 in the city's core districts (BBC 2017; Turner 2020). Perplexingly, cars are to be exempt from the ban. In fact, in conjunction with public transport, cars and taxis are being *promoted as replacements* for the motorbikes (Hodal 2017). This, along with the rising levels of car ownership in the country, make it likely that congestion will not ease by 2030, but worsen (Hansen 2015; Hodal 2017). Experts have cautioned that, without sufficient public transport infrastructure, the motorbike ban in Hanoi could turn into a repeat of Myanmar's ban, which caused the number of personal cars to skyrocket and worsened congestion (Loan 2021). Despite these warnings about the lack of public transport infrastructure to satisfy demand, the Hanoi People's Committee announced in 2021 that they are now aiming to ban motorcycles by 2025, five years earlier than the initial plan (Loan 2021). Motorbikes are failing to fit the state's modern urban transportation ideals, and therefore getting left behind as Hanoi attempts to transform itself into a 'green, cultured and modern' capital city (HUPI 2015; Musil & Molt 2010; Turner 2020).

3.3 Portraits of Line 2A and Line 3

3.3.1 Portrait of Line 2A or the Cát Linh – Hà Đông Metro Line

In 2011, construction began on the first line of the Hanoi Urban Railway System, Line 2A, or the Cát Linh – Hà Đông Metro Line. This elevated railway consists of twelve stations stretching over

13km, connecting Cát Linh in north-central Hanoi and Hà Đông in the southwestern suburbs of the city (Leducq & Scarwell 2018; Rogers 2008). Line 2A was financed through concessional loans from the Export Import Bank of China, with Vietnam borrowing $670 million – or 77 percent of the total cost of the Line – over three separate loans (Guild 2021; Finney & Vu 2021; Rogers 2008). China Railway Sixth Group, a subsidiary of the state-owned China Railway Group – currently the second-largest construction firm in the world – was contracted for the construction of Line 2A (Rogers 2008; Peel 2016).

Public skepticism surrounding Line 2A's contractor choice has been high in Vietnam, with some Vietnamese critics even suggesting that Chinese contractors purposefully submitted low bids to offload old and cheap technology into Vietnam, citing Line 2A's delays as proof (Ha 2014; Quan 2014). Unfavourable comparisons have been made between Chinese-built Line 2A and South Korean-built (and France-funded) Line 3, with critics arguing that China is using investments to push a diplomatic and political agenda (Finney & Vu 2021). Some fear that Vietnam will see its sovereignty undermined if the country falls into debt traps that leave them beholden to the Chinese state, while others are more concerned with the safety and usability of the Line following the controversial construction. Many hurdles and conflicts delayed the opening of Line 2A, including multiple serious accidents, the cost increasing by 57 percent beyond the original estimate, and the failure of eight of the ten safety procedures during test runs (Finney & Vu 2021; Nguyen 2021; Loan 2021). Despite these setbacks, Line 2A officially opened on November 6th, 2021, making it the country's first operational metro line, and was praised as a dream come true by the Vietnamese official media. For the first 15 days of operation, the metro was free to ride and large crowds flocked to the stations to experience the country's first metro for themselves (Loan & Hai 2021).

3.3.1.1 Land Acquisition and Displacement

Despite the project first breaking ground in 2011, the acquisition of all the land for Line 2A took until May 2015. Importantly, this required the clearing of approximately 100 hectares of land and the relocation of nearly 2000 households in three districts: Đống Đa, Thanh Xuân, and Hà Đông (Doan Loan 2021). In Hà Đông District alone, the location of one of the two terminuses, the area of land 'recovered' for the project was 37.8 hectares, requiring the displacement of 1198 households and 22 other businesses and organizations (Tuyet 2014). Site clearance for the Line

was divided into three phases and required the acquisition of land for the construction of the stations and the paths to the station (Tuyet 2014). The land acquisition process began with land that was managed by government departments and agencies before officials moved on to process site clearance and resettlement for other land users (Law News 2009). On August 15, 2014, at which time 1191 of the 1198 households and 21 of the 22 organizations had received compensation and handed over their premises, the People's Committee of Hà Đông District held a conference to approve their plan of forced land recovery for cases of non-compliance (Kinhte & Dothi 2014).

It is unclear from media sources what compensation and resettlement options the households and organizations whose land was acquired for the construction of Line 2A were offered.[4] Urban development in Vietnam has been criticized in the past for the low compensation offered during the land acquisition process, as well as for the use of force to evict non-consenting tenants (Han & Vu 2008; Harms 2016). The compensation for compulsory land acquisition in Vietnam is often determined according to a price framework that is a close match to the market price, however in practice compensation is often far below market value (The Economist 2013; Han & Vu 2008). In fact, according to a survey led by the World Bank, land administration is viewed as Vietnam's second-most corrupt bit of public life, and land grievances dominate complaints sent to the central government (The Economist 2013). Landownership remains in the hands of the state in Vietnam, however, since the passing of new land laws in the late 1980s and early 1990s, land users have been granted the right to lease, transfer, and mortgage their land (Han & Vu 2008: 1102). However, the practical application of these rights is often difficult and murky, as almost 90 percent of urban households do not have land certificates (Quang and Kammeier 2002). These factors, along with the corruption of local officials, make the process of land acquisition complicated and long, as illustrated by the case of Line 2A.

3.3.1.2 Tree-Felling

After acquiring the necessary land, another contentious event affected the public's perception of Line 2A's construction: the felling of ancient mother-of-pearl trees along Nguyễn Trãi Street (Duan & Duong 2015). Hanoi's Department of Construction argued that the cutting of more than 400 trees was necessary to ensure the safety of the elevated railway as in some sections the trees

[4] Compensation processes are explained in Chapter 5, as described by interviewees who had been affected.

were only 14m away from the Line (Nam 2015; Hung 2015). However, this decision was met with anger from local residents who were appalled by the removals. Several residents were quick to pick up the irony of the Master Plan's discourse of 'greening' Hanoi while state officials were actively felling trees in the city centre and replacing them with concrete pillars (Phu 2017). Concerns regarding the legality of the tree felling were also raised, as felling trees was not recorded in the construction plan for Line 2A or the initial Environmental Impact Assessment. According to the Law on Environmental Protection and Law on Investment, trees are only allowed to be cut under specific conditions (Duan & Duong 2015). The public outcry in response to the tree felling along the Cát Linh – Hà Đông railway line took place in the same year as the "6,700 people for 6,700 trees" movement in Hanoi (Clark 2015). In that case, Hanoi authorities had planned to cut down 6,700 trees, however, before they could begin the tree-felling, Facebook protest groups emerged, including the famous "6,700 people for 6,700 trees" that accrued over 55,000 likes, and a public protest of 500 people (Clark 2015; Gillespie and Nguyen 2019). Officials halted the felling of the 6,700 trees in response to the public outcry, however, in the case of Line 2A, the trees were still cut down (Saigoneer 2015). In September 2016, new trees were planted directly under the Cát Linh – Hà Đông railway line on Yên Lãng Street in Đống Đa District, causing confusion as it was only one year prior that the nearly 500 trees were cut down due to the alleged dangers of having trees too close to the railway (Phu 2017). It is possible that these new trees were a part of the Mayor of Hanoi's initiative to plant a million trees in five years to replace those that were cut down to construct highways, stations, and the elevated railway (Leducq & Scarwell 2018).

3.3.1.3 Accidents

Several serious accidents took place over the course of the construction of Line 2A, causing fear and safety concerns regarding the Line. On November 6th, 2014 – exactly seven years before the Line 2A's official opening – a crane dropped a steel rod from the construction site on to the road below, killing a motorbike rider and injuring three others (Vietnam Net 2015). Construction was halted until November 14th, but just over a month after resuming construction, scaffolding under the construction site at Hà Đông Station collapsed while workers were pouring concrete (Parameswaran 2015; Vietnam News 2016). The fallen debris damaged a taxi with four people inside and seriously injured nine construction workers (Vietnam News 2016). The following

summer, on August 25, 2015, a 2.5m steel bar fell onto a car on Hà Đông's Quang Trung Street. Although none of the passengers were injured, Hanoi authorities ordered a halt to the construction work (Vietnam News 2016). Construction workers also caused a small fire while welding scaffolding, injuring several motorists on the street below (Thanh Nien News 2015). A final accident took place at the Văn Quán Station construction site when a 19-year-old construction worker fell 5m and sustained a fatal head injury (Vietnam News 2016).

The Deputy Head of the Ministry of Labour, Invalids and Social Affairs' Safety Department said the accidents had been due to poor safety management and violations in the use of lifting equipment (Vietnam Net 2015). Meanwhile, Vietnam's Transport Minister at the time, Đinh La Thăng[5]**,** called the project the worst in Vietnam and demanded the Chinese contractor replace their consultants and subcontractors with locals. He also publicly criticized the Chinese contractors and stated, "We cannot trade [Chinese] loans for Vietnamese lives" (Parameswaran 2015; Vietnam Net 2015). Labour inspectors detected nearly 10,000 labour violations at the construction sites, which resulted in fines of hundreds of billions of Vietnamese *đồng* (Vietnam Net 2015). In 2015, it also came to light that the Chinese contractors had violated a number of rules regarding wage and insurance payments, with many workers receiving only VND 3 million (US$130) a month, which is 3.2 percent below the official minimum wage for workers in Hanoi (Hang 2015).

3.3.1.4 Operations

Following the Line's opening on November 6th, 2021, statistics on ridership have varied. On the second day of the Line's operations, during the 15-day period during which it was free to ride, there were 54,000 passengers (Hai & Chieu 2021). However, since the end of the free period, Western-funded media have reported the number of passengers to be approximately 12,000 per day, equivalent to 60 people per trip, or 8 percent of capacity (VOA News 2021). Vietnamese and Chinese media sources have disputed these reports of low ridership, with Chinese media sources arguing that reports of low ridership are simply the Western media's demonization of any project in which China or Chinese firms participate (Global Times 2021). Reports of a public boycott of the Line due to its ties with China were also briefly reported, although these claims

[5] In 2018, Đinh La Thăng became the first top Party official in decades to be tried and sentenced to prison for corruption. His major involvement in a high-profile corruption case resulted in a 10-year prison sentence (Tuoi Tre News 2021, online).

were never confirmed and are highly disputed (Thaiger 2021; Dan 2021). Either way, the media has reported that many Hanoians are reluctant to make the metro their main means of daily commute, as the motorbike remains more convenient and affordable (Nguyen 2021).

Although a single fare costs between VND 8000-15,000 (US$0.35-0.66) and an unlimited day pass costs VND 30,000 (US$1.3), the 'last mile'[6] has been described as unaffordable (Loan 2021; Nugyen 2021; Nhan Dan 2021). The metro's limited connectivity and designated parking spaces require passengers to pay for ride-hailing trips to and from the station, significantly increasing the cost (Loan 2021; Nguyen 2021). With the further delays to the opening of Line 3, the convenience of Line 2A is further called into question. The expectation that Line 2A will transform the modal share of Hanoi increasingly seems unreasonable, as it takes a network of metro lines to radically solve traffic issues, not just one (Nguyen 2021).

3.3.2 Brief Portrait of Line 3 – Nhổn - Hà Nội

Line 3, or the *Nhổn - Hà Nội* Line (also referred to as the *Văn Miếu* Line), began construction in 2009 and was initially slated for completion in 2015, and then delayed further until 2022. The full opening has now been pushed back until 2027, with the elevated section set to begin operations in Spring 2024 (Vo 2023, online). This has left Line 2A as the only operational line for three years since its opening in 2021, with Line 2A remaining the only fully operational line until the opening of Line 3's underground section, supposedly in 2027 (Vietnam News 2022). Line 3 is a joint venture between several French and South Korean companies; South Korean construction firm Daelim Industrial Co. won the bid to construct the elevated section and South Korea's Hyundai Engineering and Construction will be constructing the underground leg, with the help of the Italian company Ghella. Two French companies, Systra and Alstom, will also be supervising the construction and design of the stations and train carriages (see Figure 3.2 for Line 3 train) (Onishi 2022, online). Financing of the Line is provided by Hanoi's municipal budget, the Asian Development Bank, the European Investment Bank (EIB), the French Development Agency (AFD), and the French government (Asian Development Bank n.d., online).

[6] First-and-last mile connections describe the first leg of a trip from a starting point – often one's home or workplace – to a public transport station. The lack of planning given to improving this connectivity to Line 2A has been consistently criticized, for example the lack of motorbike parking at all but the first and last stations, confusing or non-existent bus connections, and poor pedestrian infrastructure.

The Line will span 12.5 total kilometres and 12 stations, with 8.5km and eight stations above ground and 4km and four stations underground (Ta and Vo 2022, online). As of September 2023, the Hanoi Metropolitan Railway Management Board has reported that 76.5 percent of the Line is complete, with the elevated section nearing 99 percent completion and the underground section between Kim Ma and Hanoi station only 33 percent complete (Hong et al. 2023, online). Line 3's costs have also ballooned since the project began, with costs rising from an initial estimate of around $1.2 billion to nearly $1.5 billion (Vo Hai 2022, online). As was the case with Line 2A, the delays have been partly attributed to land clearance issues, with some areas taking up to six years to clear for construction (Hong et al. 2023 online). The land clearance for Line 3 has been particularly challenging around the underground sections of the Line, where both houses and underground infrastructures – including electrical, water, and telecommunication systems – must be cleared (Hong et al. 2023, online).

Figure 3.2 Line 3 train during test runs on elevated section
Source: VN Express 2023: online

3.4 Chapter Conclusion

In this chapter, I illustrated how state plans are trying to propel an urban mobility transition in Hanoi, with the improvement of the city's public transportation network – particularly the urban railway lines – fundamental to this new vision for Hanoi. I outlined key trends in Hanoi's mobility landscape over the last 30 years, paying specific mind to the rise of the motorbike in the 1990s and the recent prioritization of 'modern' mobilities such as cars and the urban railway. Finally, I provided portraits of Line 2A and Line 3's construction, both fraught with delays and rising costs, and the former's operations to contextualize the impacts, perceptions, and uses of these projects.

Chapter 4 Methodology

4.1 Research Methods

In order to address my aim and research questions, I conducted four months of qualitative fieldwork in Hanoi from July to November 2022. In the pre-fieldwork planning phase of my research, my supervisor and I determined that I would conduct an ethnography along the length of Line 2A and utilize a multi-method approach to best address my study's research questions (see Section 1.2). I employed four qualitative methods along Line 2A: semi-structured interviews, photovoice, questionnaires, and ethnographic filmmaking. Several weeks into my fieldwork – upon the realization that I was renting an apartment in one of the construction zones for Line 3 – my supervisor and I decided to add a second study site, Alley X, where I carried out additional semi-structured interviews and ethnographic filmmaking. In this chapter, I outline each of the methods I employed: semi-structured interviews (for both Line 2A and Line 3) in Section 4.1.1, photovoice in Section 4.1.2, surveys in Section 4.1.3, and ethnographic filmmaking in Section 4.1.4. In Sections 4.2 and 4.3, I describe the sampling and analysis strategies that I followed for all four methods. I conclude the chapter in Sections 4.4 and 4.5 with a discussion of ethical considerations and me and my interpreters' positionalities within the research context.

4.1.1 Semi-Structured Interviews

The main method I employed was interviewing, as this method relies on words and meanings and allows researchers to "investigate complex behaviours and motivations" in ways that data from other methods, such as quantitative methods or observations, cannot (Dunn 2021: 150; Valentine 2005: 111). I chose to employ semi-structured interviews for the balance between structure and flexibility, as this approach allows for deviation from the set of predetermined questions when appropriate towards a more unstructured, conversational approach (Valentine 2005).The interview guides I had prepared before fieldwork – one for participants who work near the Line, and another for those who live near it – were translated into Vietnamese with the help of my interpreter, and minor revisions to questions were made based on my interpreter's suggestions. My interviews were often broadly structured by these guides, however, I spoke with many of my participants in a more unstructured or conversational style to follow up on other experiences or perspectives that they had brought up.

I conducted 74 semi-structured individuals, with the help of two interpreters, with individuals who live or work alongside the length of Line 2A (see Table 4.1) and seven interviews with individuals who live or work in an alley along the path of Line 3 (see Table 4.2), for a total of 81 interviews. Interviews were conducted along the length of Line 2A and we divided our interview locations by the Line's 12 stations, interviewing between four and nine individuals within 500m of each station. The seven interviews conducted along Line 3 were often less structured and more conversational when compared to those along Line 2A due to my proximity to the interviewees, as further discussed in Section 3.2 on sampling.

Table 4.1 Interviews along Line 2A by station

Station Name	*Interviews*
Cát Linh	7
La Thành	9
Thái Hà	6
Láng	7
Thượng Đình	6
Vành Đai 3	7
Phùng Khoang	6
Văn Quán	5
Hà Đông	6
La Khê	4
Văn Khê	5
Yên Nghĩa	6
Total interview	74

Table 4.2 Interviewees in the case study site by Line 3 – Alley X

Name (Pseudonym)	**Occupation**	**Gender**	**Age**
Ms. My	Rents and runs café	Female	40
Ms. Lu	Café worker	Female	20
Mr. Ong	Retired	Male	82
Mrs. Hoang	Tailor & Landlord	Female	53
Mr. Hoang	Undisclosed & Landlord	Male	60
Ms. Hoang	Student	Female	22
Ms. Ta	Juice seller	Female	53

4.1.2 Photovoice

Photovoice, also referred to as auto-photography, is a visual method that uses photography to "promote an effective, participatory means of sharing expertise and knowledge" in the research

process (Wang & Burris 1997: 369; see also Johnsen et al. 2008). This method involves giving participants cameras to photograph and record sites that are significant to them, and then using these photographs as catalysts for discussion and analysis. Rather than having participants "stand as passive subjects of other people's intentions and images", photovoice gives cameras to participants so they may record, represent, and catalyze change in their own communities (Wang & Burris 1997: 371). Despite the powerful possibilities of this method, Shankar (2016) has highlighted two key critiques that serve as reminders of why researchers must approach photovoice critically and with care, especially regarding the circulation of the images and their potential effects. These include how this method can reinvigorate the positivist assumption that images (or any data) can offer an entirely 'true' or 'authentic' look into the lives and experiences of communities, and that these images can be co-opted by neoliberal empowerment rhetoric (Shankar 2016).

I conducted a photovoice project with seven Hanoi residents who either live or work near the Line to investigate how they navigate and negotiate the Line and its neighbouring environments. Five of the seven photovoice participants were youth (24-29 years old) and two were informal workers above the age of 50. Through this approach, I was interested in seeing how individuals interact with and perceive of Line 2A, and how the spaces and the way participants use them may have changed throughout Line 2A's construction. For each of the seven participants who participated in the photovoice activity, the following prompt was given:

> I am studying the impacts of the urban railway and how people feel about it, in Hanoi. I'm interested to see how you interact with and perceive of Line 2A and its surrounding environments. I am also interested in how you navigate these environments, and how these spaces and the way you use them have changed over the course of the Line's construction. I would like to explore these ideas by getting you to take about 8-10 photos of up to six places around Line 2A that you use in daily life – either areas you like, dislike, or are drawn to or try to avoid for any reason. I would then like to do a short follow up interview with you about your chosen photos. If a place no longer exists, please take a photo of what is currently where the previous place was and be ready to tell me what that place was, where it was, why it was important to you and what now stands in its place.

I offered disposable cameras to each participant to use for the project, however, only one of the seven accepted and took their photographs on the camera I provided.[7] The other six participants

[7] This participant also took the film to be developed herself (despite my offering) and was re-imbursed for the development costs.

all opted to use their cell phone or personal cameras. Participants had between a week and two weeks to complete the photography component of the project, unless more time was requested, and then follow-up interviews were scheduled to discuss and analyze their photographs. These follow-up interviews lasted between one and two hours and were very open-ended and participant led. I would ask the participant to go through each photo with me and tell me where it was taken and why they took the photo, and any follow-up questions were based on either experiences or emotions they shared with me, or what was captured within the photo itself. The insights these photographs and interviews provided were extremely valuable and in-depth and participants were overall positive about the project.

4.1.3 Questionnaires

I employed six undergraduate students at Vietnam National University to complete 90 open-ended questionnaires in total, with 30 surveys at three of the 12 stops along Line 2A. The two terminuses, Cát Linh (one terminus) and Yên Nghĩa (the other terminus), and Phùng Khoang (the halfway point along the Line) were selected as sample stations (see table 4.3). 91 surveys were administered, however, only 83 were analyzed and included in this thesis as eight surveys had been conducted by research assistants at incorrect locations (five at Thái Hà Station and three at La Thành Station, two other inner-city stations).

Table 4.3 Surveys administered at each of the three stations

Station	**Total Number of Surveys Conducted**
Cát Linh	23
Phùng Khoang	30
Yên Nghĩa	30
Total surveys	83

The purpose of these surveys was to gain insights into users' perceptions regarding the construction and operations of Line 2A and Line 3. The survey was divided into three sections: the first involved basic demographic questions (gender, age, the district and ward they live in), the second focused on Line 2A and the third, shorter section on Line 3. Questions on Line 2A focused on where the individuals live in relation to the Line, why and how often they use the Line, their satisfaction or concerns with the Line, their thoughts on its construction and operations, and what they wish could be done differently. Questions on Line 3 focused

exclusively on the construction. The responses from these surveys provided valuable information on public perceptions and use of Line 2A, particularly regarding how residents access the Line.

4.1.4 Ethnographic Filmmaking

To complement my study, I engaged in ethnographic filmmaking along Line 2A and Line 3, recording video footage on the train and at the stations of Line 2A, and in the surrounding environments of both lines. Ethnographic filmmaking has an expressive potential and can be "a means of interacting with a subject and exploring it in new ways", ways that traditional, text-based methods sometimes cannot (MacDougall 2019: 140). Through this visual method, I aimed to capture the sensorial experiences of the lines as visual subjects, along with the ways these infrastructures are mediated and made use of by residents. Sensory ethnographic methods such as ethnographic filmmaking allow researchers to "shift away from solely observing participants and towards using researchers' own experience and bodily sensation to gain insight into the lived relationship between people, practices, and places", as these multisensorial, visual elements are part of the ethnographic encounter (Drysdale & Wong 2019: 4). The footage I recorded is presented as visual ethnographic fragments, placed at the beginning and end of my thesis, which together form a short ethnographic film or experimental documentary. Through the inclusion of these visuals, I present ethnographic filmmaking as both an alternative way to investigate and make sense of the lines and as a way to situate and incorporate my own experiences and sensations of the lines into my research findings (Pink 2006).

4.2 Sampling

I used a combination of purposive, snowball, and coldcall sampling strategies to recruit a range of participants for interviews, photovoice, and surveys. For interviews, cold calling involved my interpreter and I approaching individuals using the urban spaces within 500m of the Line while also aiming to capture a cross-section of occupation, income, age, and sex. To our initial surprise, this approach was quite successful, and most of our participants were found with this sampling approach. However, there were some difficulties and constraints with this approach, most notably that our participant selection was influenced by which groups were occupying the spaces around the line at certain times of day, which tended to be middle-aged men and informal workers. Snowball sampling, where an initial contact helps us recruit another contact, who can in turn put you in contact with someone else, and so on, helped us overcome some of the limitations

of our cold-calling sampling approach and connect us with more middle-class, youth, and women participants (Valentine 2005). For the seven interviews conducted along Line 3, both cold-calling and snowball sampling were utilized, however, since I lived in the alley and was connected to or familiar with most of these participants in some way – whether through renting a room in their house, frequenting their shops, or interacting on the street – the approach in this context differed from cold-calling strangers on the streets along Line 2A.

For photovoice, three participants were interviewees initially recruited through coldcalling, one was through snowball sampling from an interviewee connection, and three were found through a post I made on a public group on Facebook for Hanoi residents, looking for participants in a photovoice project on Line 2A. Cold-calling was also used for my surveys; the six VNU students asked individuals headed to, or exiting from the railway if they were willing to fill out a short survey about their use of Line 2A and opinions on both Line 2A and Line 3. The students were asked to approach a diversity of users with regards to age and sex and they conducted the surveys in pairs just outside of each of the three railway stations so as to be in public spaces.

4.3 Analysis

The bulk of the data I analysed originated from the interviews I conducted during my fieldwork. Most of the interviews were recorded on my cellphone which I then transcribed upon my return to Montreal. Once complete, I sorted the interview transcripts conducted along Line 2A and Line 3 by location (e.g., Cát Linh Station, Alley X). I sorted my photovoice transcripts separately and inserted the photographs into the transcript in the places they were discussed. For the survey data, I cleaned and organized the data based on location and then conducted descriptive statistical analyses. I conducted preliminary coding in the field, often during or immediately after interviews and developed a list of *a posteriori* codes to highlight recurring themes I encountered in my interviews (Cope 2016). I then qualitatively coded the texts from my transcripts through thematic analysis, which involves the researcher searching a transcript or document for themes, i.e., making note of each time Line 2A's poor transport connectivity was mentioned (Dunn 2021). Regarding the analysis of photographs generated from the photovoice process, I coded the photographs according to themes that were identified by participants (Bukowski & Buetown 2011; Johnsen et al. 2008: 3). One of the major strengths of photovoice is the ability to analyse

and interpret the photographic and textual data alongside participants during the follow-up interview. This allowed for themes to be discussed collaboratively, which ensured the meanings attached to each photograph by the participant were considered during the analysis. This coding process, along with the categories and themes that it created, informs the interpretations that I present in my following results and discussion chapters.

4.4 Ethical Considerations

For semi-structured interviews, photovoice, and questionnaires, an important ethical consideration is that of informed consent, which is necessary to avoid and articulate potential physical, psychological, and social risks to participants during the research process (Allmark et al. 2009; Berg 2016: 36). Informed consent requires participants to know what the research project entails, who the researchers involved in the project are, and what their participation in the project will look like prior to engaging with the research (Allmark et al. 2009). Signed written consent forms are viewed as 'best practice' in research ethics as they "systematically ensure that potential subjects are knowingly participating in a study and are doing so of their own choice" and provide institutional research ethic boards with a means to monitor the voluntary participation of participants (Allmark et al. 2009; Berg 2016: 36). However, in some cases, such as for my own research project, it was more appropriate to ask for oral, rather than written consent. This is because written consent has the possibility of further skewing the power dynamic between participants and the researcher, and potentially creating a sense of distrust, especially in the context of the socialist republic of Vietnam where there are significant concerns regarding the surveillance of its citizens (Kerkvliet 2005). For my research, I, therefore, asked for oral consent, but to mitigate against some of the shortcomings of this approach, I also gave my contact information to participants to ensure participants could contact me with any questions or concerns after the initial research activity.

Another important ethical consideration was how to compensate and thank interview and photovoice participants for their time and knowledge, especially since many interviews and photovoice follow-up interviews lasted over an hour. I brought small souvenirs from Canada to give as gifts – small, glass maple syrup bottles in the shape of a maple leaf and key chains – and prepared envelopes with cash inside (between 20,000 – 50,000 VND depending on the interview length). However, many refused the cash and only accepted the gifts after my interpreter and I

confirmed multiple times that it was a token of thanks for the knowledge they shared with me and that I had received external funding to buy these gifts.

The cross-cultural context of my research presents several ethical challenges. There were likely significant asymmetrical power relations between myself and participants, between myself and my interpreter, and between participants and my interpreter (MacKenzie et al. 2016; Valentine 2005). These power relations are further explored in the following section where I discuss my positionality in my specific research context of Hanoi, Vietnam. I aimed to address the ethical issues of conducting cross-cultural research in two key ways. First, I worked with local researchers and participants as much as possible throughout the research process in the hopes that my research was as collaborative as possible. Second, following the suggestions of MacKenzie et al. (2016: 106), I hope to communicate research results not just in the academic landscape of the 'Global North', but also in the local Vietnamese context, in the Vietnamese language, and in a usable form for both participants and academics. This will hopefully involve the publication of a local media article in Vietnamese, co-authored with my interpreters.

4.5 Positionality

As stated by Catungal and Dowling (2021: 24), "it is impossible to scrub the research process of power and difference". Who I am, my understanding of the world, and how I am perceived influenced every stage of the research process, ranging from the early stages of data collection to the later stages of data analysis and writing. Specifically, my presence as a foreign researcher from Canada, a young white woman from a middle-class background who is fluent in neither the language nor the cultural customs of Vietnam, influenced how I interacted with and was perceived by participants, along with the ways by which I framed and interpreted my data. As "neither researchers nor the research process can be treated as separate from broader societal structures, norms, and discourses", it is important to reckon with the troubling history (and present) of cross-cultural research (Catungal & Dowling 2021: 19). My position as a researcher from the 'Global North' conducting research in the 'Global South', where the relationship between the researcher and the researched is, in many ways, a "continuation of the relationship between coloniser and the colonised", may have resulted in asymmetrical relationships with participants that are skewed by uneven power dynamics (Valentine 2005: 125).

I drew on several strategies to account for and mitigate against some of the uneven power relations embedded in the research process (Rose 1997: 319). First, prior to fieldwork, I purposefully chose qualitative research methods that aim to lessen power imbalances between 'researcher' and 'researched'. Semi-structured interviews and photovoice attempt to bring participants into the research process as active members who are given the space and resources to shape the research findings, rather than treating them as passive subjects of other people's intentions (Castleden et al. 2008; Johnsen et al. 2008). I also began learning Vietnamese prior to my arrival in Vietnam and continued language lessons throughout my time in Hanoi in the hopes of conducting as much research as possible in participants' first language. However, as it was unlikely that I would reach an adequate fluency by my projected arrival in Hanoi, I also worked with two local Vietnamese interpreters.

The positionality of my interpreters, ranging from more structural aspects of their identities such as their gender, age, and social status, to their political leanings and emotional state at the time of the research activity, also inevitably affected the way participants responded to us (Turner 2010). Both of my interpreters were women, one in her early 20s and the other in her early 40s, and both were well-educated and had spent time studying in Europe. Our all-women gendered dynamic was often made obvious during interviews with men, and on many occasions, men approached us on the street to talk with us before we had the chance to approach them. One particular example comes to mind to illustrate how our gender impacted how we were perceived. During an interview with a middle-aged man about the usability of Line 2A, he pointed to me and my interpreter as examples of why women could never take the Line to work, as our 'pretty outfits' and 'make-up' would be ruined by the time we got to our office as we would have to walk and wait too long in the heat. We laughed and responded that we both rode the Line nearly every day and had been out for several hours in the heat before meeting him, but such interactions serve as reminders of how our role as 'researchers' is inseparable from our lived experiences and embodied identities (and how such identities are perceived by others). Finally, during fieldwork, I kept a research diary where I reflected on my experiences and observations on conducting research, with the aim that "these emotional accounts could themselves be windows into the impact of power relations in the research process" (Catungal & Dowling 2021: 29). Throughout the analysis and writing-up of my data, I continuously returned

to my research diary to ground my interpretations and ensure that I was accounting for the absences and fallibilities inherent to the research process in my final write-up (Rose 1997).

4.6 Conclusion

In this chapter, I outlined the methods of data connection and analysis, ethical considerations, and my positionality. I highlighted the three methods I utilized for data collection – semi-structured interviews, photovoice, and surveys – and the role of ethnographic filmmaking in my research. I outlined the sampling strategies I employed and the analysis process I applied to my transcribed interviews. I reflected on ethical considerations specific to my research context and how I tried to account for and lessen asymmetrical power relations throughout my fieldwork. Finally, I outlined the impact my positionality as a foreign researcher from the Global North, and the positionality of my interpreters may have had on this research. In the following chapters, I report the results revealed by these methodological approaches.

Chapter 5 Life along the Line – Perceptions, Impacts, and Negotiations

5.1 Introduction

In this chapter, I present key findings from my analysis in order to answer the first of my three research questions: ***What are the most notable impacts of Line 2A for residents living alongside the Line or those working nearby, and how do these groups perceive of and negotiate these impacts?*** To address this research question, I have divided the following chapter into three sections. First, I provide an analysis of the ways participants who live or work within 500 metres of Line 2A perceive the line, be it positively, neutral, or negatively (Section 5.2). Second, I discuss the key impacts Line 2A has had on local residents during three key periods: the construction period, during the opening of Line 2A in November 2021, and a year into operations (Section 5.3). This is then complemented by an investigation of how two groups of residents – informal workers and young people – are negotiating, appropriating, and transgressing the new urban spaces at and around Line 2A (Section 5.4).

5.2 Perceptions of the Line

In this section, I provide an analysis of how individuals who live or work along Line 2A perceive of the city's first urban railway line. Drawing from semi-structured interview and photovoice data, I concentrate on four key themes that were raised. First, I focus on how Line 2A is viewed by some as a 'modernizing' project in Hanoi. Second, I analyse the necessary sacrifices that interviewees frequently noted. Third, I discuss interviewees' concerns with the construction and operations of Line 2A, including the costs, contractor choice, and assumed corruption while the line was being constructed. Finally, I interpret participants' concerns with the usability and what some called the 'backwardness' of the line.

5.2.1 Changing the face of the city

Just under one-fifth (14/74) of interviewees described Line 2A as modernizing or developing Hanoi, while just under a third (23) explicitly expressed that they were in favour of the city's new urban railway. For this relatively small cohort, particularly those who are young and middle-class, Line 2A seems to represent an important shift in the country's development. "It's marking the development of Hanoi, and also Vietnam" Mr. Do[8], 38 at the time of interview, told me,

[8] All names are pseudonyms.

adding “it changed the face of Hanoi” (Interview, Phùng Khoang, 01/09/2022).[9] The notion of the line ‘changing the face’ (*thay da đổi thịt*)[10] of the city came up in multiple interviews. When asked to elaborate on what this idea of ‘changing the face of the city’ meant to them, participants explained that they viewed the line as modernizing and developing the landscape of Hanoi. Mr. Loi, an office worker who was 30 years old at the time of interview and frequently sits and drinks tea underneath Line 2A, told me “At the time of the opening, people read the news and online newspapers and felt very happy. People were so eager to use the line because the line changes the face of the city, it looks modern” (Interview, La Thành, 20/07/2022). Meanwhile, a 20-year-old student added “Line 2A is probably the first step for sustainable development in Hanoi” (Interview, Hà Đông, 06/10/2022). Others described the urban railway as “the vehicle of the future”, speaking of the line’s potential to curb pollution and reduce traffic jams in the city (Interview, Văn Quán, 15/09/2022; Interview, Hà Đông, 23/09/2022). One 24-year-old photovoice participant documented this opinion through his photograph of the symbol of Hanoi – the *Khuê Văn Các* in the temple of literature – at Cát Linh Station (Figure 5.1).

Figure 5.1 Iconic symbols of Hanoi. Source: Photovoice participant

[9] Phùng Khoang refers to the station along Line 2A. Each reference includes the station around which each interviewee lived or worked.

[10] A direct translation from Vietnamese would be ‘changing the skin’ of the city -- *Như kiểu thành phố thay da đổi thịt* – but this has been translated to ‘changing the face’ in English.

He explained:

> Now, the metro has become something like an iconic symbol of Hanoi. The big icon here [in the photograph] is the best example I can find. It's an image of the literature temple in Hanoi, so I think it's the best way to combine the idea of the new metro system representing the image of Hanoi in a great way that attracts more tourists and people. I feel kind of proud. I talk with my friends and we discuss the impacts of the metro system, and we say now we can proudly go to this place, go to that sign, take a picture and say 'hey, we have a metro system here in Hanoi' (Photovoice, Thái Hà 12/10/2022).

Another woman who lives near La Thành Station and has taken Line 2A on several occasions with her family told me "It's very convenient, I really love it because it's fast and modern and the scenes are beautiful… we have to develop different types of construction like the elevated railway to reduce the traffic" (Interview, La Thành, 26/07/2022). Interestingly, participants who spoke of Line 2A as 'changing the face' of, or 'developing' Hanoi, almost always used one or several of the words *hiện đại* (modern), *văn minh* (civilized), or *sạch* (clean) to describe this transition. These terms mirror the state's plans and propaganda to promote the new Hanoi City and Transport Master Plans and urban railway network. Interviewees seemed to echo the state's propaganda about Line 2A's role in Vietnam's green development, exemplified by this response from a 46-year-old woman who lives near Yên Nghĩa Station, one of the two terminuses. When describing her thoughts on having an urban railway in Hanoi, she told me: "It's civilized, modern, fast clean… I feel that it's so modern!" (Interview, Yên Nghĩa, 14/10/2022). Despite this minority of positive voices, the majority of interviewees were far more skeptical regarding the Line, as analysed next.

5.2.2 Sacrifices for a more sustainable future

"If you want a better tomorrow," Mr. Trieu, 56, told me when discussing Line 2A's construction, "you have to sacrifice today" (Interview, Thượng Đình, 18/08/2022). This sentiment was echoed by many participants, particularly regarding the cutting down of trees along the length of Line 2A during construction. As previously discussed in Chapter 3 (Context), the felling of more than 400 ancient mother-of-pearl trees along Nguyen Trai Street was deemed 'necessary' for the safe construction of the elevated railway, much to the frustration of local residents. Just under half of all participants (36) knew of the tree-felling, and nearly all of them spoke of the incident with regret or anger, often describing it as a 'pity'. However, despite it being viewed as a pity, it was

also commonly used as an example of the sacrifices necessary for the city's development. "It has to be, to build the metro they need to cut down the trees" Mr. Kieu, 50, told me. (Interview, Thái Hà 26/07/2022). Mr. Do, 37, further elaborated: "Everything comes with a price, so that's the price you pay [cutting down the trees] for building the line. If you don't build the Line, then you have the environment, but if you cut the trees down to build it, then you have development" (Interview, Phùng Khoang, 01/09/2022). Ms. Doan, 46, told me that her friends and her were initially angry when they heard the trees were cut down, but now she understands the tree-felling as "a sacrifice you have to make because the space will either be the road, the tree, or the metro, so you have to consider between the benefits and the losses" (Interview, La Thành, 26/07/2022). However, when asked if Line 2A is worth this sacrifice, she told me that the benefits do not outweigh the losses as the line is too short, and the advantages are insufficient. Mr. Ha, 83, spoke similarly of this imbalance of costs and benefits, telling me: "It took maybe 20 or 30 years to grow the very big trees like that, and the metro[11] is not modern, it uses a lot of concrete… it destroys the landscape of the city and doesn't benefit many people" (Interview, La Thành, 26/07/2022).

When discussing the felling of trees. another woman who lives near Line 2A, Ms. Vuong, 35, exclaimed "it's a pity since it affects the environment, but the train runs by electricity, so it's better than gasoline" (Interview, Vành Đai 3, 26/08/2022). Although the tree-felling is viewed by interviewees as having negatively affected the environment due to the loss of green space, temperature regulation, and carbon storing, many such as Ms. Vuong are hopeful about the positive environmental effects the urban railway will have for Hanoi. "If you build anything you're already impacting the environment, and if the government did that [cut down trees] then they already have a plan to have more sustainable development from the cutting down of trees" a 20-year-old architecture student who studies by Hà Đông Station expressed (Interview, Hà Đông, 06/10/2022). The government has indeed released a plan to plant 500,000 trees between 2021 and 2025 – with 100,000 planted so far – so many view the cutting down of trees along the Line as a concern that will be somewhat balanced by the government's plans to re-green the city (Vo Hai 2023).

[11] Throughout this thesis, I refer to Line 2A and Line 3 as both the 'urban railway' and the 'metro'. Although in the transport and Master Plan the project is referred to as the urban railway [*Đường sắt đô thị Hà Nội*, literally Hanoi Urban Railway], participants often referred to it as the metro, and the project was also frequently referred to as the metro in the media.

However, others were less supportive of the government's decision to cut down trees along the Line and struggled to ignore the hypocrisy of the tree-felling in the name of sustainable development. Mr. Trinh, 26, who lives near Vành Đai 3Station spoke of the irony of cutting down trees just to replant them: "They cut them several times. Cut and then re-grow. Of course, it is sad to see them cut since they were there for a very long time. They cut down the trees, and now they plant them back again. It's just a circle" (Interview, Vành Đai 3, 01/09/2022). Ms. Nguyen, a 31-year-old street vendor near Láng Station, spoke of her confusion with the plan to re-plant more trees after the Line had been built. Looking incredulously around the area she worked on a busy street underneath the Line, she asked "Where can they plant the trees now? There's no place to plant trees now" (Interview, Lang, 17/08/2022). It is unclear whether decisions like the tree-felling along Line 2A will truly help carve out a sustainable future for Hanoi, or if such 'sacrifices' will remain stuck in a performative 'green' cycle.

5.2.3 Construction Concerns: Contractors, cost, and corruption

Three of the most common concerns participants voiced regarding the construction of the railway itself (rather than environmental or other local impacts) revolved around the contractor choice (35 percent of participants), the cost and economic impacts of the Line (35 percent) and, relatedly, suspicions of corruption (16 percent). As discussed in Chapter 3 (context), two-thirds of the original financing for Line 2A comprised of preferential loans from China, conditional on the consultants, construction, and materials being sourced from China as well. This raised a number of doubts in local residents' minds regarding the project, with high levels of public skepticism surrounding Line 2A's contractor choice. Over a third of interview participants (26/74) directly noted that they were unhappy with or did not trust the Chinese contractors.

Middle-aged and older respondents often cited the historical and current tensions between Vietnam and China to explain their distrust, with some suggesting that Vietnam will see its sovereignty undermined if the country falls into debt traps that leave them beholden to the Chinese state. Older generations across all socio-economic classes and younger participants – particularly those who were working class – tended to bring up the 'evil-mindedness' (*hiểm độc*) of China towards Vietnam in their explanations of why they did not trust the Chinese contractors. A 25-year-old app-based motorbike taxi driver told me "The Chinese always have the intention of invading Vietnam, they might start a war and invasion, because they have another purpose,

not just building things" (Interview, Cát Linh 14/07/2022). A 55-year-old *xe ôm* (motorbike taxi driver) who works near Láng Station added, "I think they are untrustworthy, and they will cause something bad for the Vietnamese people. The Vietnamese people hate the Chinese people because we have 1000 years under them in history" (Interview, Lang, 16/08/2022). Others, such as Ms. Doan, 46, expressed their frustrations with China winning the bid to construct the Line, explaining:

> Yes, we have a very distorted image of China and what they do, and what they are doing in Vietnam. We have been aware of the threat. I hope our government can choose other countries as contractors, but I don't know how they deal upstairs, up top. I have a lot of friends that don't dare to go on board because they're afraid of the quality, they still say that until now, even though a lot of people have been travelling, they're still scared of getting on (Interview, La Thành, 26/07/2022).

Although very few participants spoke of their own unwillingness to take the Line due to the contractor choice, several mentioned friends of theirs who still refuse to take the Line for these reasons, such as Mr. Kieu, 50: "Lots of Vietnamese people, they don't trust the Chinese contractor. Many people told me that they don't like to go [on the Line] and advise me not to take it because they think it is not safe. Yes, I know about the boycott of the Line" (Interview, Thái Hà, 26/07/2022). This 'boycott' of Line 2A, as mentioned in Chapter 3 (context), and covered by some Western media outlets, was an organized refusal to ride the train due to the Chinese contractor and related safety concerns. However, based on conversations with participants, it appears to have been less of an organized movement than it initially seemed from my preliminary research. For example, Ms. Doan told me "Yes, some people have that intention, they don't like it, but I don't think the boycott is very widespread because finally they are more curious" (Interview, La Thành, 26/07/2022). So, while anti-China sentiment is still present among middle-aged and older participants, their perception of the Line – despite the Chinese contractors – appears to be shifting. Mr. Bui, 70, explained this shift, saying "the people, in the beginning they were afraid, but now for the convenience, they use it more" (Interview, Cát Linh, 13/07/2022).

Younger participants tended to highlight their distrust of the quality of Chinese products as opposed to political or historical tensions between the two countries. Some of the more extreme critics suggested that Chinese contractors purposefully submitted low bids to offload old and cheap technology to Vietnam, citing Line 2A's delays and safety concerns as proof. Most

participants, however, were more concerned with the safety and usability of the Line due to a lack of trust in the quality of Chinese goods, describing them as cheap and easily broken. Mr. Le a 22-year-old student who lives near La Thành Station, explained: "People say that it [Line 2A] is not that good because of the Chinese contractors. In some places they construct it and then something goes wrong, like it breaks" (Interview, La Thành 29/07/2022). Others explained that to many Vietnamese, China is synonymous with low-quality and untrustworthy products, impacting people's perception of Line 2A's materials during construction. "There is a lot of propaganda against the Chinese government" a 24-year-old photovoice participant explained, "there was a lot of news about the construction quality, the delays, the amount of money spent and how the price was inflated by both the Vietnamese and Chinese government, so we had a bad view back then, but now I think it doesn't matter as much anymore" (Photovoice, 12/10/2022).

The cost of the Line was also a common concern and cause for distrust. The same proportion as those who raised concerns over Chinese involvement[12] (over a third; 26/74), said that the cost was too high for the Line. "It cost a lot of money and I am so disappointed", one 68-year-old woman told me, because "just a few people use that Line, it just serves a very small amount of people" (Interview, Lang, 16/08/2022). In an interview with Ms. Do, I asked whether she believed the construction cost of Line 2A was worth it as a follow-up question to our discussion. Ms. Do, who had already expressed a concern that the construction cost a lot of money, laughed while stating: "I have no idea. Maybe yes, maybe no. But right now, not many people are using the metro" (Interview, Cát Linh, 29/08/2022). Another man who lives near the Line noted "The construction cost a lot of money, and time will answer if it's worth it" (Interview, La Thành, 20/07/2022).

While over a third of interviewees expressed frustration with the cost of the Line based on the minimal benefits they foresaw, a few, while still concerned over the costs, such as Mr. Le, 22, had a more optimistic outlook on the future benefits of Line 2A. He explained: "The cost for construction is really high, it's much higher than expected. Worth it or not I don't know… maybe worth it because it's modernizing, so it's one part of the big switch to public transport in the country" (Interview, La Thành, 29/08/2022). Others – particularly younger participants – described the current operations of the Line as wasteful due to low ridership but were hopeful

[12] Several participants raised multiple concerns.

about the potential increase in ridership and therefore positive impact of the Line in the years to come (Interview, La Thành, 20/07/2022).

Another concern regarding the Line's construction was that of corruption, with 16 percent of participants (12/74) voicing this concern. This concern often intersected with distrust in the contractor choice, particularly with those middle-aged and older across all classes. "It's like a trap for Vietnam", Ms. Doan exclaimed when discussing the cost "an economic trap, from China. I don't know, maybe the [Vietnamese] government… they have to undergo something, they have to do it. But it's an economic trap for Vietnam, for Hanoi, and for future generations" (Interview, La Thành 26/07/2022). Others, such as Mr. Kieu, explained that although the Vietnamese people do not like the contractor choice, the government must have had their own reasons for why China won the bid, hinting at possible corruption or 'foul play'. For example, while wondering why a China firm won the bid for Line 2A, he mused "maybe it is cheaper and somehow related to politics, maybe that's why the Vietnamese government had to make that decision" (Interview, Thái Hà, 26/07/2022).

The lack of trust did not rest only on the Chinese contractor. Participants also believed local corruption was responsible for Line 2A's rising costs, as many believed Vietnamese officials pocketed some of the money for themselves. "There is a lot of corruption among officials," Ms. Quan, 60, who works near Láng Station, explained:

> Every official makes use of their position and corrupts. The overwhelming corruption becomes a burden for the normal people. The appearance of the metro is really good for development, but damn it, the high-level officials 'eat it all' [take all the money for themselves]. The rest, the workers eat (Interview, Láng, 27/08/2022).

Others, such as Mr. Bui, 70, expressed frustration about the lack of communication from the government about the ever-increasing costs, explaining: "The people wonder why the government tells us a certain amount of money for building this Line and then the number doubles. The people can't accept it. The cost of the construction is double, so people wonder why it's that way" (Interview, Cát Linh, 13/07/2022). Mr. Chu, 60, a retiree who lives by Yên Nghĩa Station, added that he was positive corruption took place during the construction of Line 2A:

> Definitely it [corruption] happened with this Line. Many times the investment increased. If you give 1000, but when you finish you claim 2000, then 1000 goes into the pocket of someone, and 1000 for the Line. And it's the people that have

> to bear that burden, they have to shoulder this (Interview, Yên Nghĩa, 12/10/2022).

Such concerns with corruption, though not uncommon in Vietnam, added to a lack of trust in the Line in the eyes of residents.

5.2.4 Concerns with Usability

While only a fifth of interview participants (14/74) believed Line 2A had helped improve traffic congestion in the city to date, just under a third of participants expressed that they were hopeful about the urban railway's potential to alleviate traffic jams in the future: "We cannot have the results right now", Mr. Le, a 22-year-old student told me, "I'm not sure if the plan will work, we'll need time to see it" (Interview, Hà Đông, 06/10/2022). Others suggested that only in five- or ten-years' time, when there are multiple lines in operation, will the railway network be able to reduce traffic jams and meet the needs of the people, adding that currently with only one line in operation, it is not a viable way to move around Hanoi (Interview, Phùng Khoang, 01/09/2022; Interview, Vành Đai 3, 26/08/2022). As a young student who lives near La Thành Station explained: "If you live and work on the road of that line it would be really convenient", going on to explain, as others also did, that the lack of synchronicity between Line 2A and other modes of transport that take users to other areas of the city is hindering this potential (Interview, La Thành, 29/08/2022).

It was notable that this lack of synchronized infrastructure surrounding the Line – specifically the lack of official motorbike and bicycle parking and limited or confusing bus connections – was the most frequent concern brought up by participants regarding Line 2A's operations, raised by half of all interviewees. Participants often brought up the poor or unclear connections between the railway and other modes of transport, leaving many except frequent bus users – which none of my 74 interviewees were – at a loss for how to use Line 2A for anything other than the experience.

Line 2A's perceived lack of connectivity with motorbike parking, bus networks, and pedestrian infrastructure will be explored in depth in Chapter 6. However, it is interesting to note that there are indeed bus connections at most Line 2A stations; many participants are simply unfamiliar and uncomfortable with buses in Hanoi and are therefore often unaware of the connections that exist. As Ms. Nguyen, a 22-year-old student who studies near Hà Đông Station

told me, “The people right now, they’re still not used to the Line. They just built it and said it’s for the future, it’s for the better, but they didn’t instruct people. People don’t know how to use it so they will just go with what is familiar” (Interview, Hà Đông, 23/09/2022).

5.2.5 Concerns with ‘backwardness’

Several participants who had ridden the Line mentioned signs of decay they had already noticed in the infrastructure, bringing up these cracks or imperfections as examples of the poor-quality building materials used during construction. Some interviewees argued that the trains and materials were in bad condition from the moment they were first imported, while others believed the materials had deteriorated during the long construction delays. Ms. Nguyen spoke of the slow degradation of the materials due to delays and people’s subsequent safety concerns upon seeing these early signs of wear: “The metal used for the metro, because it had to wait a long time it’s a little bit rusty. And people are scared that maybe it can affect how safe the train is, you know?” (Interview, Hà Đông, 23/09/2022). Two different photovoice participants also documented signs of wear they had noticed at different stations along the Line (Figures 5.2 and 5.3). One of these participants, who frequently uses Line 2A to commute to school and moved to Hanoi from the Philippines, reported in detail:

> It struck me how old it [the station] feels already, despite it being open for barely a year. I’m a little sad about it… sad because of what it implies, I don’t think the station will last that long. You can feel it from the building of the station, the tiles – these tiles will not last, they will crack. And I speak from experience, I’ve seen how my country’s metro system has degraded, and we built it slightly higher, in terms of standards. This one, I feel it’s a lot of money wasted. I think the ‘powers that be’ will force the metro to exist, which means, if it wears down earlier, they’re going to fix it, which is more money. More money going towards it, when you could have built it properly in the first place (Man 29 photovoice, 17/10/2022).

Figure 5.2 Signs of decay at Cát Linh Station (damage to the wall by escalator) Source: Photovoice Participant

Figure 5.3 Signs of decay at Cát Linh Station (damage to columns) Source: Photovoice Participant

Others described the Line as 'backwards' or 'outdated' due to the design and aesthetics of the train, as well as because it is an elevated rather than underground railway. Mr. Phan, 60, a café owner near Văn Quán Station detailed: "We ordered it ten years ago and now we put it into operation, but it's backwards, it's an outdated model. It's called new, but it's outdated" (Interview, Văn Quán, 15/09/2022). Several participants also brought up how the screws for Line 2A's tracks are believed to have partly oxidized before the Line was in operation, noting this as another cause of the Line being 'backwards' and in bad condition.

Other interviewees regretted that Line 2A was not built underground, as a subway, rather than as an elevated railway. One 28-year-old man lamented: "If only the government were a little bit more patient and waited and studied more and then built the underground instead, it would have been so much better" (Interview, Văn Quán, 15/09/2022). While discussing a photograph she had taken that documents signs of wear along the Line, (see Figure 5.4), a 29-year-old photovoice participant was reminded of a rumour about the construction of Line 2A that made its way through the internet before the Line's opening which pointed to some of the cultural superstitions regarding the Line's construction. Constructing Line 2A, she told me, was like placing swords into the back of a dragon. If too many swords were plunged in and the dragon began to feel uncomfortable, the dragon would begin to shake to make all the swords fall out. People were afraid, she told me, that like the dragon, if too many columns were stuck into the ground, it would become irritated and cause the structure to collapse (Photovoice, 23/09/2022). In line with these fears Mr. Ha, 83, who lives by La Thành Station, spoke to me of the accidents

that took place during the construction, warning me: “It fell on the ground once already – it is not the train that falls, but the iron and other material” (Interview, La Thành, 26/07/2022). Such narratives further enforce the distrust in the Line’s safety and usability.

Figure 5.4 'The dragon's back' Source: Photovoice participant

5.3 Physical impacts of Line 2A construction on daily life

The near decade-long construction of Line 2A impacted residents through displacements and the loss of land, as well as the creation of a variety of hardships borne by those that live right next to the Line (see Figure 5.5). The ‘cleaning up’ of the area around the Line, and the exclusions this has caused, was another key impact. Furthermore, the re-routing and narrowing of roads during construction caused traffic jams, detours, and longer travel times; the accidents that took place during the construction impacted how safe certain participants felt in the spaces underneath and around the Line; and the dust and noise from the construction affected some participants. All the above key impacts will be discussed in the following section.

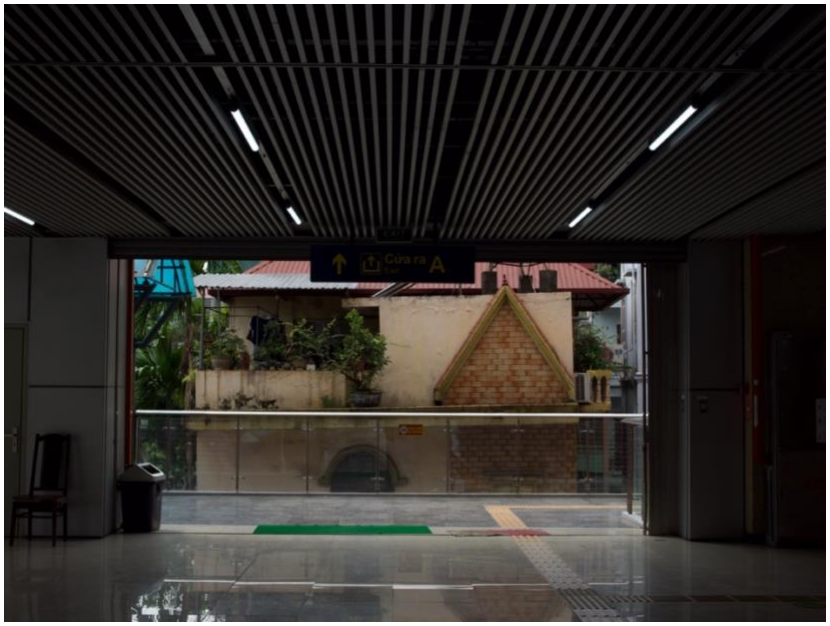

Figure 5.5 View into a neighbouring home from Line 2A Station. Source: Author

5.3.1 Changes to the surrounding areas

A theme that emerged from my interviews regarding the impacts of Line 2A was the 'cleaning up' of areas around the stations since the opening of the Line in November 2021. A few participants, particularly those of older generations who lived right next to the Line – either on the main road or just inside an alley – described the Line as positively impacting how safe, organized, and 'civilized' the area was. This impact appears to have varied across space however, as only participants near the first four stations – those that are closest to the inner-city, namely Cát Linh, La Thành, Thái Hà, and Láng stations – noted these changes. Several interviewees also noted an increase in cafes, *trà đá* [iced tea] stands, and casual restaurants (*quán ăn*), near the first several stations of the Line, as well as the construction of new condominiums and the gradual relocation of companies along the Line (see Figure 5.6 and 5.7; Photovoice, 12/10/2022; 29 photovoice, 28/10/2022). A shop owner who lives right next to Cát Linh Station described how much safer he feels in the area since the station's opening, due to the constant security presence at the station. As several participants mentioned and one photovoice participant documented (see Figure 5.8), security guards are always keeping watch in the station, even when the Line is closed to the public overnight. Other participants who live and/or work near the first four stations, such as Ms. Phạm, 47, also described an increased feeling of safety since the opening. Describing the changes to the area since the construction of Line 2A, Ms. Phạm elaborated:

The street here was poor, it was not developed back then [before the Line]. Nowadays, with the development of this metro line, the street is cleaner and nicer. It made the whole area more beautiful, it is safer now. Before, in my alley, there were a lot of people using drugs here. But now, it is bigger, brighter, safer (Interview, Thái Hà, 27/07/2022).

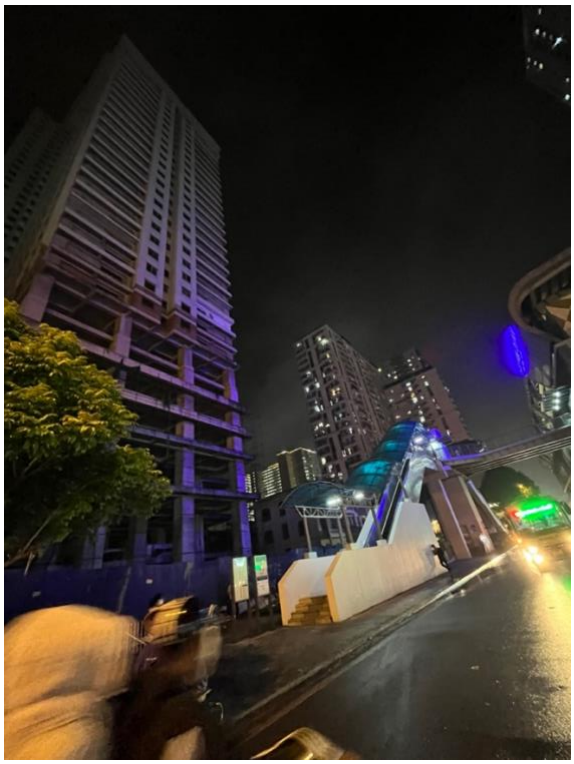

Figure 5.6 New condominium development near Thượng Đình Station. Source: Photovoice participant

Figure 5.7 New businesses next to Cát Linh Station. Source: Photovoice participant

Other interviewees, particularly those who live by Cát Linh Station, the most-inner-city station, told me that the development of Line 2A did not just 'clean up' the crime or 'seedy' practices in the area, but that it also cleaned up the environment itself. For instance, Mr. Bui, 70, who lives next to and frequently fishes at a small lake by Cát Linh Station – lake Hào Nam – discussed the positive environmental impacts the Line has had on the area: "It changed the surroundings here, it changed it for the better because it used to a very, very dirty lake. And now they cleaned up the lake" (Interview, Cát Linh, 14/07/2022). Other interviewees who live near Cát Linh noted how they had observed the area becoming much cleaner since the opening of Line 2A. Mr. Dinh, a 50-year-old shop owner next to Cát Linh, argued: "The area is becoming more civilized, and the hygiene of the surroundings is cleaner, and the people who experience the change, they are also aware of the need to keep the environment clean. Now, here, people are aware of keeping the environment clean" (Interview, Cát Linh, 14/07/2022).

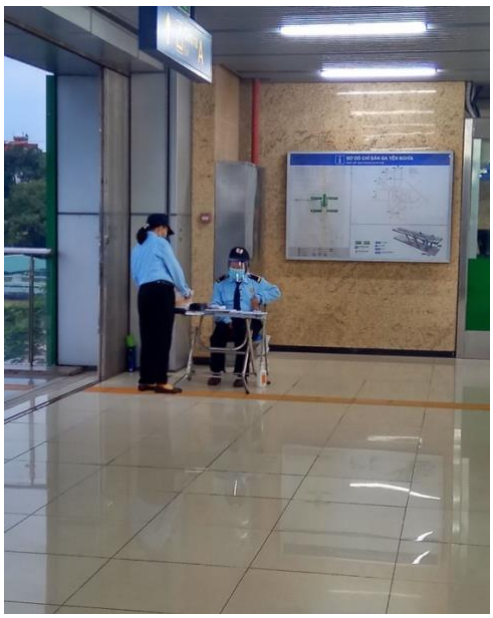

Figure 5.8 Security guards at Yên Nghĩa Station. Source: Photovoice participant

Participants who lived or worked further along the Line, and therefore further away from the city centre, rarely brought up any increased sense of security or cleanliness in the spaces immediately next to the stations. In fact, several participants who had ridden the Line for the experience voiced feelings of frustration or confusion regarding how undeveloped the areas surrounding the final stations were, particularly the outer-city terminus station, Yên Nghĩa. One photovoice participant, 56, who operates a *trà đá* stand near Thượng Đình Station spoke of his

experience riding Line 2A for the first time soon after the opening, and expressed how disappointed he felt when he got out at Yên Nghĩa Station and saw "nothing much." As he showed me one of the photographs he took at Yên Nghĩa Station for his photovoice project, (see Figure 5.9), he elaborated:

> It's really different from Cát Linh, it's like a rural area, the surrounding area of Yên Nghĩa Station is really nothing, it's so disappointing. Cát Linh and Yên Nghĩa, they're supposed to be the same, the investment should be the same, but they're not. It's an unfinished part of the railway here. It took too long, and still it looks unfinished when it was supposed to be finished many years ago (Photovoice, 19/10/2022).

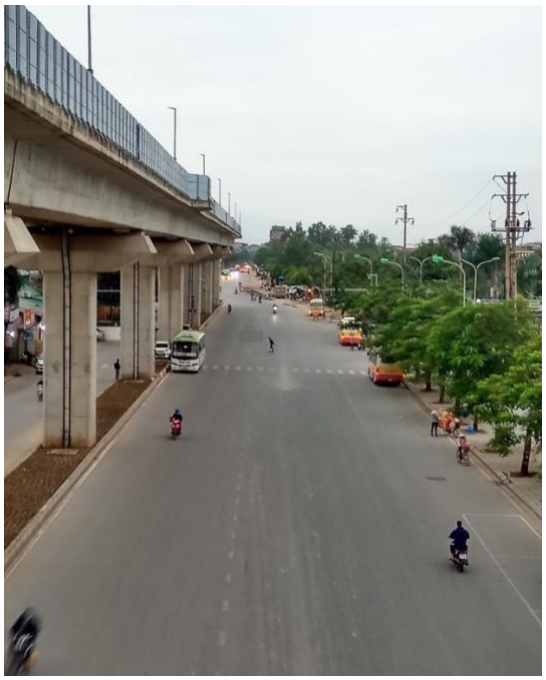

Figure 5.9 Looking out at Yên Nghĩa Station. Source: Photovoice participant

Certain groups, however, especially street vendors who now work underneath Line 2A, have been unable to benefit from these so-called 'positive' impacts of the Line, in part because they are one of the groups that are being negatively targeted by state-driven or endorsed processes to make the city 'more modern'. This will be further examined in my next results chapter, in Section 6.3.1.

5.3.2 Lucky, Unlucky, and Least Lucky: Displacements and the Loss of Land

As discussed in Chapter 3, 100 hectares of land was 'reallocated' by the state for the construction of Line 2A and nearly 2000 households across three city districts, Đống Đa, Thanh Xuân, and Hà Đông, were relocated. Many more residents lost a proportion of their homes for the construction, often referred to as having their house 'cut'. Of the residents I interviewed, three were either displaced or lost a portion of their land due to the construction of the Line, and several participants had friends or family who had been displaced by the construction. A core theme that emerged from my interviews was the degree to which the Line – both during construction and afterwards – had caused major disruptions and emotional stress for these residents. One participant spoke of the important difficulties his neighbours who were forced to move for the construction experienced:

> It's very difficult, my neighbours feel uncomfortable because they had lived here, in this area, for a very long time, from their grandparent's generation, but now they have to move to a bigger, different area… Of course, they aren't happy, because here it is like a village, a community, the neighbours lived for a very long time together, and then they have to move out to a new area" (Interview, Cát Linh, 14/07/2022).

In an alley next to Cát Linh Station, a corrugated fence separates the station area from a plot of land filled with demolition waste (see Figure 5.10). Spaces such as these serve as troubling reminders of the destruction and displacements that took place in order for the Line to be built. Mr. Dinh, a 50-year-old shop owner who lives next to this site and had his house 'cut', told me:

> Here in this street, there were homes, and then all these people had to move out [gesturing to the area that is now underneath the metro in the alley]. Now I'm at the front of the street, but we used to be seven lanes back, I was the seventh. And then my place became the front of the street – it means that six [lanes] have had to move out for the construction of the metro (Interview, Cát Linh 14/07/2022).

While Mr. Dinh was not displaced by the land acquisition process for Cát Linh Station, he did lose 20 square metres of his house. When asked about the compensation he received, he explained that he, along with all his neighbours who lost land for the construction, were given the right to buy a discounted apartment in Mễ Trì in Nam Từ Liêm district, about seven kilometres away. He was also compensated 38 million VND (approx. 1,620 USD) per square metre and believed this was the standard rate of compensation for those with land appropriated

for the railway project. Further along the Line, other participants confirmed the compensation process Mr. Dinh had detailed. Namely, those who were impacted by the land clearance were offered discounted prices in newly constructed apartment buildings in other areas of the city, and all residents who lost land received compensation on a per square metre basis. At Láng Station, a 30-year-old interviewee who was initially told he would lose 3 metres of land but ended up only losing 20 centimetres, told me:

> For the people in this area [who lost land], there were three types of apartments to compensate. One is in Chua Láng Street. One is in Phạm Ngọc Thạch Street. One is in Hoàng Cầu Street. The price will be different. The people can choose, it depends on their budget. In general, all the houses that have been impacted by the clearance project have the chance to buy these apartments, but I did not lose this house, also I have another house, so I did not (Interview, Lang, 15/08/2022).

Figure 5.10 Waste site next to Cát Linh Station on land that had formerly included a house. Source: Author

Participants had differing views on whether the compensation was sufficient for those who had been displaced. While the majority of participants initially said they were satisfied with the amount, many still expressed that the amount they received was below market value. Multiple middle- and upper-middle-class participants who had their house cut told me they were uninterested in the new discounted apartments that were offered as compensation, as they already had a second home elsewhere so did not feel the need. These participants were more concerned with the inconveniences the construction delays had caused them, as they had felt 'stuck' waiting for the unknown and undisclosed date that they would be able to re-construct their 'cut' homes. In contrast, lower-income participants – both those whose homes were cut, and those who had simply heard about the displacements – often described the compensation as insufficient: "If the

compensation is ten [units of money], but the government only gives you two or three, then of course it's not enough" a *trà đá* seller who works by Thượng Đình Station told me when speaking of the inconsistencies between market prices and official compensation in Hanoi. He continued: "If the compensation is not worth your land, then you can't let go of that land. But you have to accept it, if not, the government will force you to accept it" (Interview, Thượng Đình, 18/08/2022).

Interviewees often spoke about 'unlucky' and 'lucky' households regarding who had been displaced or lost part of their land. Those deemed unlucky had had to move elsewhere and accept the state's low financial compensation, while those deemed (comparatively) 'lucky' lost only part of their land or house but ended up with a street-facing frontage (instead of formally having been several houses back, often down a small alleyway). This was deemed lucky by those who took the opportunity to begin to operate a small business from their house. For example, one photovoice participant who had had her house cut for the construction of Văn Khê Station explained how the displacements in her street created a vacant space that she now uses to run a *trà đá* stall (see Figure 5.11):

> They took over [the land] because of the design of the station, and it means that the houses had to be a certain amount of metres away from the station, so they cut the houses and my house was also cut. Every house here [motioning to street we are on from her stall until the station stairs, approx. 50m away] was cut. I'm quite happy because my house was in a small lane and now I 'move' to a very big road, to the front of the street. Now I can have a tea stall at my home (Woman 58 photovoice, 21/10/2022).

Figure 5.11 A* trà đá *[iced tea] stand set up on land where houses once stood in front of her house. Source: Photovoice participant

Another participant who 'moved' to the front of the street after the displacements in his alley echoed the above sentiments, explaining: "In general, there are pros and cons [to the railway]. The pro is, before my house was in the alley, now due to the land clearance my house has a façade on the street so I can have a coffee business" (Interview, Lang, 15/08/2022). The con was that the land acquisition process took too long. "They did the clearance in 2012 or 2013", he added, "and it took two years of waiting before I could rebuild my house. Because of the land clearance, the house was demolished to expand the street and I couldn't rebuild it when they were still doing the clearance" (Interview, Lang, 15/08/2022).

Then there were the 'least lucky' households. These were residents whose houses ended up being extremely close to the Line or to flights of access stairs or escalators (see Figure 5.12 and 5.13). A number of owners of these households suffered severe economic impacts because their house's ground-level commercial spaces (which are common on the first floor of homes on main streets, with the upper 2-3 storeys reserved for residential uses) are no longer attractive for people to rent. Similarly, their upper floors are no longer appealing for residential purposes due to the close proximity to the station or stairs. These residents were thus described, by themselves and other participants, as the 'least lucky' because they gained no compensation nor any new,

advantageous street frontage, and instead now owned a building that no one was interested to rent or purchase.

Three participants lived in a house that was in front of new Line 2A access stairs at the time of my interviews, with one additional participant having moved from their house that is now in front of the stairs in 2008, upon finding out the plans for the Line's construction. This 60-year-old interviewee explained that as soon as she found out about the construction plans and discovered that the stairs would be built in front of her house, she sold her home and moved into a nearby side street. She detailed:

> Many houses can't be rented because of the staircase [being so close]. The person whose land is not taken [in front of the staircase] didn't get any compensation. Now, it's very hard to sell the house and even rent it. Nobody wants to rent because it's blocked by stairs. It's very near the stairs, only 1 metre, and now the people who still live there they can't do anything. It used to be for a shop, they could rent for at least VND20 million [~US$850] per month, but now they can't get anyone to rent it (Interview, Hà Đông, 16/09/2022).

Figure 5.12 Railway staircase in front of homes. Source: Author

Figure 5.13 Railway staircase in front of homes Source: Author

While some participants whose property was impacted by the construction of Line 2A described feeling powerless in the face of these changes, with one participant noting: "Nobody likes the Line, but when it is built, what can we do?", others have come up with new adaptive strategies to cope with these impacts (Man b. 1974 La Thành, 20/07/2022). The small-scale, informal actions and businesses that have popped up along the length of Line 2A in response to these changes, enacted by those deemed 'lucky' or 'least lucky', will be explored in Section 5.4.

5.3.3 Traffic, Dust, Noise and Accidents

The installation of the large concrete pillars that support Line 2A about 15m above the ground was often described as the most impactful period during construction. Participants explained that the pillars were constructed between 2012 and 2015. Although no streets were entirely closed during the construction of Line 2A, interviewees told me that the major roads that run underneath the Line – P. Hào Nam, P. Hoàng Cầu, P. Yên Lãng, D. Láng, D. Nguyễn Trãi, Thanh Xuân, D. Quang Trung, and Yên Nghĩa – were narrowed, often to a single lane, at various periods during construction. Participants living within 500m of the Line said the narrowing of roads made it more difficult for them to access their home, as well as other areas of the city as their regular commuting routes were drastically affected by the closures. As Mr. Ngo, 22, expressed when discussing construction detours: "Sometimes you'll get out of the house, and you don't know where you are. You get lost in your own street because of the re-routing. Sure, you can take a detour but there's a new one every month" (Interview, Hà Đông, 06/10/2022). Another participant who lives near La Thành Station said the most impactful period of the road narrowing was when the main street by her home was reduced to a one-lane, unidirectional one, requiring her to turn into oncoming traffic (illegally) on her motorbike if she wanted to exit her alley following her usual route. To get around this, she explained she would often make use of the small *ngõ* (alleys) in her neighbourhood, weaving through these tight back corridors on her motorbike to avoid the main road when it was too congested (Interview, La Thành, 26/07/2022). Others adopted similar strategies, often complaining about the additional time these detours added to their daily commutes. Mr. Lam, 51, who lives near La Thành Station, explained how his daily travel routes were impacted during construction as he was no longer able to turn in the direction he needed in front of his home: "The main road, they blocked it, so I had to go far away. I had to turn far away from here [where we sat, in front of his home] to get out, and take a detour." (Interview, La Thành, 27/07/2022).

Participants who worked or went to school along the Line complained about the traffic congestion that the construction and narrowing of roads created. One participant, 35, who lives near Vành Đai 3 Station was attending university during the construction and her daily commute was along a portion of the Line. She recalled with frustration: "It was very inconvenient, there were always traffic jams, roadblocks, they were persistent due to the narrowing of the road. I would be stuck when going to school and also on my way from school to my home, it was very

horrible" (Interview, Vành Đai 3, 26/08/2022). The increased traffic was not unique to the construction of Line 2A, however. As one 22-year-old student who studies near the Line told me, "Anywhere there is construction, there will be a lot of traffic jams" (Interview, La Thành 29/08/2022). Many participants described this as a common issue in Hanoi, a city that at times feels perpetually under construction, so although they were frustrated by the traffic and increased travel times, most viewed the Line as just another frustrating construction project.

Dust and noise were raised as the next most common daily impacts during the Line's construction period, although these impacts were also viewed as unavoidable by most participants. As a young woman who lives near Phùng Khoang Station told me, "You cannot avoid the dust and the noise in construction, you just have to accept it. If you want something better you have to accept that the first step of construction is not going to be pretty" (Interview, Phùng Khoang, 01/09/2022). While many middle-class interviewees complained about the construction dust on the roads underneath the Line that would irritate them as they drove their motorbikes, working-class participants, particularly informal workers, rarely raised this as a concern. For instance, when I asked one street vendor who works underneath Láng Station a follow-up question about whether the dust or noise during construction impacted her work, she laughed and responded, "The street is always dusty" (Interview, Láng, 17/08/2022).

The noise from the construction was also raised as a nuisance relating to the Line's construction. Depending on where they lived along the Line, some participants told me the construction would begin just before 5am and stop around 11pm, while others recalled the construction normally taking place throughout the night. Interestingly though, although the noise initially frustrated those that lived near the Line, most participants, such as Mr. Duong, told me they stopped noticing the construction noise after a while. He explained "I got used to the noise, similarly to how you live next to the railway and then you get used to that noise… you get accustomed. After a while, at five in the morning I didn't hear the voice that announces construction" (Interview, La Thành, 20/07/2022). Despite the frequency with which the construction noise was mentioned during interviews, most participants tended to shrug this off as a typical and regular complaint of living in Hanoi A 26-year-old man living by Vành Đai 3 Station noted, "I don't mind, everything is the same, I have adapted. Around here there are four to five factories and they're always running, and the market is crowded and noisy. You get used to it." (Interview, Vành Đai 3, 01/09/2022). Another participant, 53, who lives by Thái Hà

Station echoed this sentiment: “Even if the noise makes you crazy, you have to accept it, this is a difference between Vietnamese people and foreign people, Vietnamese people suffer the noise and don’t complain” (Interview, Thái Hà, 04/08/2022). This acceptance of noise makes sense due to the high levels of noise pollution in Hanoi. In fact, the average day time noise level in Hanoi is 78dba, which is ten times the healthy, recommended levels (Luong 2021). Daily life in Hanoi is accompanied by the constant hum of motorbike engines, honking horns, construction, and the various sounds of street life, making the noise generated from Line 2A’s construction a relatively minor addition to the city’s soundscape.

Surprisingly, just over a third of participants (25/74) – a relatively low proportion – were aware of the accidents that took place during the construction of Line 2A, with most who were aware having read about accidents in the state-sanctioned media or on social media. As discussed in Chapter 3 (context), five (reported) accidents took place along the Line between 2014 and 2016 injuring both workers and/or motorists beneath the Line, with two of these accidents resulting in fatalities. While most participants ‘shrugged off’ such accidents, rationalizing that “all building projects have some accidents” or that accidents are “inevitable while constructing”, several older participants who lived in close proximity to accident sites described how the accidents impacted how they felt in spaces around the Line during construction (Interview, Láng 15/08/2022; Interview, Vành Đai 3, 26/08/2022). Apart from the obvious direct harm that Line 2A caused to those who were injured or lost their lives during construction, these participants expressed feeling afraid for their safety underneath the Line after the accidents and spoke of their anxiety about potential harm, particularly around Hà Đông and Văn Quán stations, the area where most of the accidents took place. One 60-year-old café owner by Văn Quán Station who was at the location of an accident when concrete fell from the Line into a taxi below, and witnessed the event, exclaimed: “Yes, of course [it affected how I felt around the Line], I was afraid of that happening again. But it’s a main street, so I can’t avoid it. I was forced to go on this road.” (Interview, Văn Quán, 15/09/2022). Another participant, 63, who lives by Hà Đông Station, told me: “I had to use that way [main road beneath the Line] but I felt so scared because of the psychology and everyone felt a bit afraid, afraid of something falling down on our heads” (Interview, Hà Đông, 16/09/2022).

A shop owner by Cát Linh Station who lost some of his land for the construction of the Line, added a different perspective on possible harm, being concerned about potential damage to his house from the construction of the Line. He explained:

> A lot of people were afraid for their life, because they build an underground part at this station, and for a certain period of time I didn't dare to live here [in my house]. I didn't dare to live here when they worked underground. I was afraid that, when they built the two basements – here they have two basements underneath the station – I was afraid that my house will fall down, will sink (Interview, Cát Linh, 14/07/2022).

In contrast to participants who lived near an accident site, those who were further away from these precise locations reflected that the accidents had no direct impact on them other than perhaps making them question the safety of the Line. Many participants explained that the construction was 'up there', above the street, and therefore did not impact their daily life. As Ms. Doan reflected, "Maybe at the time or around the time it will have an impact but after a long time you get too busy with your life and you get occupied with other things so you forget. For a lot of big things you think you cannot forget, but then you forget it after years, and you don't have any memory of it" (Interview, La Thành, 26/07/2022). Those who were directly impacted by the construction through the destruction or devaluation of their land, however, were not so easily able to forget. Such experiences – along with the loss of life, injury, and psychological impacts caused by the accidents during construction -- attest to the infrastructural violence of Line 2A's construction (Rodgers and O'Neill 2012).

5.4 Appropriations and negotiations of space along Line 2A

In this section I focus on two key groups that are appropriating and finding new opportunities in the spaces at and around Line 2A, namely those who have established new cafés, and those now operating motorbike parking stations. These resourceful individuals are creating new informal livelihood opportunities in the areas underneath the Line, often on land where there were displacements or the cutting of homes. I include two brief ethnographic case studies of each new informal economy operation. First, I offer the case of a café operator who has established a stall in an alley next to Láng Station, an area where there were many displacements and where the land acquisition and compensation process was particularly tense and drawn out (see Figure 5.14). Second, I introduce a particular informal motorbike parking lot established by a resident

whose house had been obstructed by the construction of the railway's staircase. I then briefly introduce two other informal motorbike parking lots that have been established at other stations along the Line. Each of these case studies demonstrates how residents are enacting their 'right to the city' through the production of presence in these new urban spaces (Sassen 2002).

After these cases, I focus on how the stations themselves, particularly the platforms, have become sites to 'hang out' and 'check in' for young Hanoi residents. These very contrasting ways of appropriating the new spaces around Line 2A – by informal workers and youth – shine light on new ways of living with and negotiating the Line. These observations highlight how residents are taking back their 'right to the city' and to these specific spaces, carving out new possibilities for these spaces in ways that deviate from state visions of modernity.

Figure 5.14 Cafes beneath the Line by Láng Station. Source: Author

5.4.1 Cafes underneath Láng Station

After descending from Láng Station, if you follow the curve of Line 2A in the direction of Yên Nghĩa, you will stumble upon an alley lined with small chairs, stools, and tables; the outdoor seating area for a number of cafes that operate outside of the buildings immediately across the street. Some of the café chairs are made from a dark wood or rattan, while others are the quintessential plastic stools that can be seen on nearly every street corner in Hanoi. Along the length of the block, a net made from plastic foliage hangs from the concrete pillars of Line 2A. The area is surrounded by climbing plants, and flowers have been planted in the shaded area

directly underneath the railway line. A small water fountain has been installed next to one of the concrete columns and a row of electric fans are lined up beside it, cooling customers as they sit in the midday heat. It was beside this water fountain that my research assistant and I interviewed a woman who operated a *bánh mì* stand for one of the cafes, Ms. Quan, 60. After I commented positively on the green space in the area, she smiled and said: "Actually, it's nice. When the government does like this [builds Line 2A], people will make it nicer. This place is nice thanks to the local people" (Interview, Láng, 27/08/2022). She told us that it took a month to set up the café and that it had only been open for a short period of time. The greenspace we were sitting in, she said, was built in one afternoon; the café owners levelled the land and installed tiles over the dirt in a matter of hours (see Figure 5.15).

Figure 5.15 Cafes by Láng Station. Source: Author

Ms. Quan continued to explain that the space belongs to the government, but that the café owners pay a monthly bribe to the ward police (*công an*) to continue operating their businesses on the sidewalk here. "When places are made nicer and better, the local government will take over" she told us, "They will say it belongs to them" (Interview, Láng, 27/08/2022). At the time of writing, these cafés are a stable presence in the area, but the future of these spaces remains uncertain.

When we asked about the displacements that took place in the nearby/adjacent alley, she explained: "Where we are sitting, it was a residential area before. The local government

compensated the local people. But about the [amount of] compensation, I don't know. Most of the people here are poor, not many high class people here" (ibid.). The building Ms. Quan's *bánh mì* stand and the proprietor's café are housed in, which is now at the street-front, used to be behind several other houses in the alley prior to the land acquisition process and cutting of land for the construction of Line 2A. "Suddenly, these houses reached the main street, the value of these houses were raised" she told us, adding. "but for those who lost their house, they are heartbroken. The pain of one person will be the happiness of the other" (ibid.).

If you walk a little further down the Line, you stumble upon the remnants of these displacements; half-demolished houses and piles of construction waste that lie just one block from these cafés (see Figure 5.16). Although the land acquisition process for this alley took place over five years ago, the end of the street appears to me as if it were frozen in that time; broken and discarded furniture remains piled up amongst mounds of garbage and bricks that will presumably be used for future construction in the area (see Figure 5.17). While the cafés at the front of the alley attest to the new possibilities and spaces that can be carved out from the area's upheaval, the abandoned, cut homes and debris serve as reminders of what these spaces were, and what they would still be, if not for the informal interventions of enterprising local residents.

Figure 5.16 Cut home in an alley by Láng Station. Source: Author

Figure 5.17 Remnants of displacement and signs of construction by Láng Station. Source: Author

5.4.2 Informal motorbike parking

Mr. Ta, 50, was sitting on the front steps of his home smoking a cigarette the first time we met him. My research assistant and I had been walking back to La Khê Station, ready to head home after a long day of interviews, when we noticed dozens of motorbikes all parked near the staircase we were about to ascend (see Figure 5.18). We went to investigate, and peered into the first floor of what we would later learn was Mr. Ta's home, finding rows of motorbikes parked on the tile floor. Mr. Ta told us his home had been impacted by the construction of Line 2A, that the building shook as the construction workers installed the columns in 2012 or 2013 (he did not quite recall when). When we asked him why he opened a motorbike parking lot in his home, he told us his house used to front onto the street with a normal open façade, but when the railway staircase was constructed, it blocked his home and he was no longer able to rent out the ground floor for commercial purposes as he had done in the past, losing important income. Mr. Ta added rather candidly that he had been released from jail fairly recently, where he had served a short sentence for committing an undisclosed crime. He explained:

> After I got out from jail, people said no one would accept me as a worker but I didn't have money to even pay for the electricity and I couldn't sell or rent anything [because of the new Line 2A access staircase in front of his house] so I just came up with this. Some neighbours asked me to take their motorbikes so they could go up here, on the railway, and that's how it started. It was because I had nothing, no job, no money, so I had to come up with something (Interview, La Khê, 05/10/2022).

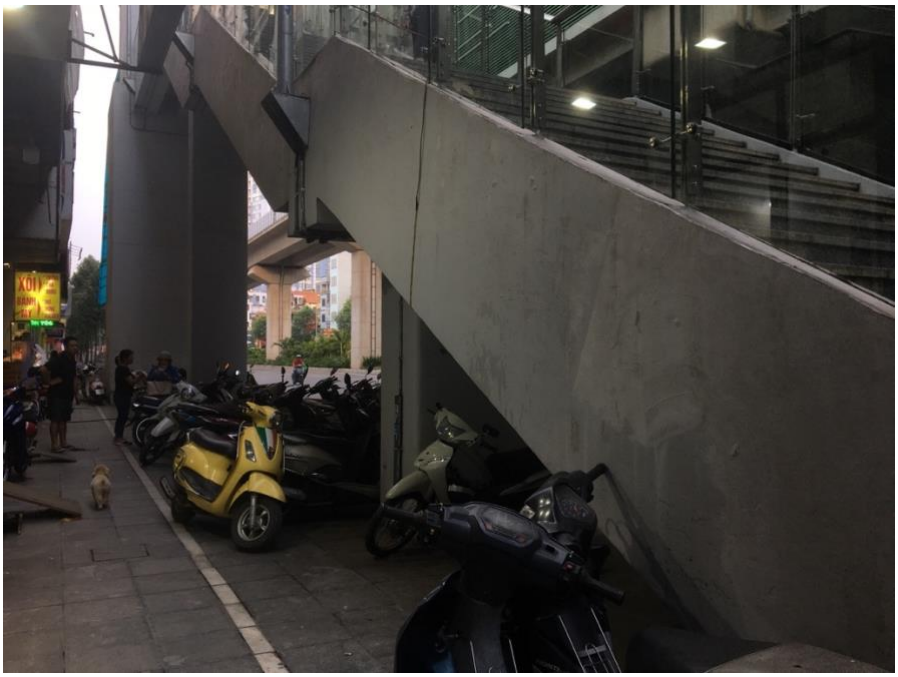

Figure 5.18 Spill-over informal motorbike parking across from Mr. Ta's house, underneath La Khê Station. Source: Author

Mr. Ta's experience of Line 2A's construction is what other participants called the 'least lucky'; the experience of those whose homes have become 'undesirable' due to their close proximity to the railway staircase, yet who received no compensation. "It didn't touch my living area, my land," he told us, "so the government didn't need to notify me because it's their property, so they can do whatever they want. Even though the house is now covered by the staircase, there was no compensation" (Interview, La Khê, 05/10/2022).

As we stood talking with Mr. Ta, multiple customers came to park or retrieve their motorbikes. He told us he gets between 30 to 40 customers a day and that he often does not have enough space to accommodate everyone who wants to park. "I can't take them all", he said, "so there are other houses here too, and underneath the stairs on the sidewalk" (ibid.). The price he charges depends on each person, he explained, as he does not have a set price. My research assistant observed one customer paying him 5000 VND (~0.20 USD), which is an average cost of parking in Hanoi (which normally ranges between 3000 and 8000 VND for one motorbike). "Maybe the station should pay me" Mr. Ta joked, "people like me increase the customers for the station" (ibid.). Entrepreneurs like Mr. Ta are indeed meeting a crucial need of commuters that use Line 2A, as only two of the stations (the first and last) have official parking spaces, with urban planners and state officials seeming to have completely overlooked the fact that the

majority of urban residents still need to use their personal motorbikes to access the Line. Similar informal motorbike parking lots have been established at several other stations along the Line. One photovoice participant, who runs a *trà đá* stall and at times also offers informal motorbike parking, photographed her neighbours' parking business by the staircase of Văn Khê Station (see Figure 5.19), while another photovoice participant documented an abandoned gas station that had been transformed into informal motorbike parking by neighbours for the Line (see Figure 5.20).

Figure 5.19 Informal motorbike parking by Văn Khê Station. Source: Photovoice participant

Figure 5.20 Informal motorbike parking in a former gas station. Source: Photovoice participant

These informal entrepreneurs, much like those who have opened cafés or *trà đá* stands beneath the Line, must continue to navigate tensions with local ward police if their operations spill over onto the sidewalk. "Yes, I've gotten in trouble for having motorbikes parked here", Mr. Ta told us motioning to outside his ground floor, "the police will stop by, but I say what are you going to do, take me to jail? [laughs] If the police say anything I will take all the bikes inside my house" (Interview, La Khê, 05/10/2022). Ms. Ly, the photovoice participant introduced above who lets railway customers park their motorbikes at her *trà đá* stand, explained that if the police see you have motorbikes parked in front of your place, they will want you to 'register' your business with them. She did not elaborate on whether this required a formal registration process, or the paying of bribes. As she did not want to 'register', Ms. Ly simply did not put up a sign or advertise her motorbike parking, and instead told me that she only lets a handful of people park their motorbikes discreetly, so as not to attract attention from the ward police.

In the wake of the demolition and displacements of houses for Line 2A, the 'lucky' and 'least lucky' are coping with the changes to their neighbourhoods by finding new ways of making a living in the spaces underneath the Line. The cafes described near Láng Station and the informal motorbike parking lots near the end of the Line are just two examples of this. Many other small stalls, particularly *trà đá* stands, have popped up along the length of the Line as well, as those who are left to grapple with the impacts of this infrastructure project come up with innovative ways to adapt to and make use of the changing environment. These adaptations and

negotiations can be understood as tactics of everyday and street politics, as these groups contest the norms and rules of these new urban spaces to include them (Bayat 2013; Scott 1985). However, informal workers' use of these spaces is precarious and dependent on the ward police to whom they must pay bribes to avoid being targeted and removed from the sidewalks. For now, however, these adaptive strategies and livelihoods are continuing as local residents do their best to live with, and seek out new opportunities from, the Line.

5.4.3 'Checking in': Alternative youth uses of Line 2A

Another group who has been using the new urban spaces of Line 2A in ways that deviate from the expected and officially 'desired' uses of the Line and its stations– i.e., for travel – are young, often middle-class Hanoi residents. Younger participants (those between 18 and 30 years of age) frequently explained how the stations of Line 2A have become locations for young people to 'hang out' (*đi chơi*) and 'check in' (often said in English). Checking in, young participants clarified, involves taking photographs of themselves in a specific location to share with friends on social media, as a way of showing people that "we are here" and that they had been to a popular or trending location (Photovoice, 23/09/2022). One 29-year-old photovoice participant, Ms. Vu, photographed herself holding her metro ticket for the project and explained: "I always like to 'check in'. I saw some young people [on social media], they go together and then they each have one ticket, so they put them in a circle to check in, and then post it on Instagram" (Photovoice, 23/09/2022; see Figure 5.21).

Figure 5.21 'Checking in' at Cát Linh Station. Source: Photovoice participant

Another interviewee, a 26-year-old woman who lives near Cát Linh Station, told me that many young people go to take pictures and hang out at the stations: "It's like a tourist attraction now" (Interview, Cát Linh, 29/08/2022). She elaborated, "I don't know if they [the young people] use the railway or not, but they just go there and take pictures, upload it to Facebook… my second sister does it too, she goes to take photos like other young girls" (Interview, Cát Linh, 29/08/2022).

Young participants described how the stations are the perfect backdrop for photo shoots, either with friends or for more formal occasions, such as engagement photos (Photovoice, 23/09/2022).[13] On my daily rides along Line 2A during fieldwork, I frequently saw young people shooting photos and films on the Line, with some even having multiple outfits to change into during the photoshoot (see Figure 5.22). I also found it was common for railway riders, especially those riding the Line for the first time, to livestream, photograph, or film their ride. One need only to search 'Line 2A' or 'Cát Linh Hà Đông' on YouTube to find a long list of vlogs depicting the experience of riding Hanoi's first urban railway line. Before taking the Line for the first time, I remember how hesitant I had felt about bringing a camera onto the metro, as I worried I would attract negative attention, be reprimanded by security guards, or make other

[13] Several couples have taken their wedding photos on the platforms and trains of Line 2A. These photos have been widely shared on social media and in news articles. See this article (Kien Thuc 2021) for examples: https://kienthuc.net.vn/cong-dong-tre/cap-doi-chup-anh-cuoi-dep-nhu-phim-dien-anh-o-ga-cat-linh-ha-dong-1628532.html

riders uncomfortable. After my first time riding the Line, however, I quickly realized that I was just one of many riders documenting their experiences on the Line.

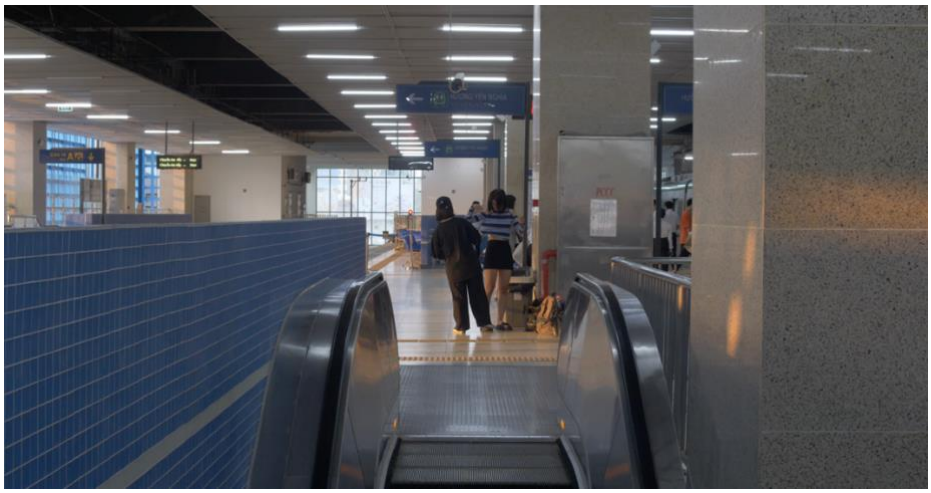

Figure 5.22 Two young people switching outfits to prepare for a photoshoot. Source: Author

Mr. Tran, a photovoice participant who lives near Thái Hà Station, told me how the stations have become sites for artistic photoshoots as well. While describing a photograph he took that shows a young man he met on the station platform doing a photoshoot (see Figure 5.23) he explained:

> Another cool thing about the metro stations is that they've become a place here for young people to take pictures, like of their fashion style. It's very popular right now. I know some artists and fashionistas are doing their lookbooks or outfit looks in the railway stations, it's becoming a very popular place for lookbook photography and videos and stuff. A lot of people just go to the railway to take photos, but they don't take the railway (Photovoice, 12/10/2022).

Mr. Tran related how young people are using the new spaces of Line 2A with what he called the 'Circle K effect'. When Circle K, a chain of convenience stores that are now omnipresent in Hanoi, first entered Vietnam in 2008, a new youth culture was created around these spaces. Mr. Tran explained: "People would sit there at night, rapping and freestyling" and many photographs and videos began to be shot in front of these stores. "Similarly, the railway stations create a new playground for people. Photography is just the beginning, I think. A new pop culture is starting up with the arrival of the railway system" (Photovoice, 12/10/2022). A quick search of the many Instagram posts made at Cát Linh Station demonstrates just how popular these alternative uses of Line 2A are amongst young people in Hanoi.

Figure 5.23 Photo shoot on Line 2A platform. Source: Photovoice participant

5.5 Conclusion

In this chapter I analysed how Hanoi residents perceive of, and have been impacted by, the construction and operations of Line 2A. I found that those who live and work along the Line contradictorily view Line 2A as both a modernizing project and a 'backwards' or outdated form of infrastructure. Participants also spoke of the 'trade-offs' necessary for development, with the tree-felling during construction often brought up as one important example of this. The contractor choice and high construction cost remain controversial a year into the Line's operations, although it does seem that locals are becoming more trusting of and positive about the Line as more people use the Line for themselves. Many still view Line 2A as inconvenient for their own travel needs due to the lack of synchronicity between other forms of transport, such as motorbike parking and bus networks (to be further discussed in the following chapter). Regarding the impacts of the Line, I analysed how the land acquisition process and construction of the Line have enacted infrastructural violence on residents who live and work near the Line, and created 'lucky', 'unlucky', and 'least lucky' individuals. Other less severe impacts, such as the narrowing of roads, dust, and noise that took place during the construction of the Line, was also discussed. Finally, I demonstrated how residents are engaging in tactics of everyday and street politics by using and adapting the new spaces along Line 2A to include them.

Chapter 6 : Line 2A's Users and Everyday Mobilities

6.1 Introduction

In this chapter, I analyse semi-structured interview, photovoice, and survey data to answer the second of my three research questions: *How are Line 2A's users responding to, being impacted by, and negotiating the Line, and in what ways has the urban railway affected their everyday mobilities?* To answer this question, I have divided this chapter into two sections. In the first section, I address the ways Line 2A is being responded to and used through an analysis of survey data with users of the Line. I then reflect on a key user group I found through my analysis; those who ride the Line for 'the experience' *(đi chơi).* Next, I investigate three barriers to the use of Line 2A, focusing on poor transport connectivity, inadequate pedestrian infrastructure, and how some residents' mobility needs are not met by Line 2A due to their lack of static work locations. In the second section, I analyse the present and future disruptions to residents' lives and livelihoods. Specifically, I investigate street vendors disrupted mobilities and the potential disruptions that will be caused by the state's plans to ban motorbikes in central districts of Hanoi.

6.2 Uses of and barriers to use Line 2A

To begin this section, I analyse survey data to determine common travel patterns and uses of Line 2A. Next, I discuss an unusual user group for Line 2A, those that ride 'for the experience', and reflect on this common use of Line 2A. Then, drawing from semi-structured interview and survey data, I concentrate on three key barriers to accessing the Line. First, I focus on the poor and unclear connections between Line 2A and other modes of transport, particularly motorbike parking and bus routes. Second, I discuss participants' concerns with the lack of pedestrian infrastructure surrounding the Line, and their concerns with the area's poor walkability. Third, I analyse the mobility needs and rhythms of different groups, particularly office workers with a static workplace and informal workers without, and how these differing needs create incentives for some workers to use the Line and barriers for others.

6.2.1 Riding the Line: Uses and Travel Patterns of Survey Respondents

Among survey respondents – who were surveyed at a station as they arrived or exited from riding the train –, the most common reason given for their trip on Line 2A was to commute to

work, with this reason accounting for just under 40 percent of all responses.[14] The second most common uses were to see friends or family (24 percent), and the third was to ride the Line 'for the experience' or for 'sightseeing' (21 percent), often referred to as *đi chơi* in Vietnamese.[15] Only 11 percent of respondents reported riding the Line to commute to school and the remaining responses were listed as 'other', with these respondents adding that they were either using the Line to return home (the initial trip purpose was not disclosed) or to perform a work task.

One third (28/83) of respondents noted that they take Line 2A less than once a week. Just under a quarter (20/83) of surveyed users take the train over ten times a week, with these users classified as either commuters or all-purpose riders, who take the Line for a variety of trips in the city. Occasional riders, those who take the train at least once but under ten times per week, made up the biggest share of 43 percent of responses, with users who take the train 5 to 10 times a week at 17 percent, those who take it 2 to 5 times a week at 13 percent, and once-a-week riders also accounting for 13 percent. From this data, most of the surveyed users were therefore either frequent riders that commute to work using the Line, or 'joyriders' taking the train to experience the country's first metro.

All respondents accessed the station by either their personal motorbike or bicycle, a bus, a taxi (motorbike or car), on foot, or reported they had been dropped off by a friend or family member. In the total breakdown of the different modes of transport taken to Line 2A, with the consolidation of the data from all surveyed stations, walking was the most common way of reaching a station as it was the mode of transport used by 33 percent of all respondents. Accessing the Line by one's personal vehicle accounted for just under 20 percent of trips and commuting by bus accounted for 16 percent of all trips to a station.

To determine if these trends are consistent across space, as the Line begins in the inner-city and ends at Hanoi's periphery, I analysed the survey data at each of the three surveyed areas along the Line to investigate if modal choice is impacted by one's location along the Line. From these results, walking appears to be the most common way of reaching the stations at the beginning and middle of the Line, while these pedestrian numbers drop significantly at the end of

[14] As some participants had more than one reason for their commute to the line, although 83 individuals were surveyed, this specific question has 95 responses.
[15] In Vietnamese, *đi chơi* is often used to describe 'hanging out' or enjoying leisure time. Interviewees often used *đi chơi* to describe riding the Line for the experience. In this context, the term can also be understood as 'going for a ride'– to 'hang out' on and experience the Line.

the Line – from approximately half of all trips to the metro being taken by foot to Cát Linh and Phùng Khoang Stations, to less than 10 percent at Yên Nghĩa. Average commute times by personal motorbike were similar at Cát Linh and Yên Nghĩa Station, however, these commutes dropped by almost half for those surveyed at Phùng Khoang. It is also interesting to note that just over three percent of commuters at Cát Linh and Phùng Khoang Stations had used their personal bicycle to access the Line, while no one at Yên Nghĩa had reported commuting by this mode. The potential of bicycles – particularly fold-up bicycles – in meeting the needs of Line 2A's users, especially regarding first-and-last mile connections, will be further discussed in Section 6.2.3.

In response to the survey's open-ended questions, respondents tended to be hopeful about the Line's future potential in improving traffic and pollution in the city, especially when coupled with other policies, such as the motorbike ban (see Section 6.3.3) that encourage a switch to public transport. As Mr. Nguyen, a young student noted while describing how Line 2A is the 'right' way to go around Hanoi: "Line 2A is a good choice to go around Hanoi because it is reasonably priced, fast, reduces pressure on main roads and reduces emissions" (Survey #23, Cát Linh, 08/07/2022). Respondents were also asked to describe Line 2A in one word. The five most common responses were: great or good (11 percent); modern (8.4 percent); development or developing (8.4 percent); convenient (5.6 percent); and interesting (5.6 percent). The only word given that did not have positive connotations was 'limited', which was selected by only one respondent. All the other chosen words focused on the aesthetics (beautiful, picturesque) or the operations (fast, efficient, comfortable). Still, others had less ambitious ideas regarding the benefits of the Line's use, with responses focusing more on how it saves them commute time. As Mr. Phan, a 23-year-old banker explained, "By using this metro Line, we will not need to worry about being late for work because of traffic jams and ensure 100 percent traffic safety" (Survey #42, Yên Nghĩa Station 08/07/2022). Similarly to Mr. Phan, 14 percent of surveyed users responded that they believe the Line allows them to avoid traffic jams, with just under 18 percent describing the Line as fast, or mentioning that it saves them time.

Despite some positive perceptions of the Line, frequent users of Line 2A often noted frustrations with the Line's current lack of convenience and connectivity, especially for those that do not live within a short distance of one of the stations. Over half of all survey respondents did not believe the Line was a good way to get around Hanoi, with the common issues brought

up being the poor connectivity between the Line and other forms of transport, the minimal stations and therefore few areas served by the Line, and the Line's current inability to compete with the convenience of a personal vehicle. Mr. Hoang, a 20-year-old student, explained this inconvenience: "There are still too few stops, you will have to take a bus, taxi, or Grab to get from the station to where you need to go and back. It's inconvenient and more time consuming than just using personal transportation" (Survey #37, Yên Nghĩa Station, 08/02/2022). Among survey respondents who used the Line once or more a week, the percentage of users who did not believe Line 2A was a good way to get around Hanoi went up three percent (to 53.3 percent), with frequent users being more familiar with the difficulties that arise when trying to use Line 2A for one's daily mobility needs. These concerns were also raised by interview participants and will be discussed in the following sections on common barriers to the Line's use, following a brief overview of a new user group, those that ride 'for the experience'.

6.2.2 Riding for the experience (đi chơi)

As discussed in the previous section, just over 21 percent of 83 survey respondents had taken the Line for 'the experience', or to go 'sightseeing' when surveyed. Similarly, over half of my interview participants had mentioned riding the Line for the experience at least once. As Line 2A is the first (and currently only) operational metro Line in Vietnam, many Vietnamese have been curious to ride and experience the country's first urban railway line, with the Line serving as some people's first ever experience of a metro system. When discussing her own curiosity that led her to ride the line 'for the experience', 46-year-old Ms. Doan explained "A lot of Vietnamese people here, they have never been on a metro so they are curious. For me, I'm more curious about the two sides of the road, about how it looks [from above], than the metro" (Interview, La Thành Station, 26/07/2022).

One quarter of interviewees had taken the Line during the first 15 days of operation when it was free to ride. Participants who took the Line during this time described how crowded the trains were, with many lamenting that there was not enough room for them to sit down for the journey. Mr. Ta, born in 1992, described a similar experience of the opening: "During the 15 days trial, I didn't go it was too crowded. My mom tried but she couldn't find a seat" (Interview, Láng Station, 15/08/2022). Several other interviewees told me they had refrained from riding the Line during the initial 15 free days as they were nervous about the crowds at a time when the city

had high numbers of COVID-19 cases. Still, most participants described it as an enjoyable experience, frequently mentioning how the train was very clean and fast, and how pleasant they found the air conditioning in each carriage.

Riding the Line for the experience, or *đi chơi,* has become a new kind of leisure activity in Hanoi, with many taking the train to sit back, relax, and look at the views. A version of this practice of *đi chơi* on the Line has also formed alongside the metro's route, with many people, particularly youth, going to 'hang out' at rooftop cafés that offer a view of the train. One photovoice participant, a 24-year-old man, attempted to document these cafés along Hoàng Cầu lake (see Figure 6.1). He explained:

> A lot of new rooftop coffee shops have been opened. When we were still in high school, rooftop coffee was very rare. But now a lot of new rooftop coffees have been opened alongside the Line of the metro system. I once tried to count how many rooftop cafes I could count when I took the metro system, it was like up to 10 or 15 and many still opening, so I think it's a new thing to have with the metro system. People want to have a nice view of the lake and a nice view of the metro leaving the stations. It's like a vibe for Gen Z people (24-year-old man photovoice lives near Thái Hà, 12/10/2022).

Figure 6.1 Rooftop cafés along the Line where people go to watch the trains pass for đi chơi. Source: Photovoice participant

Several participants spoke of how this initial curiosity has now waned, with one man born in 1974 suggesting that "After the 15 free days people no longer feel eager, they no longer feel curious" (Interview, lives by La Thành, 20/07/2022). However, as just under a quarter of

survey respondents at one of the stations had been riding Line 2A for the experience at the time of the survey – nearly a year after the train began operations –, it seems these 'joyriders' still account for a notable proportion of the Line's users. Ms. Pham, a 47-year-old interviewee, has never ridden the Line but she spoke to me of her friends' continuous use of the Line for the experience, explaining:

> Saturday and Sunday there are a lot of people. The people near my place always encourage me to use to use Line, but I cannot make time yet. In the weekends, they [neighbours and friends] tend to use the Line, they really like it. They ride it every single weekend, just for the experience, just go back and forth for fun because they enjoy it. They like to go there with the air conditioner and get to see the city. The sightseeing is very good, according to them. I am very eager to see the view (Interview, works by Thái Hà, 27/07/2023).

In fact, a substantial number of participants believed that Line 2A was not only still being used for the experience, but that it was *exclusively* useful for the experience, with one quarter of interviewees describing Line 2A as only suitable for *đi chơi* or sightseeing purposes, and not as a real mobility solution. As Mr. Ngo, a 22-year-old student, told me: "This is just the first one, the experience time for people in Hanoi because the infrastructure is not synchronized. It's not optimized transportation for the people, most of them will just use it for the experience" (Interview, studies near Hà Đông, 06/10/2022).

Not everyone, however, had this desire to ride the Line for the experience. Ms. To, a 68-year-old woman who lives and sells tea near Láng Station, was one of several participants (10/74) who expressed no interest in trying the Line, whether for commuting or *đi chơi*. When discussing the opening in November 2021, Ms. To expressed:

> When the Line just opened for 15 days free, nobody in this area [around Láng Station] went to use the Line because they say 'go for what'? I don't prefer to use public transport even though, for the old people, people that are 60 years and up, they don't have to pay for the ticket, but still I never use it. Even though it's free! I'm just interested in *xe ôm or xe máy* [motorbike taxi or motorbike], I have no demand to go around on the train (Interview, works near Láng, 16/08/2022).

It is also relevant to note that Láng Station, near where Ms. To lives and works, was one of the areas most impacted by the Line's construction, with a particularly complicated and drawn-out land acquisition process. Still, neither the impacts of the Line's construction – nor the negative

perceptions regarding contractor choice or safety concerns – deterred most participants from riding the Line for the experience. Instead, the lack of demand or interest in this new mode of transport was the more commonly given reason for not using Line 2A. This lack of demand will now be explored through an analysis of three key barriers to the use of Line 2A.

6.2.3 Barriers to use: Poor transport-connectivity.

Participants brought up the stations' lack of connectivity with other forms of transport, particularly motorbike parking and bus routes, as the most common barrier to Line 2A's use, with half of all interviewees raising this concern. This lack of synchronicity between modes of transport was particularly frustrating for participants due to the minimal areas serviced by the Line's twelve stations. Mr. Dang, a 25-year-old app-based motorbike taxi driver, voiced these frustrations, explaining: "It'd be so much better if there were more stops, like some of the stops are too far from each other so it's hard to reach the places that you want to be… it's not enough, we need more stops" (Interview, works by Cát Linh, 14/07/2022). Nearly a third of interviewees expressed that Line 2A is a good start, but that there are not enough stations for it to be an effective or desirable form of public transport for them.

Even among survey respondents – the Line's users –, 50 percent of respondents did not think Line 2A was a good way to get around Hanoi. As Mr. Cao, a survey respondent who was born in 2000 explained, "For example, if I come here [to the station] by motorbike, then get on the train and get off at another stop, then I don't have a motorbike to go onwards" (Survey respondent #6, Cát Linh Station). Respondents cited the poor connectivity – particularly the lack of first-and-last mile connections – and the short length of the Line, as key reasons that detract from the Line's usability and ability to compete with personal vehicles for their daily mobility needs. Mr. Minh, 22, who was surveyed at the final station along the Line, described this inconvenience: "You will have to take a bus, taxi, or grab to get from the station to where you need to go and back. It's inconvenient, and more time consuming than just using your personal vehicle" (Survey respondent #37, Yên Nghĩa Station).

For those who do not live near one of the Line's stations, accessing the Line requires the use of a connecting mode of transport. Many users of Line 2A still use their personal motorbikes to access the stations, however, as discussed earlier, only the first and last stations have official parking spaces (see Figure 6.2 for motorbike parking at Cát Linh Station). Ms. Le, 35-years-old,

described the difficulties with accessing the metro: “Some people still have to use their motorbike to get to the station, people with a longer distance to travel like 2km, they don’t want to walk so they’ll still have to use their motorbike but there’s no specific parking area [at most stations]” (Interview, work and live near Hà Đông, 16/09/2022). She went on to explain that these commuters could ask to park their motorbikes at the houses and shops of people living nearby, a practice that many users have utilized and that homeowners and shopkeepers along the Line have picked up on, with some offering informal motorbike parking lots in or just outside of their homes (as discussed in Chapter 5). For the users that do park their motorbikes at the beginning of their journey, they are then often left needing a last-mile connection after disembarking and reaching their end station, often having to rely on motorbike taxis to reach their destination. These first-and-last mile connections add another cost to the commute as well, with the official motorbike parking at Cát Linh Station costing 5000 VND, and motorbike taxi rides starting at approximately 10,000-15,000 VND for a short trip. Ms. Doan, a 46-year-old who lives near Thái Hà Station, described the costs of a journey on Line 2A with her family:

> It's a good way to get around Hanoi but I think it’s expensive, because we also have BRT [Bus Rapid Transit] lines to my mom’s hometown and this way [the Line] is more expensive because you have more stations and it’s calculating based on the number of stations. For instance, if we go to the shopping mall [by railway], each person will have to pay 12,000 VND one way, and for four people that’s 48,000 VND, so two-ways that’s around 100,000 VND [just over 4 USD]… that’s a lot! And we have to take the taxi at the end, take the taxi to the house so it’s not very convenient… best way is just to take the motorbike (Interview, lives near La Thành, 26/07/2022).

Figure 6.2 Official motorbike parking at Cát Linh Station jam-packed with vehicles. Source: Author

Ms. Ngo, a 34-year-old who operates a *trà đá* [iced tea] stand near Thái Hà Station, explained how taken aback she was by the inconvenience of accessing the Line by motorbike. After driving to the Line, users must find a place to park near one of the stations – which can in itself be time consuming, especially for those unfamiliar with the area – and then walk to the station, only to have to find another mode of transport at their end station. Ms. Ngo laughed as she suggested, "If they have to park, they'll just take their motorbike to move to their destination [instead], better like that than if they take the metro!" (Interview, works by Thái Hà, 04/08/2022).

The perceived poor synchronicity between the Line and bus routes was also often criticized by participants. As Ms. Vu, 26, explained: "This metro Line is new and it's not really connected to buses. It's going to take so long to be well-connected like that" (Interview, lives near Vành Đai 3, 01/09/2022). Although the stations closest to the city centre are in fact well-connected to bus routes (despite participants believing otherwise) six railway stations along Line 2A and Line 3 (which is still under construction) do not offer the possibility of transfer to a bus stop within 100 or 200 metres (Buczek et al. 2018). As seen in Figure 6.3, the number of bus routes decreases as one moves away from the inner city, leaving those farther from the centre with fewer connections in an already unsynchronous transit landscape.

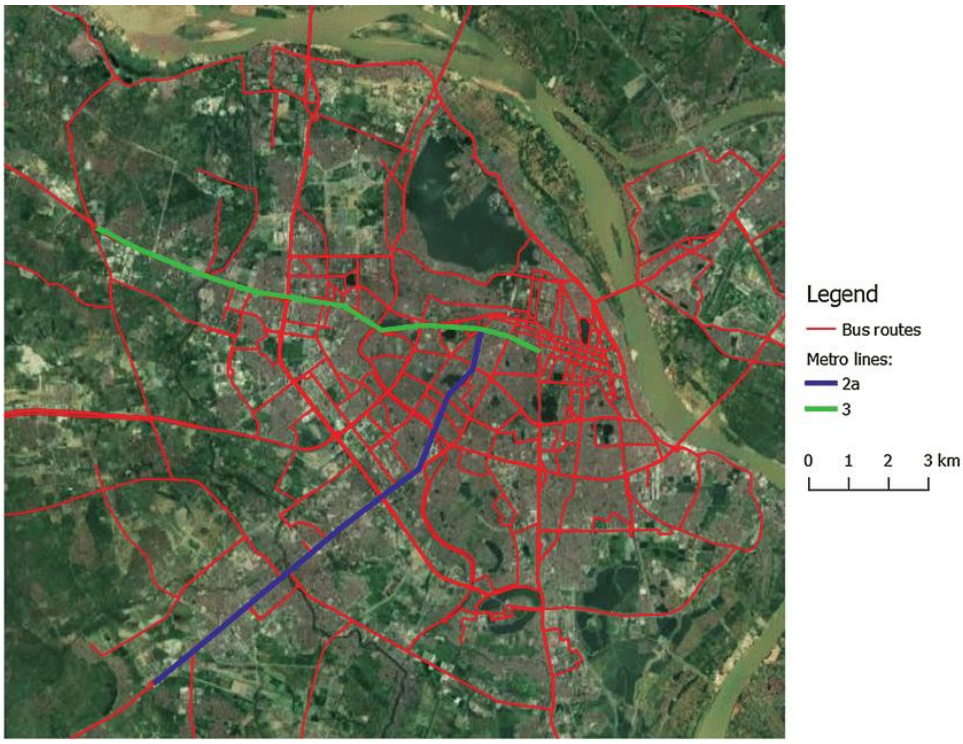

Figure 6.3 Map of Hanoi's public transport network (bus lines in red, Line 2A in blue)
Buczek et al., 2018: 79

Regardless of the actual availability of bus stops in the area, participants who lived within the inner-city expressed that they found bus connections lacking or confusing. Others were disinterested in using the bus altogether, regardless of its accessibility, as they viewed it as slow, dirty, uncomfortable, and inconvenient. Ms. Vuong, 35, a middle-class woman who works at a university, described why she does not take the bus:

> I don't like the bus because it's too crowded. The students use that type of transport a lot but I don't have enough time to wait for the bus. For example, if I start from here [her house], I will have to walk until Vành Đai 3 Station [approx. 400m], there's no bus from my place to the station. If I go to work, I will wear high heels, I cannot walk with those heels, and my laptop and everything… it's going to be exhausting for me, I cannot do it (Interview, lives near Vành Đai 3, 26/08/2022).

Similarly, Ms. Phung, a 30-year-old street vendor who works by Láng Station, explained: "I could go by bus but it wastes a lot of time waiting. If you go by motorbike you spend only one hour, but if you go by bus you have to spend two hours" (Interview, works near Láng, 17/08/2022). Most middle-income interviewees told me they had only taken the bus when they were a student, and participants from all backgrounds expressed that the bus is mainly used by

students and the elderly. We can think about the idea of 'captive' bus users here – those who do not have a choice in using this form of transport. I was told these two groups – students and the elderly – often do not have access to their own personal vehicle, either because of their age (too young for a license or too old to comfortably operate a motorbike) or financial means.

One interviewee, Mr. Duong, 48, explained: "If I am forced to use the bus, I will use it, but I never want to use the bus". When asked to elaborate, he added: "Because to get to the destination you want to go to, you will have to take two or three buses, or maybe the destination is 2 or 3km away from the bus station… No, the best way to get around is by car or motorbike" (Interview, lives near La Thành, 20/07/2022). This idea that the motorbike is the best and most convenient way of getting around Hanoi came up in many interviews. Ms. Ngo explained why she believes public transport is unable to compete with the ease and convenience of people's personal motorbikes:

> Vietnam always has traffic jams and if you use public transport then you have to wait until very late in the evening to get back home, even with the railway [Line 2A]. It is better to use my private motorbike than to use public transport. If you use motorbike you can go down the very small lanes, and if you use public transport you have to walk quite far but if you use the motorbike, you can use it to go anywhere (Interview, works by Thái Hà, 04/08/2022).

Another mode of transport that often came up during interviews – particularly with younger, middle-class participants – was fold-up bicycles (see Figure 6.4). Although standard bicycles are currently not allowed on the metro trains, the management of the Line has officially allowed folding bicycles on board (Tuoi Tre News 2022). Several interviewees told me about people who ride fold-up bikes to their closest Line 2A station, either friends or people they had seen while riding the Line. Once entering the station, these cyclists fold up their bikes to take them on to the train, before unfolding the bike as they descend from their end station, ready to ride it to their destination, solving the problem of the first-and-last mile connections. Ms. Do gave one example of this as she described her friend's way of accessing the Line:

> She not only uses the metro but also uses bicycle. She has a fold-up bike and just bought it three months ago for around 15 million VND [US $630]. I think it's very expensive, but very convenient because then you can fold it and use the metro and also save the parking fee [laughs]. She used the motorbike before, but then her boyfriend said 'hey let's buy a fold-up bike', and then he changed from motorbike

to metro. So, she traded because of her boyfriend (Interview, lives near Cát Linh, 29/08/2022).

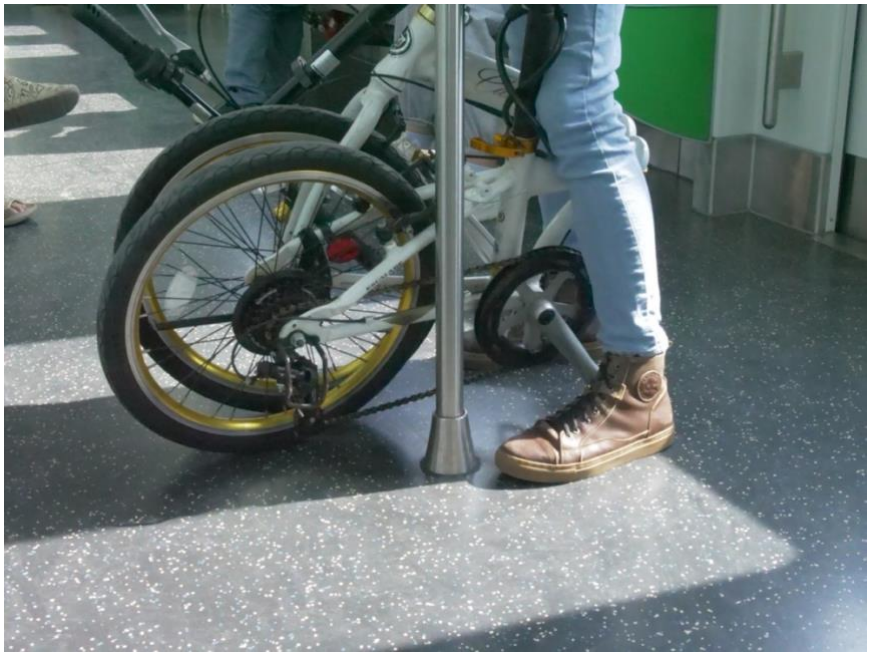

Figure 6.4 Passenger with their fold-up bicycle on Line 2A. Source: Author

Still, these fold-up bicycles were not viewed as an affordable or feasible mode of transport by most participants. Aside from the high cost of fold-up bicycles – which are more expensive than a standard bicycle or some motorbikes – many participants expressed that they would not feel comfortable cycling in Hanoi due to safety concerns and the climate. There are currently no designated bike lanes in Hanoi, forcing cyclists to share the road with motorbikes and cars. While several interviewees spoke to me about how they ride bicycles around lakes in Hanoi for exercise early in the morning – either Hoàn Kiếm or Hồ Tây– no one I interviewed was comfortable commuting by bicycle in Hanoi, at least not yet. Ms. Doan, a 46-year-old who cycles around Hồ Tây at 5:00 on the weekends, explained why she and many others do not want to bike to work: "I ride the bike for exercise, and I think it's good for the environment but in Hanoi it's not very convenient. The distance is very far…It's very hot, and you sweat so you need to bring clothing [to work] to replace, it's very annoying. I think motorbike is a better way" (Interview, lives near La Thành, 26/07/2022). Although fold-up bicycles may not be an accessible way for most commuters to overcome the poor transport connectivity that creates barriers to using the Line, an investment in this form of active transport could be a good way to help meet some commuters' needs. However, the infrastructure around Line 2A would also have

to change for this mode of transport to become attractive, a point I turn to in the next section on the lack of pedestrian and active-transport infrastructure surrounding the Line's stations.

6.2.4 Barriers to use: Poor walkability and pedestrian infrastructure.

A common theme brought up by interviewees was how Hanoi residents do not have the habit of walking and often do not feel safe walking due to the lack of safe pedestrian infrastructure in the city. Sidewalk space is frequently taken up by motorbike parking, informal shops and stalls, or occupied by residents using the space outside their homes for various purposes. This leaves pedestrians having to navigate a kind of obstacle course when walking from point A to point B; dodging various sidewalk uses, and at rush-hour in congested areas, even competing with motorbike drivers who ride up onto the sidewalk in the hopes of skirting traffic jams. Ms. Ho, a 27-year-old office worker and yoga teacher, explained:

> Vietnamese people don't have the habit of walking, for example if they can walk a bit and then use the motorbike, then they will just use the motorbike the whole way, it's not really our thing to walk. For students, if it took them just 500m [to walk] then it's okay, but 1km is too much, it's not going to work for them for walking. Just for students, working people or people with family, they live in a hustle lifestyle, they cannot [walk] (Interview, lives near Phùng Khoang, 01/09/2022).

Participants often lamented Hanoi residents' 'laziness' and refusal to walk even short distances. These individuals spoke of the need to change people's habits, to create a practice or culture of walking in Hanoi. It was only when people's walking habits changed, I was told, that Line 2A's ridership would increase, as currently only those that lived very close to a station – often defined by interviewees as within 500m – would walk to the Line.[16] Mr. Vu, a 55-year old office worker, spoke of what he deemed the 'laziness' of Vietnamese people when it comes to walking: "If the Vietnamese people were like foreigners, like not lazy to walk, then they would use the train quite often, but Vietnamese people are quite lazy to walk and so they will not use the train" (Interview, lives near Văn Quán, 15/09/2022). When asked about this habit of not-walking, he mused that Vietnamese people prefer to use a private vehicle because "on the way back home we often go to a coffee shop or *trà đá* shop to chit chat or something", instead of taking the train directly from work to home, which is how Mr. Vu believed foreigners with the habit of walking commute

[16] Interestingly, my survey data showed that users were willing to and did in fact walk longer distances than 500m to reach the Line. However, this remained uncommon and undesirable for many.

(Interview, lives near Văn Quán, 15/09/2022). Although this theme of the 'laziness' of Hanoi residents, when it came to active transport, was brought up in many interviews, the lack of walking is not only due to people's personal preferences or desire for comfort. Indeed, motorbikes are often preferred due to the convenience they offer, however, there is also a severe lack of safe and accessible pedestrian infrastructure in Hanoi, including around Line 2A's stations. As Ms. Vuong, 35, told me when speaking of her experience walking in Hanoi:

> Even if it's a short distance, I would still use my motorbike, because our pavement does not support pedestrians. There's no zebra-crossing, so it's dangerous. For example, sometimes I have to pick up the kids just across the street, and I will have to use my motorbike to drive and follow the traffic flow. When my second child was a baby, I had to carry him to cross the street [on foot], but no one would stop for us. And there are even some streets that don't have pavement (Interview, lives near Vành Đai 3, 26/08/2022).

Ms. Ho, born 1995, re-iterated this sentiment: "The infrastructure in Vietnam does not really encourage people to walk. Other countries, they have more pavement but in Vietnam the pavement is only used for selling drinks, business, or parking" (Interview, lives near Phùng Khoang, 01/09/2022). One photovoice participant, a 29-year-old man, illustrated the difficulties experienced by pedestrians in Hanoi (see Figure 6.5). When he uses Line 2A to commute to his school, he must walk from the station to his university, a walking experience that he described as uncomfortable. He photographed one particularly frustrating section of his route, and explained:

> So, from Phùng Khoang Station to my university there's this case, I think it's for a recycling plant or whatever, it's so nasty to go through because it stinks and takes up the entire pedestrian area, so you have to risk yourself on the road. You literally have to walk around it and it's always here, I've never seen it vacated before… I get so annoyed and frustrated, because like me, if I don't feel like dealing with it or I'm not in the mood I have another option [to go by Grab motorbike or taxi] but there are three universities between Phùng Khoang and the next station, and the kids, they have to deal with it because not a lot of them have *xe máy* [motorbikes], so they really have to walk. They have no option but to go through (Photovoice, lives near Cát Linh, 17/10/2022).

Figure 6.5 Students walking on the road as the sidewalk has been taken up by waste from a nearby factory. Source: Photovoice participant

While public transportation such as urban railways are believed to help increase walking and the 'walkability' of neighbourhoods, particularly in the Global North (see Huang et al. 2017; Lachapelle & Roland 2012; van Soest et al. 2019), if there is no practice of walking and no safe or comfortable pedestrian infrastructure surrounding these projects – as in the case of Hanoi's Line 2A – the poor walkability creates a disincentive or barrier for potential users. Ms. Nguyen, a 22-year-old, gave a personal example of how difficult it would be for someone in her position to switch from using a motorbike to public transport – particularly Line 2A – due to the lack of infrastructure and transport connections in Hanoi:

> The metro Line is still not big enough to serve the people, and in Hanoi we have a lot of old streets and alleys, so the motorbike is needed. You'd have to change a lot [to use public transport], like someone like me would have to change a lot. The service of the bus, I think that's the first thing [that needs to change], because like me, I live in [private new development complex] so the bus can't have a station in that area, so if I want to go [by public transport] I have to walk a very long way, right? Because right now even with the Vinfast bus[17] [private e-bus by VinGroup] I still have to walk like 1km to the nearest station. In my area there is pavement so I can walk and it feels safe for me, but in another place like the Old Quarter or

[17] VinBus is a private, electric bus service that operates in Hanoi. It is owned and operated by VinGroup, the largest conglomerate in Vietnam, as a 'non-profit'. Most routes connect Vingroup's private residential developments (such as Vinhomes Ocean Park or Vinhomes Smart City) with other areas of the city.

> something like that they don't have a sidewalk, so it's more stressful (Interview, studies near Hà Đông, 23/09/2022)

Interviewees therefore called for increased synchronization between the Line and the surrounding transport infrastructure, particularly in terms of pedestrianization. Mr. Quyen, 53 years old, explained how the vision for the railway network in Hanoi cannot succeed in reducing traffic and motorbike use until there is synchronization between transport modes and the rest of the city: "Right now, the government has nothing [to meet these needs]. At their last station, the one nearest to their office, people will get down, but their office is several kilometres away. People need a means of transport, it needs synchronization" (Interview, lives near Thái Hà, 04/08/2022). Until these connections are made and steps are taken to improve the pedestrian infrastructure surrounding Line 2A's stations, interviewees explained that the Line will fail to compete with the convenience of a personal vehicle. The six variables Cresswell (2010) has presented in his work on the politics of mobility, particularly the starting point, rhythm, routing, and friction, help us untangle the inconsistencies between Line 2A and the mobilities of many Hanoi residents. The realities of why and how people move – and when and how movement stops – appear to have been overlooked in the planning and operations of Line 2A.

6.2.5 Barriers to use: Different mobility needs and rhythms.

Interviewees frequently noted their reliance on their motorbike for work, with most either working from their bike, such as delivery people and street vendors, or relying on their motorbike to commute. As Ms. Ly, a 49-year-old interviewee explained, numerous informal sector workers rely on their motorbike for their livelihoods, with many unable to work without it, and few able to afford alternative modes of transport, such as taxis (Interview, works and lives near Thái Hà, 04/08/2022). The railway was therefore noted as highly impractical for such workers who never have fixed beginning and end locations for their work. Ms. My, a 49-year-old who works at an informal *trà đá* stand, described how the Line is not suited for her work as she requires a motorbike to make a living: "For my work in the morning I need to go prepare early, go out and get the sugar cane, get the ice, and the coconut, bring it here… early in the morning, I cannot wait for any kind of public transportation" (Interview, lives near Thái Hà, 27/07/2022). The perspectives and needs of informal workers who rely on their motorbikes to make a living help us untangle different mobility needs and rhythms and how they are not always in line with the services of Line 2A (Cresswell 2010). For example, office workers or students have stable

workplaces and therefore only need to commute to and from fixed locations with the Line. This means their mobility needs could align with and be met by the services Line 2A provides, so long as their destination is within close enough proximity to the Line and/or they have access to adequate transport connections. However, the mobility rhythms of informal workers – and some formal workers whose jobs require them to run errands during the workday – are often incongruent with the Line, as they rely on their personal vehicles to transport them around the city quickly and conveniently in order to accomplish their work tasks.

During an interview with Mr. Kieu, a 50-year-old security guard, he spoke of the difficulties faced by those with non-static workplaces to use the Line, and the middle-income office workers he believes the Line serves:

> There's a problem, people can take the metro to their workplace but for their work, they have to go around during the workday. If they don't have a motorbike, they cannot, it's not convenient, so they have to give up the plan of using public transport. For example, you go to work but then your boss says you need to go somewhere to do something… it's good to have this metro, but it only applies to the group of people who are working at the office who can stay there for a whole day (Interview, works near Thái Hà, 26/07/2022).

Mr. Kieu related Line 2A to an initiative put forth by the Japanese in Vietnam for recycling that also failed to consider the realities and limitations imposed on low-income individuals. He explained, "the Japanese were trying to apply a plan to recycle trash in Vietnam, they thought it might encourage good habits, but some houses are too small, they can't put three trashcans inside, so it didn't work. We need to apply these plans to a specific group of people; it cannot apply to all" (Interview, works near Thái Hà, 26/07/2022). Similarly, Mr Kieu explained that top-down plans such as the implementation of Line 2A cannot be expected to benefit all groups in Hanoi if state officials and urban planners fail to consider the realities of residents' differing rhythms, lifestyles and needs, particularly those who are lower-income. While the Transport Department of Hanoi has ensured equitable and subsidized ticket fares for certain user groups of Line 2A, including free rides for those who can prove they come from a low-income household, these initiatives fail to address the other key barriers that are keeping these groups from using and accessing the Line (Vietnam News 2021).

6.3 Disrupted mobilities: Past, Present, and Future

In this section, I analyse the current and potential disruptions to residents' mobilities that have resulted from the Line's construction and operations. First, I discuss past and present disruptions caused by the Line, focusing on disruptions caused to the livelihoods of informal workers who work along the Line, through a brief case study of street vendors near Láng Station. Lastly, I investigate residents' perceptions of the state's plans to ban motorbike in central districts of Hanoi by 2030 and reflect on how Line 2A and the motorbike ban are related as attempts to 'modernize' the city's transport landscape.

6.3.1 Disrupted and displaced informal livelihoods: Street vendors by Láng Station

The mobility of those who work along the Line – not only metro users – has been impacted by Line 2A, as the movement of street vendors has been disrupted, controlled, and altered by the construction of the Line. The spaces around Line 2A have been subject to a high degree of state regulation during its initial months of operation, with street vendors ordered to move away either by the *Công an* (neighbourhood police) who can clear sidewalks of users deemed 'unacceptable' (or 'non-modern'), or by transport police who do the same on roads. Policies that restrict the mobility of informal economy workers in Hanoi are not new; the Vietnamese state has a long history of enforcing 'order' on Hanoi's streets through 'clean up the street' campaigns that aim to remove 'inappropriate' activities, such as street vending, from the sidewalks (Ta & Manfredini 2017; Turner & Ngo 2019). Most recently, in March 2023 the Hanoi People's Committee announced the relaunching of a 'cleanup the sidewalk campaign', which was initially established in 2017, to re-establish 'sidewalk order' (Vo Hai 2023). This campaign aims to remove those that are deemed to be encroaching upon streets and sidewalks, such as vendors selling on the pavement, motorbike parking in certain areas, and even business billboards. Street vendor interviewees spoke to me of a similar, specifically located 'clean up' that took place prior to the opening of Line 2A. These vendors, who sell their produce at an informal outdoor market underneath Láng Station, (see Figure 6.6) spoke of an increased ward police presence during the weeks leading up to and during the opening of the Line. Ms. Phung, a street vendor born in 1992, explained:

> There was an inspector that came to inspect the Line, so the police came and I didn't have the right to sell here, so I couldn't sell here, but only for the time of the inspection. When the inspector came here, I had to pack up and go, and the police will come and push us away. Some inspectors, they inspect the Line and then the

police come, and they don't want the people to sell food near the station, they just say it's illegal, you have to go! The local police have bothered us more since the Line has opened (Interview, works near Láng, 17/08/2022).

Figure 6.6 Street vendors by Láng Station. Source: Author

These efforts to control and 'clean up' the spaces along Line 2A are in line with the visions laid out in the Hanoi Master Plan 2030 to 2050, to create a 'modern' cityscape. As such, informal economy livelihoods, "particularly those that are most visible and therefore most eloquently attest to what the state views as the country's so-called 'backwardness'" must be removed (Drummond 2000: 2385). Informal economy livelihoods along the Line have been subjugated by the politics of infrastructure, with workers having to find new routes and selling spaces at short notice, disrupting both their livelihoods and mobilities (Graham and McFarlane 2015).

6.3.2 Future disrupted mobilities – Hanoi's Motorbike Ban by 2030

Line 2A and the urban railway as a whole exemplify the Vietnamese state's promotion of 'modern' mobilities in Hanoi. In line with this 'modernization' of the city's transport landscape, city officials are working towards implementing a ban on motorbikes by 2030 in Hanoi's core districts (including a number of those where Line 2A runs), despite the high dependence Hanoi residents have on motorbikes for their everyday mobility, as discussed throughout the chapter. This ban, in tandem with the continuous push for residents to switch to public transportation, is set to further disrupt the mobilities of Hanoi residents in the near future. In a conversation with Mr. Hoang, a 28-year-old architect, about what he believes it would take for Vietnamese people

to switch from their motorbikes to walking and public transport, he connected the motorbike ban to when Vietnam's mandatory helmet policy was introduced:

> If the government has the right policies, the people will have to follow. Take the example of wearing helmets, maybe 15 years ago people didn't have the habit of wearing helmets. Then, when the law came into force, it meant everyone had to follow the law. And I wonder about changing people's habits, because most people have a habit of using the motorbike, they can reach everything everywhere, so it's very hard to change the habit… In China, people used motorbikes a lot and now they stopped using them, and they use public transport. And I have wondered many times about that, about how they did that (Interview, lives and works near Văn Quán,15/09/2022).

I then asked Mr. Hoang what he thought of the motorbike ban by 2030, and if he believed this ban would help change people's habits, to which he replied: "The motorbike ban by 2030, it's a revolution, it's a mistake" (Interview, lives and works near Văn Quán, 15/09/2022). Over two thirds of interviewees with whom I discussed the motorbike ban (28/40)[18] echoed Mr. Hoang's opinions and were negative about the ban, describing it as either impossible or an unrealistic and poor policy decision. A mere two interviewees with whom I discussed the ban were unaware of this policy; one was a young woman who runs a café and the second was – surprisingly – an app-based motorbike taxi driver. The latter's lack of knowledge about the future ban was particularly surprising as he belongs to a demographic whose livelihood and daily mobility will be severely affected by the ban of motorbikes in central districts, though he was relatively new to the city.

A core theme that emerged from interviews with those who were negative about the ban was how motorbikes are simply too important for Hanoi residents' mobilities and livelihoods to ban. Mr. Lam, born 51, laughed when I asked about the motorbike ban. "I heard about it", he said, "but it just went out of my ears. It is impossible. As you can see there are lots of alleys and people have to use their motorbikes. The government cannot provide another solution [that can compete with motorbikes] (Interview, lives near La Thành 27/07/2022). Most middle-income interviewees expressed their concern with the motorbike ban due to its potential impacts on their ease of movement, as they told me the infrastructure in Hanoi is best navigated by motorbike.

Despite rising rates of car ownership in the city, many residents are unable to afford this more expensive mode of transport. Ms. Ngo spoke of the financial barriers faced by many

[18] The motorbike ban was only discussed in 40 interviews.

Hanoians regarding transportation, and how the motorbike ban does not consider lower-income residents' reliance on motorbikes for their mobility needs. She related:

> Using the motorbike is so convenient, I think it's impossible to ban the motorbike in Vietnam because in Vietnam the money is cheap and Vietnamese people are poor, and at the moment some people still can't afford to buy a motorbike, so it's not like other countries, rich countries, that have a lot of cars. Even now some people can't afford to buy a motorbike, so they cannot afford to buy a car (Interview, works by Thái Hà, 04/08/2022).

The mobility frictions and disruptions that the motorbike ban would cause also extend to people's livelihoods, as many rely on their motorbikes to make a living (Cresswell 2010). As Ms. Phung, a 30-year-old street vendor who relies on her motorbike to sell her wares lamented when speaking about the motorbike ban: "Yes I've heard about it, how can I sell food that way? It's impossible to do that because Vietnamese people are still very poor, and the economy is down right now, there are difficulties at the moment. I wouldn't be able to sell my fruit without the motorbike" (Interview, works near Láng, 17/08/2022). These workers' mobility needs, as discussed earlier in the chapter, are unable to be met by public transportation such as Line 2A. The motorbike ban, therefore, would severely disrupt – and potentially put an end to – their livelihoods, which are deeply connected to the use of a motorbike. Mr. Dang, 36, described how the motorbike ban is incongruent with the on-the-ground realities and mobility needs of most Hanoi residents: "If you want to reduce motorbikes, then base it on the facts, base it on reality. In Vietnam, we have a lot of motorbikes and most of us live in lanes, in small alleys, and the motorbike is very convenient for us… We cannot ban the motorbike" (Interview, lives near Văn Khê, 11/10/2022).

Still, one quarter of interviewees (10/40) with whom I discussed the ban were positive or neutral, with those with a more positive outlook suggesting that the ban will help facilitate an important shift in the development of Hanoi. Mr. Bui, 70, believed the motorbike ban is an inevitable step in the country's development, with the urban railway set up to be the next major mode of transport in the country's progress narrative. He explained,

> Hanoi will move towards a smart city, so the number of motorbikes will reduce, and people will accept this policy. It is the progress of the development of the capital. In the past, you see, we had a lot of bicycles, and then we moved to motorbike, then the car. But now people have to pay a lot to travel around [by car

> and motorbike], so soon they will accept the development of the train [urban railway] (Interview, lives near Cát Linh, 13/07/2022).

Mr. Trinh, 26, also believed the ban was inevitable. “We will get the motorbike ban in the future anyways,” he expressed, “so we will have to use public transport and get used to it” (Interview, Vành Đai 3, 01/09/2022). He went on to explain how Vietnam is following the lead of other foreign and developed countries that made the switch from motorbikes a very long time ago as they developed. Vietnam will ban motorbikes to demonstrate the country’s development, he and other interviewees argued, regardless of whether it corresponds to people’s current needs or wants. Other proponents of the motorbike ban thought it was an important environmental initiative, as the ban would limit the number of motorbikes on the road, and therefore reduce traffic jams and air pollution. Mr. Kieu spoke positively of the motorbike ban and its potential environmental benefits and described how the development of public transport and electric vehicles – particularly those produced by Vingroup and Tesla, of which he was particularly appreciative – are “the most important thing” (Interview, works near Thái Hà, 26/07/2022).

The motorbike ban was viewed as closely related to Line 2A and the development of public transport in the eyes of participants. In fact, all participants who were positive or neutral about the motorbike ban believed it would only be successful with further investment in Hanoi’s public transport network, as the current supply of public transport in the city would be unable to meet the demands of the new users that would be created if the motorbike ban was to be implemented. Mr. Le, 22, discussed the relationship between the ban and public transport: “I think the motorbike ban is okay if it can reduce traffic jams, but the public transport needs more of an upgrade so that it becomes convenient because I can’t get used to it right now. It’s a little forcing, the motorbike ban, but I think it can be a good idea” (Interview, lives near La Thành, 29/09/2022). This sentiment was echoed by most proponents of the ban: a good idea for the future, but not yet. As one example, after Ms. Do, 26, spoke of how good the motorbike ban would be for Hanoi, I asked if she thought Hanoi was ready for the ban with the current infrastructure and public transport network. She laughed, and replied: “Of course not, it’s not ready! If the motorbike ban happened right now, all the people will be against it. We need more time, people will not do it immediately, and of course now they will not agree” (Interview, near Cát Linh, 29/08/2022). Line 2A and the motorbike ban, therefore, are two different yet related attempts to move Hanoi residents away from motorbikes and towards what the state has deemed

‘modern’ or progressive transport choices, such as public transport and cars. However, due to the current inability for public transport, including Line 2A, to meet such a demand, it is unclear how these plans will play out.

6.4 Conclusion

In this chapter, I analysed how Line 2A is being used and negotiated by residents, as well as the effects the urban railway line has had on the everyday mobilities of those who use the Line and its surrounding environments. I found that most users of Line 2A are either frequent riders who commute to work or school with the Line, or they are part of a new user group; those that ride ‘for the experience’. Nearly a quarter of both survey respondents and interviewees had taken the Line for this reason, pointing to a new and perhaps unexpected use of the Line as a leisure activity or form of entertainment. Through an analysis of user’s travel patterns, I found that users closer to the city centre were much more likely to walk to access a station than those at the Line’s terminus station in the periphery, with these users relying on their personal motorbike to a higher degree than those at the centre. Interviewees who used the Line told me they were hopeful about the Line’s potential, but described three key barriers that users face and that they believe keep Line 2A’s ridership low and unable to compete with personal motorbikes. These barriers included poor motorbike parking, unclear connections with surrounding bus networks, and a lack of both pedestrian infrastructure and a culture of walking. Fold-up bicycles were raised as a potential micro-mobility solution that could help with first-and-last-mile connections, however, due to a lack of bicycle infrastructure and a high price tag for such bicycles, this currently remains a solution only for those wealthy and brave enough to be early adopters. While the urban railway has affected the everyday mobilities of those that ride the Line, whether to commute or for the experience, I found that many residents – especially informal workers – are not served by the Line due to different mobility needs and rhythms. I also demonstrated how the Line has disrupted the mobilities of those that use the space around the Line, particularly street vendors whose movements have been altered and arrested by the increased control in these spaces since the Line’s trial runs. Finally, I analysed Hanoi’s potential motorbike ban and the disruptions it will cause, as well as how it relates to Line 2A and the state’s visions of modernity.

Chapter 7 "An unstable life": Perceptions and Impacts of Line 3

***Excerpt from field notes**: The first time I walked into the alley I ended up calling home in Hanoi, I was sure I had made the wrong turn. After walking along an overgrown construction site – that on Google Maps appeared as a major road –, I stood in front of the alley address where I had been told my apartment tour would begin. I peered further down the alley, which was surrounded by corrugated iron fencing, and was met with the sight of a vacant lot filled with discarded furniture and construction debris. Houses still lined the lot, but it seemed as if they had been cleanly sliced; the front of each house was gone, and in its place jutted metallic bars and crumbling brick and plaster. These inside-out houses were loosely covered by huge fabric sheets that draped along the length of the structures, but what was left of a former bedroom or bathroom still peeked out beneath the sheets when the wind blew them open. Just as I was about to call my soon-to-be-landlord to check the address, one of her daughters emerged from a gap between cut houses and kindly led me into the alley and up to their family home. It was only after moving in and living on the top floor of this multi-generational home that I learned that the construction I moved through every day was for Line 3, the city's second urban railway line. I had, completely by accident, found myself living amid the second metro's construction while studying the impacts of the first.*

7.1 Introduction

In this chapter, I analyse a different urban railway project; Line 3, or the Nhổn - Ga Hà Nội Line. Mirroring the format of Chapter 5, in which I focus on the impacts and perceptions of Line 2A, I begin by analysing data from interviews and surveys along Line 2A to investigate how residents perceive of the construction of Line 3, particularly in comparison with the controversial construction of Line 2A. I then investigate a case study on an alley that lies in the path of Line 3's underground construction, which I refer to as Alley X to maintain the privacy of those who live within it. These two approaches to the perceptions and impacts of Line 3 answer my third and final research question: ***With Line 3 now under construction, how are local residents and those working along the Line's route experiencing and perceiving this Line? Are there similarities and differences with Line 2A****?* While bearing in mind the experiences discussed in the two previous chapters on Line 2A, I analyse how residents' lives have been uprooted, disrupted, and made precarious by the construction of Line 3, and what strategies these individuals have drawn on to cope with their changing areas and livelihoods.

7.2 Perceptions of Line 3

Hanoi's Line 3 is set to be finished and begin operations in 2027. Rather surprisingly, especially given the municipal and central Vietnamese state's ongoing promotion of the Urban Railway,

only 40 percent (30/74) of interview participants were familiar with or had even heard about Line 3, with the remaining 60 percent of participants unaware of the Line. Nonetheless, the individuals who were unfamiliar with the specifics of Line 3 – such as the route or contractors – were, however, more generally aware of plans for an expanded railway network in Hanoi and knew that new lines would be constructed over the next several years. Mr. Loi, for example, a 29-year-old who lives near an operational Line 2A station, had never heard of Line 3 but knew that "the inner city will have more lines, but in the future" (Interview, La Thành, 20/07/2022). Survey respondents (i.e., users of Line 2A) were more commonly aware of Line 3's construction, in comparison to interview participants, with nearly half the surveyed users having heard of Line 3 in some capacity. Moreover, just under two-thirds (21/83) expressed a positive opinion about the new Line's construction. This greater knowledge of Line 3 could be because these respondents were surveyed upon entering or exiting one of Line 2A's stations. As users of the urban railway, these individuals may be more likely to follow news relating to the construction of the metro network compared to non-users who simply live or work alongside a Line. Still, just under a third (31 percent) of survey respondents were unfamiliar with Line 3, a surprisingly high proportion of users of the current urban railway system.

I found from conversations with interviewees and survey respondents that Line 3 appears to be viewed as less controversial or note-worthy when compared to Line 2A, despite both lines facing similar delays and setbacks. In the following sub-section, I investigate these differing perceptions by comparing the contractor choice, design, and delays and setbacks of both Line 2A and Line 3 to better understand these differing perceptions.

7.2.1 Similar setbacks, differing perceptions

The main theme that emerged during interviews about Line 3 was the preference for and increased trust in Line 3's materials, construction, and overall safety over Line 2A. I found this was influenced by the contractor choice for Line 3, which is a joint venture between several French and South Korean companies, as opposed to the Chinese contractors who were responsible for Line 2A. Interestingly, many participants incorrectly believed Japan was involved in the construction of Line 3, which may be due to a mix-up in the understandings of the contractors involved in the ongoing construction of Ho Chi Minh City's Line 1, who are Japanese. Regardless of whether participants believed the co-contractors were Japanese or

Korean and French, I was frequently told that the design of Line 3 was better than Line 2A, both aesthetically and technically, due to the different contractors. Interviewees tended to express that the design[19] of both the stations and trains of Line 3 were nicer, better, or 'more beautiful' than those of Line 2A, with examples to prove this ranging from the improved colour palette to the shape of the train to the fact that it is not, in some interviewees opinions, made with cheap or out of date materials, as some believed Line 2A was.

Though this was not raised in any of my interviews or surveys, it is also worth noting that there was, in fact, more local participation in the design of Line 3. In 2018, a public consultation process took place to gather residents' thoughts on the design of the interior and exterior of Line 3's trains, as well as how likely respondents would be to use the Line upon its opening. The consultation process had both an online and in-person component. Major online news sources, including *VnExpress*, *Thanh Nien*, *Zing*, and *Saigoneer* all hosted online polls with questions about the train's design, and in-person questionnaires were also administered along the future metro route by members of Hanoi's train management team to gather public feedback (Saigoneer 2018; Thanh Nien 2018; VnExpress 2018). Responses to *VnExpress'* poll can still be viewed on their article site[20], with anonymous resident responses being overwhelmingly positive regarding both the train's design and respondents' willingness to take the train when it goes into operation. Over 80 percent of respondents (160/195 votes) described the line as beautiful and harmonious [*Đẹp và hài hòa]* and 91 percent of respondents (134/147) voted that they plan to take the train once the Line opens (VnExpress 2018). It is possible that this consultation process also positively impacted the public's perception of Line 3, whether residents' feedback was heeded or not.

Line 3 was also often viewed by interviewee and survey respondents for my own research as more technically advanced and trustworthy than Line 2A, again due to the different contractor choice. Ms. Doan, 46, suggested that "the technology is much better [for Line 3]. I also believe more in the dignity of those people [the contractors of Line 3] than the Chinese contractors" (Interview, La Thành, 26/07/2022). Other interviewees echoed this idea while also suggesting that the contractors of Line 3 will be able to learn from the mistakes of Line 2A's construction,

[19] All eight of the Line's elevated stations were either complete or near the end of construction at the time of interviews and a test run had been done on the elevated portion – many Hanoians have therefore either driven past the stations or seen them on either state-run or social media.
[20] See article here.

and therefore construct a higher-quality line. As Mr. Vu, 55, argued: "For the line that was carried out by the Chinese, the safety standards were maybe ignored, and the contractor who builds the Nhổn - Hà Nội Line will draw from this experience and then maybe the safety standards will be much higher than the Chinese contractor, it will have fewer accidents" (Interview, Văn Quán, 15/09/2022). Although the construction of Line 3 has indeed not resulted in any fatal accidents to date – unlike Line 2A – the construction process has been far from perfect; tree-fellings, rising costs, consistent delays, displacements, and the destruction of homes have accompanied Line 3's construction, as they did for Line 2A (see Section 6.3). While several participants expressed that Line 3 is experiencing the same delays as Line 2A, the impacts of Line 3's construction appeared to be less of a concern among participants. One potential explanation for this was raised, indirectly, by Ms. Do, 26. When asked about her knowledge of Line 3, she replied:

> If there's a specific event that everyone is talking about, then it will affect me, then I will know. I don't have much time to go to the internet to read the news, so I just know things when everyone is talking about it, like in Vietnamese we have the word *nghe trộm*, eavesdropping. If it's a hot topic, I will know, but if not, I don't. And Line 3 is not a hot topic, not everyone is talking about it (Interview, Cát Linh, 29/08/2022).

This sentiment, that Line 3 has not been a 'hot topic' like Line 2A, was frequently raised during interviews. Negative press regarding Line 2A was often in the news and the progress and controversies were followed closely by the media and residents, in part perhaps because it was the country's first urban railway line, but also likely in part due to anti-China sentiments. As one 24-year-old photovoice participant explained during a follow-up interview: "There is a lot of propaganda against the Chinese government, especially when they were the contractor for the metro line, so there was a lot of news about the construction quality, delays, and how the amount of money inflated, so we kind of had a bad view on China back then" (Photovoice, 12/10/2022). The contractor choice was important to many interviewees, such as Mr. Phan, 60, who explained "Vietnamese people were afraid of the same thing happening with Line 3 as it did with Line 2A, so the Line 3 contractors cannot be Chinese" (Interview, Văn Quán, 15/09/2022). Mr. Hoang, a 28-year-old architect similarly told me: "Maybe it's better, nicer, because of the different contractor", yet also raised reservations: "I saw the Line and it has also slowed down compared to expectations, the date of completion is also delayed" (Interview, Văn Quán, 15/09/2022).

Despite the different contractor choice for Line 3 appearing to satisfy many participants, the delays and rising costs associated with this Line's construction have left some questioning how different the two lines really are. While hopeful individuals believe that the construction of Line 3 will be informed by the difficulties of constructing Line 2A and that the contractors for Line 3 will build on the experiences from Line 2A and improve on it, participants, such as Mr. Duong, 48, raised similar concerns regarding both lines. "I think they're the same," Mr. Duong told me, "Because they didn't do the land clearance before they constructed, so the construction will be prolonged because people who don't get proper compensation won't move out, and then it prolongs the construction. Line 2A and Line 3 are the same, prolonged and cost a lot of money" (Interview, La Thành, 20/07/2022).

In fact, as Mr. Duong suggested, both Line 2A and Line 3 have faced similar cost increases at around US$300 million; Line 2A's budget rose from an initial $552 million to $868 million, while Line 3's costs have risen from an initial estimate around $1.2 billion to nearly $1.5 billion (Vo Hai 2022). Both lines will have also faced similar delays to their opening, with Line 2A and Line 3's construction timelines sitting at just under a decade, assuming there are no further delays in the opening of Line 3. These similarities make residents' differing perceptions particularly interesting and once again point to the different contractors as a key reason, rooted in historical and contemporary politically-linked tensions vis-à-vis China, for the increased support of – or rather, lack of opposition to or vetted interest in – Line 3's construction.

7.3 Impacts of Line 3

In the following section, in an ethnographic case study, I analyse three key impacts from Line 3's construction on Alley X, which sits directly on the Line's route (see Figures 7.1 and 7.2). These include: the loss of homes and land; the economic losses caused to small business owners in the alley; and the cracking of homes caused by the construction and the precarity and insecurity that has accompanied this damage. This case study is small and by no means an attempt to encompass the entire experience of those living or working in the path of Line 3's construction. Rather, I aim to shine a light on the experiences of a small group of people – seven participants – who live and/or work in one specific area of the city in the hopes that it will provide insight, however small, on the ways Line 3 has affected those living alongside it in important ways.

Figure 7.1 Entrance to the alley, through re-construction of cut homes. Source: Author

7.3.1 The Residents and Workers of Alley X

The Hoang family has lived in Alley X for generations. The father, 60-year-old Mr. Hoang, has always lived in the alley, and he explained that the land their house – a traditional Hanoi tube house (*nhà ống*) – is on has been in his family since his great-grandparents' generation. Mrs. Hoang, 53, moved into the alley when they married, and their two daughters were born and raised there as well. The house had undergone several renovations and changes over the years, but at the time of my interviews, it was seven storeys tall, with the top three floors (four if including the loft/rooftop which I rented) available for rent. Mr. and Mrs. Hoang and their 22-year-old daughter still lived in the house, while their eldest daughter lived elsewhere in Hanoi with her husband and child. My partner and I rented the top two floors (a loft-style apartment) and were the only long-term renters, as the other two floors for rent were mainly used for short-term stays by tourists, booked through Airbnb. Mr. Hoang's elderly mother lived in a smaller, two-storey house next door, and was often over at our house or sitting outside her door on a small stool, greeting the other alley residents with a smile. In addition to renting rooms in their house, Mrs. Hoang also operates a tailoring business out of the main floor of the family home and Ms. Hoang is a student. Mr. Hoang's employment was never disclosed, although he appeared to be retired.

The other alley residents or workers I interviewed were Mr. Ong, Ms. My, Ms. Ta, and Ms. Lu. Mr. Ong, 83, has owned and lived in his two-storey home several doors down from the

Hoang family since 1969. His late wife and five daughters used to live there as well, but he now lives alone, with his daughters all living elsewhere in Hanoi. Neither Ms. My, 40, nor Ms. Ta, 53, live in the alley; Ms. My has rented and run a café in a four-storey building since 2019, and Ms. Ta has worked at a small, two-storey juice stand owned by a relative since 2021. Both the cafe and juice stand have an additional one to two employees who also live in the building. In the case of Ms. My's café, Ms. Lu, 20, and her brother had lived in the middle floors of the building for just under a year at the time of our interview, as the first and top floors are reserved for the café (see Figure 7.2 for locations of all participants in Alley X).

Figure 7.2 Locations of all participants in Alley X. Source: Author

7.3.2 Displacements, loss of land, and insecurity

All seven Alley X interviewees described the most impactful period of the Line's construction to date as the year 2019 when the displacements and the destruction of homes began. "The most impactful time had to be the starting period", Ms. Hoang, the 22-year-old daughter of my landlord, Mrs. Hoang, explained, "when all the barriers went up and the street was destroyed to move the houses. It was super loud and dusty when the houses started being displaced" (Interview, Line 3, 29/09/2022). Meanwhile, her mother, Mrs. Hoang, 53, estimated that half the lane had been displaced at this time, leaving them and "only several old people left in the alley"

(Interview, Line 3, 29/09/2022). Like the resettlement process for Line 2A, the displaced residents all received compensation and a discounted new apartment in a high-rise building by Hoàng Cầu Lake (an area that Line 2A passes through). The new buildings are in a different ward in Hanoi, nearly four kilometres away from Alley X. Relatives of the Hoang family had moved into these buildings during this period of displacement, along with long-time neighbours. When I asked the family if their relatives and friends were satisfied with the compensation process, Ms. Hoang, 22, replied: "They have to be okay with it" (Interview, Line 3, 29/09/2022). Mr. Hoang, 60, later elaborated on his daughter's point and the displacement process in their alley, explaining:

> Whether you agree or don't agree with the decision of the government, you still have to sign the paper, the agreement. But in this alley, there was no force used, everyone willingly left. For the people who had their land taken over, because the market price of the square metre compensation is about 300 million [VND; approx. 12,300 USD] per square metre in this alley and then the compensation of the government is just half that, a lot of people feel very sad. But they still accepted the amount because it's a national project (Interview, Line 3, 29/09/2022).

Mr. Hoang further explained that this acceptance of the project, despite insufficient compensation and difficulties, was not only because Hanoi residents rarely have the power to refuse state-led land acquisitions. It was also, he argued, because alley residents supported the project as it was a national project and a public works initiative. Since people in the alley agreed with the government's narrative, he explained, no one protested the displacements, and it, therefore, did not spiral into a heated land dispute as other projects – particularly commercial projects, such as the Hàng Đẫy stadium or Đồng Tâm airfield[21] – had in the past. While the displacements in Alley X were nowhere near as controversial or violent as the two land grabs Mr. Hoang brought up in comparison, the process was not without difficulties. Ms. My, 40, who has leased a café since 2019 at the front of the alley, spoke to me of the delays that arose during the land acquisition process, specifically for one building that housed multiple families. While the displacements were often dealt with quickly, the procedure for this one building, she explained, was extremely slow and complicated, with it only being finalised when the

[21] The Đồng Tâm land dispute was a highly publicised and controversial land dispute that took place in 2020. Local villagers were protesting the grabbing of 50 hectares of village land by Viettel Group, Vietnam's military-run communications company, for the construction of a military airport. The conflict turned violent, and three policemen and a local village leader were killed during the conflict (BBC 2020).

government increased the compensation for those affected. “The government needed just one third of the area of that home”, Ms. My told me, “But the house was quite big, and some of the people agreed but some others did not, so it took so long” (Interview, Line 3, 18/10/2022).

Ms. My was also the only participant I interviewed who lost a portion of land for the construction of Line 3. The café she leases lost four metres widthwise and 15 metres lengthwise for the construction in 2019, only for it to be cut again in May 2021 (see Figures 7.3 and 7.4). She explained:

> They [the contractors] took over the front of the house to here [gesturing about 4m back from the main road] in 2019, and then we rebuilt the house again in 2019 and moved it a bit forward, just out a little bit. But when the foreign experts came, they said they will put the columns [for the station] near here, very near here and the experts didn’t agree that the house could be extended out a bit more [into the public area], so we had to cut it down again (Interview, Line 3, 18/10/2022).

Figure 7.3 Ms. My’s café before it was cut, pre-2019
Source: Google Maps Review

Figure 7.4 Close-up of Ms. My's café after being cut multiple times, 2022 during the reconstruction of neighbouring houses. Source: Author

Mrs. Hoang, 53, spoke to me of the cut houses that still lined the alley in 2022 despite the destruction and displacements first taking place in 2019. "A lot of houses that were destroyed haven't completed the re-building yet", she told me, clarifying: "Some of the houses haven't been rebuilt yet, some just won't be rebuilt, and some of the houses were rebuilt and then they got cut again because they occupied the public space" (Interview, Line 3, 29/09/2022). The latter scenario describes what happened to Ms. My, as described above. Since the owners of the café Ms. My rents, both Ms. My and Mrs. Hoang explained, only had the rights to one metre of land, despite the café initially taking up more than 10 metres in length. After the local government took over the land in 2019 for Line 3, the owners rebuilt the café so that it extended onto public land to widen their area. The owners of several other houses did the same, only for their new additions to be cut again in 2021. "They had to be destroyed by the government", Mrs. Hoang explained "because the owners occupied space needed for Line 3's construction. The government had to destroy the wrongdoing of these houses because they were built to occupy public space" (Interview, Line 3, 29/09/2022). When I asked why the café owners re-constructed on public land if they knew of the planned urban railway construction, Mrs. Hoang laughed and told me, "we Vietnamese, we just do it [build] and we don't care much about the law. Maybe if the owner of the house has some… under the table money, a bribe, then the government will ignore it, will ignore their construction" (Interview, Line 3, 29/09/2022).

As was the case with Line 2A, interviewees who had been affected by the displacements and destruction of homes could be described as either 'lucky', 'unlucky', or 'least lucky'. Ms Ta, 53, the juice seller, echoed what interviewees along Line 2A had told me: "When you see a beautiful street, it means somebody has been compensated, and that the government has taken over their house. If someone is lucky, their house will go to the front of the street, and if someone has bad luck, they will have to move out of their house" (Interview, Line 3, 18/10/2022). The Hoang family's relatives and neighbours who lost their homes and had to accept low financial compensation could be understood as among the 'unlucky', as was the case with Line 2A. However, since the construction of Line 3 is still ongoing, unlike those who were deemed 'lucky' in the case of Line 2A, the residents whose homes were cut in the alley have not been able to reap the benefits of their new street-facing frontage to date. They are still living in a period of instability and insecurity, unsure of when the construction or its impacts will end. The infrastructural violence caused by the displacements and destruction of homes is exacerbated by the pause of Line 3's construction in the area since the beginning of the pandemic in early 2020, with little communication about when the construction will resume, further marginalizing the alley residents (Rodgers & O'Neill 2012).

Ms. Lu, 20, who works for Ms. My at her café, spoke of how the cafe has had less customers since the houses in the area were cut, with their current customers almost exclusively being regulars who started coming before the construction began (Interview, Line 3, 18/10/2022). "For my regulars that want to have a quiet time, they choose this place", Ms. My explained, as she still operates a seating area on the top-floor, only accessible by elevator, that is quiet, peaceful, and looks out on to a small lake (Interview, Line 3, 18/10/2022). Where there used to be a balcony, however, there is now a door that leads to nowhere, as it was cut and all that remains is some rebar and crumbling plaster and a straight drop to the alley entrance five floors down.

Rather than getting to benefit from the opportunity of running a new business in front of their home –or gaining increased foot traffic due to their frontage now facing a main road – those who lost land in the alley are instead stuck living or working in a construction site with no clear end in sight or knowledge of how they might still be impacted. "We don't know what will happen" Mr. Hoang related, "I'm afraid that we won't get to know about the plan for this area until it's done" (Interview, Line 3, 29/09/2022). Ms. Ta, the juice seller, added that there were

rumours that the displacements and cutting of homes – and the insecurity that comes with these – were not yet complete. She explained:

> The rumours are that all these shops will be displaced too [all the shops near hers on the main street, about five shops]. They will take over these buildings to build the station area. My relatives wanted to buy more land over there, but we asked and somebody said they are not sure if this area will be taken over or not [for Line 3], so we decided not to buy more in this area (Interview, Line 3, 18/10/2022).

All four interviewees involved with a small business operating in the alley –Ms. My and Ms. Lu at the café, Ms. Ta's juice stand, or Mrs. Hoang's tailor business that is run from the ground floor of the family home – said their business had been negatively affected by the construction of Line 3. Ms. Ta spoke to me of the economic losses the juice stand she helps run has suffered since the construction began:

> The revenue of the stall has dramatically decreased because of the dust and construction, and so few people come. In the past we had a lot of customers who came and then they would maybe move to the opposite side of the road to sit and drink, but now so few people come. The income of this stall in the past was more than 10 million VND [approx. 400 USD] a day, but now it's just only 2 million VND [82 USD] a day (Interview, Line 3, 18/10/2022).

Each of the seven interviewees spoke of how the area used to be bustling and full of hotels, restaurants, cafes, and small businesses that attracted locals and tourists alike, but that many of these enterprises and associated buildings were either demolished or cut for Line 3's construction or had to shut down or move since the construction began. Those that remain have had to innovate with new ways to attract customers and keep their businesses afloat. Ms. My detailed: "I've come up with many ways to attract new customers, like having flowers and lights and music and I put an address for the café on Google Maps", but she added that she also had to increase the price of coffee and other drinks due to lower customer numbers (Interview, Line 3, 18/10/2022). While the addition of the café to Google Maps seemed to help at first, Ms. My said in exasperation that "many foreigners would come after seeing my address, but then they see it looks like this [points to construction site] and so they stop and don't come in. On Google Maps it looks beautiful, but they arrive here, see this, and think the shop must be closed" (Interview, Line 3, 18/10/2022). Ms. My and Ms. Ta also both started selling their drinks on GrabFood, an app-based motorbike delivery service, to diversify their revenue and attract more customers. Ms.

Ta told me most of her customers are now using the GrabFood application or are take away orders, as few still come to drink their juice at the small seating area in front of her shop. Even she admitted she no longer feels comfortable in her shop, as the barrier on the main road for Line 3's construction has significantly reduced the space for traffic, making the cars "nearly push up to my shop, it's so dangerous and makes me feel so small" (Interview, Line 3, 18/10/2022; see Figures 7.5 and 7.6 for state of main road in front of Ms. Ta's shop). Despite these challenges, the use of apps such as Google Maps and GrabFood have given both Ms. My and Ms. Ta an avenue to continue operating their businesses despite the undesirability of their current locations.

Figure 7.5 Inside the construction barrier on the main road. Source: Author

Figure 7.6 The main road in front of Ms. Ta's shop. Source: Author

When I asked Ms. My what she wishes had been done differently regarding the construction of Line 3, she replied in frustration: “The most important thing is when will they start working again?” (Interview, Line 3, 18/10/2022). Residents of the alley see themselves as having been left in an in-between-state of insecurity since the construction began, and with the pause of the construction since the pandemic, their economic suffering and anxieties and decline in well-being has stretched far longer than they anticipated with no end in sight. “They told me that in 2022 the construction would be finished” Mrs. Hoang exclaimed, “but it’s not, it’s still going on” (Interview, Line 3, 29/09/2022).

Due to this drawn-out instability, those who have remained in the alley could therefore also be categorised as among the ‘least lucky’, at least while the construction is ongoing. “I sometimes feel crazy” Ms. My told me, “But if we want the country to develop, we must accept it. But my wish is that they do as much as quickly as possible. Just do it faster” (Interview, Line 3, 18/10/2022). Though interviewees accepted the goals of the project, they struggled to accept how long they have been, and will continue to be, impacted by the construction and the instability it has created. The longer the construction goes on, the longer residents remain the ‘least lucky’, stuck in a state of insecurity and unknowns. A particularly difficult aspect of this insecurity, the cracking of residents’ homes due to the construction, is discussed next.

7.3.2 Cracking of Homes

In this section, I turn to the story of Mr. Ong, 82, who lives two doors down from the Hoang family home where I stayed during my fieldwork. I first learned about the cracking of Mr. Ong’s home in a news article sent by a friend in Hanoi who recognized my alley’s address (Tuoi Tre News 2022). The article focused on two households whose inhabitants had discovered cracking since the construction began on Line 3; the first was along Kim Mã Street, in Ba Đình district, and the second was in Alley X. The photographs in the article showed gaping cracks crawling up the walls of Mr. Ong’s home, loosely held together by makeshift treatments (see Figures 7.7 and 7.8). During my interviews with members of the Hoang family – which took place after I read the article – I brought up the cracks that had been found in houses along Alley X and asked if they had found any cracks in their own house (where I was staying) as well. “Our house is very well constructed” Mrs. Hoang assured me, “we built our house very strong, using columns for the foundation, strong enough to support nine floors even though we only have seven”

(Interview, Line 3, 18/10/2022). Nonetheless, I wondered if our relationship – landlord and tenant – perhaps influenced this initial response. Regardless of whether Mrs. Hoang was trying to assure me of the structural integrity of the house that I rented the top floor of or not, later in the interview she ended up expressing that the house does indeed "have some cracks, but they are very small because the foundation is very strong" (Interview, line 3, 18/10/2022). Mrs. Hoang told me they had only noticed the cracks several months ago, but that they are just "like a hair string crack" that her and her husband, Mr. Hoang, did not feel the need to further report them (Interview, Line 3, 18/10/2022). During my interview with Mr. Hoang, 60, he elaborated on the cracks in Alley X and his house:

> They [government officials] took photos of all the houses here, they took photographs before they started construction, and then after the construction. Most of the houses were not built so well and so they cracked, and so they have the photos of the houses before the construction and after. By luck, here, there were only very small ones [cracks]. I see some cracks on the main road [in the asphalt], and then there are some very small cracks on the road of the alley, but I think that's because they have to put really big columns into the ground there. Otherwise it depends on the construction of the houses. But for two to three days people measured changes in the lane as they began construction. They did measurements on the main road and then they came to the lane and measured for several days (Interview, Line 3, 28/09/2022).

Figure 7.7 Cracks in Mr. Ong's home
Tuoi Tre News 2022

Figure 7.8 Mr. Ong's hand showing the same crack shown in Figure 7.8 from Tuoi Tre News. Source: Author

During our interview, Mr. Hoang led me to look at the cracks in his house. They were on the ground floor near the entrance and were really, as Mrs. Hoang and he had already said, minor hairline cracks. Next to the cracks the number 165 was written. "They just put this marking here", Mr. Hoang explained, "so they can see if something changes or not, and if the construction was doing something to the foundations so they wrote 165 here. I don't know what it is, I just took them here. It was a government official that did this" (Interview, Line 3, 28/09/2022). Neither Mrs. nor Mr. Hoang expressed any nervousness or apprehension about these cracks. "Nervous for what?" Mr. Hoang asked me, "There's a person who took photos of every corner of this house, and then we will make an agreement that if something happens, they will compensate us" (Interview, Line 3, 28/09/2022). The Hoang family believed that their home was constructed well and was strong enough that no problems would occur, or if they did, the railway company and "foreign experts" would provide adequate support and compensation to resolve the problems. Unfortunately, the story of Mr. Ong's house demonstrates how complicated and inadequate the reality of this process can be.

Mrs. Hoang had arranged a meeting between myself, my research assistant, and Mr. Ong, set to take place near the end of my fieldwork in Hanoi. The morning of our interview, the three of us met on the ground floor of the Hoang's home and walked the short distance – about 10 metres – to Mr. Ong's house. Mr. Ong's house was two storeys tall, but he no longer felt safe

using the top floor due to the cracking, so he moved his bed and daily belongings to the ground floor and has since spent most of his time on the ground level. During a tour of the house after our interview, he took me and my research assistant to the second floor, which consisted of a bathroom with the walls nearly completely separated due to the cracking (see Figure 7.9) and his former bedroom, which now hosts a shrine to his late wife.

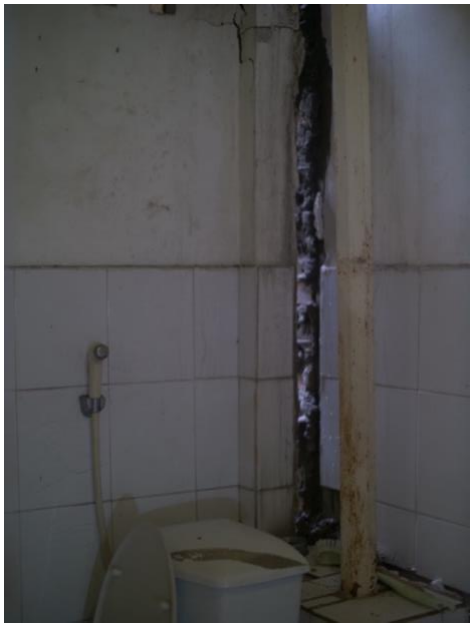

Figure 7.9 Cracks in Mr. Ong's bathroom. Source: Author

Mr. Ong told me the cracking began in 2020, when the construction of the Line began. "When the underground work was begun", he explained, "they dug out the earth and it also withdrew water from the ground, and it affected the foundation of the houses. When they were doing construction, it would shake the houses" (Interview, Line 3, 21/10/2022). In April of 2020, after Mr. Ong had reported the cracking in his home, officials from the train management company came to inspect the condition of the building and determine whether the construction of Line 3 was responsible for the damage. Mr. Ong was provided five months' worth of compensation, beginning at the time of this first visit. Each month, he was given five million VND [around 200 USD] to cover the rent of a second apartment that he and his wife were told to move into for safety concerns caused by the cracking. After the five months passed, Mr. Ong said, "We didn't get paid anymore, and me and my wife didn't have enough money to rent a second house outside on our own, so we had to go back home, like you see now, come back to live here" (Interview, Line 3, 21/10/2022). He and his wife knew, however, that they could not stay in their home without reinforcing the cracks. "We had to find a way to support the house, to

fix it, so we could live here on our own", he explained, sadly adding, "and then me and my wife lived here until my wife passed away, and now it's just only me that lives here" (Interview, 21/10/2022). Mr. Ong and his wife did not receive any compensation or assistance from the railway management company to fix the cracks, and instead had to finance and organise the installation of wooden planks and steel columns on their own (see Figure 7.10). One could debate the degree to which these would make a two storied building structurally sound.

Figure 7.10 One of Mr. Ong's systems to support the home (wall). Source: Author

The lack of official support and compensation received by Mr. Ong and his wife was certainly not due to their lack of trying. They had sent a petition to the Hanoi city government and to the project management unit, and he had shared his complaints with the mass media; indeed, he reported that nearly 20 different media sources had come to his house and interviewed him about the cracking. Aside from lodging formal complaints, Mr. Ong also went to meetings between the local government, the electricity and water companies, and the Line's contractor. "But nobody says they're responsible for the cracking" Mr. Ong lamented, "They blamed the construction of the house next door, the cultural house [*Đình*: 'village communal house'], for the cracking of my home. They blamed the cracks on that after they blamed each other, but I just have to bear it on my own" (Interview, Line 3, 21/10/2022). Although Mr. Ong agreed that the construction of the cultural house may have also had a minor impact on the cracking of his home, he was understandably frustrated with the railway company's refusal to take any accountability

for the cracking despite a clear correlation between their construction and the beginning of the cracking. He elaborated:

> Until now, nobody has taken responsibility for the cracking and I've gotten no answers from anybody. I sent the petitions and got no response. Several meetings were arranged at first but the person who is responsible for the cracking was never decided. A few years ago [in 2020], somebody [from the railway company] came to my house every day to measure the cracking and to measure how the house is going down, how it's sinking. Every day somebody came and measured, but the last visit was over a year ago. Since then, nobody has come. They just stopped coming. (Interview, Line 3, 21/10/2022).

The Environmental Monitoring Report for Line 3, produced by the Hanoi Metropolitan Railway Management Board, lists seven grievances raised by residents who live alongside Line 3 (Ha Noi Metropolitan Railway Management Board 2021). Four of the seven grievances were related to cracks in residents' homes, with the case of Mr. Ong's home – along with all but one of the six other complaints – listed as 'closed'. The report regarding Mr. Ong's grievance case confirmed the information Mr. Ong shared with me regarding the formal process he went through after the cracking began: the contractor HGU is said to have supported the Ong family with 5 million VND to cover rental costs, and the household was evacuated in April 2021 (Ha Noi Metropolitan Railway Management Board 2021: 88-89). The report also mentioned that an investigation would take place to assess the cracking and its cause, and that the contractor agreed to repair the house if any damage was confirmed to be due to the construction (Ha Noi Metropolitan Railway Management Board 2021: 88-89). These reparations, however, never took place, as the contractor never took responsibility for the damage to Mr. Ong's home. Instead, Mr. Ong has been left to finance the repairs on his own, as well as cope with ongoing concerns over the house's structural integrity and his personal safety, with no further support or security.

At the end of our interview, I asked Mr. Ong what he would need to feel secure in his home once more. "I don't have very big wishes" he replied, "I just wish that somebody, that the government, the contractors, or somebody, could figure out who is responsible for the cracking and then I could live securely in my home. Just fix my home and make me feel safe" (Interview, Line 3, 21/10/2022). I was the 20th person to visit Mr. Ong and interview him since the cracking began. He keeps a notebook in a cabinet of all our names, affiliations, and contact information that he asks each of us to sign (see Figure 7.11). Twenty times he has welcomed strangers into his home, sat with them, explained his situation, shown them the damage, granted them

permission to photograph him and the cracking, all in the hopes of receiving some support and assistance so his house can be repaired, and he can once again feel secure. Yet still, no one has taken responsibility, and nothing has changed. Mr. Ong's life has been thrown into a state of insecurity and instability since the construction of Line 3 began, leaving him to bear the weight and costs of this severe infrastructural violence and instability on his own.

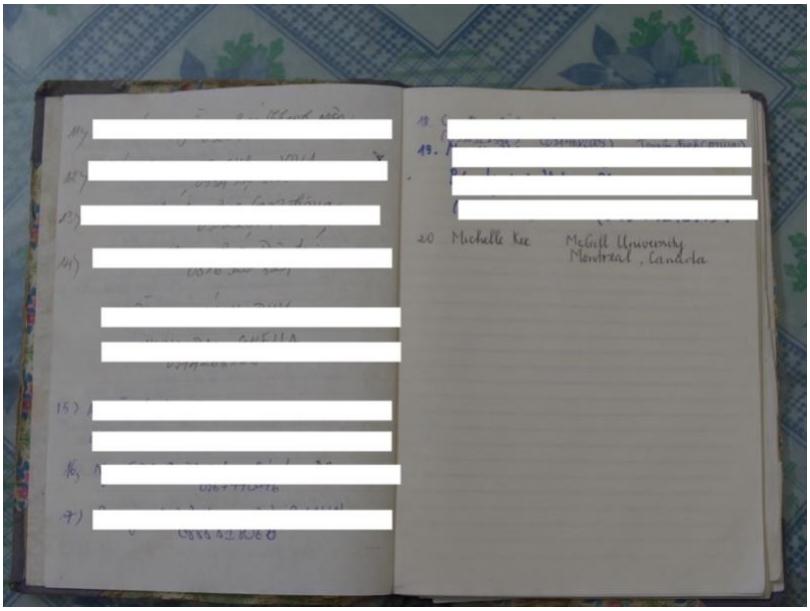

Figure 7.11 Mr. Ong's guest book (retracted for confidentiality). Source: Author

7.4 Conclusion

In this chapter, I analysed how Hanoi residents perceive of, and have been impacted by, the construction of Line 3, the city's second urban railway line, which remains under construction as I write. I found that despite Line 3 facing similar delays and setbacks to Line 2A, interviewees and survey respondents had a more positive perception of Line 3. The lack of controversy surrounding Line 3 – both among interviewees and survey respondents, and in the Vietnamese media – has likely been influenced by the different contractor choice, as some of the negative press and perceptions surrounding Line 2A were due to anti-China sentiment. The lack of Chinese involvement in Line 3 has therefore likely contributed to its construction not being a 'hot topic' in Hanoi. Moreover, a more concerted effort to consult residents regarding design choices, and the possibility for the current Line 3 contractor to learn from the mistakes of Line 2A may have also contributed to this lack of 'hot topic' and more positive overall impressions.

Nonetheless, I found that residents of a case study site located along Line 3 have been severely impacted by its construction and left in a precarious state with little official support to

cope with these impacts. The displacements and destruction of homes in the area have caused structural, financial, and psychological instability and the ensuing changes to the area and ongoing pause to construction due to Covid-19 lockdowns in the city have caused economic losses and impacted the livelihoods and well-being of those living and working nearby. I analysed how the land acquisition process in Alley X near Line 3 has also created 'lucky', 'unlucky', and 'least lucky' households as for Line 2A. However, those who might be deemed 'lucky' for Line 2A, are, in the case of Line 3 the 'least lucky'. This is because rather than benefitting from new economic opportunities, those close to Line 3 who now face the front street are still being negatively impacted by the construction.

Finally, I shared the story of Mr. Ong, whose life has been uprooted and gravely impacted since the construction of Line 3 caused severe cracking to his home. Thus, despite the broader lack of controversy surrounding Line 3, individuals who live and work along the Line have been left to bear the weight of the insecurity that has come with the construction on their own, with little support or transparency regarding when this period of insecurity will end. As Mr. Ong told me, "Before, we lived very peacefully in this alley, but when the construction started, it changed the life of the people here. Now, it's an unstable life" (Interview, Line 3, 21/10/2022). With rumours of the impending construction of columns in the path of Alley X to support the tunnel for Line 3, it is unclear when, or if, this instability will end.

Chapter 8 Discussion and Conclusion

Visual Fragment II

8. Introduction

In this final chapter, I analyse how the encounters, entwinements, and tensions that have emerged at different locales along Line 2A and Line 3, during both the construction and (for Line 2A) operation periods, are embedded in the politics, promise, and violence of these infrastructures. In Section 8.1, drawing from the infrastructure turn, I interpret the state-endorsed narratives of 'modernization' and 'development' behind the two urban railway lines. I utilize the concept of the 'promise of infrastructure' to analyse the significance and perceptions of the project. In my results chapters, I demonstrated evidence of the failures of these promises, which are made clear by the precarity, loss of life, destruction of homes, and displacements that accompanied the construction of the two lines. I draw on the concepts of 'infrastructural lives' and 'infrastructural violence' to interpret how these failures have been embodied and experienced by those who live or work near the lines (Graham & McFarlane 2014; Rodgers & O'Neill 2012). In Section 8.2, I analyse the uses of Line 2A and its surrounding environment through two of Cresswell's (2010) politics of mobility, namely frictions and rhythms. In Section 8.3, I argue that residents' tactics of 'living with' Line 2A and navigating its impacts are practices of everyday and street politics, particularly drawing on Bayat's (2013) concept of the 'quiet encroachment of the ordinary', before returning to my research questions and key findings in Section 8.4 to conclude my thesis.

8.1 The Promises and Pitfalls of Line 2A and Line 3

As detailed in Section 2.2, researchers working with concepts regarding the infrastructure turn consider infrastructure systems as political and lived phenomena and argue that discourses, practices, and everyday uses are both embedded in and central to these infrastructures (Addie et al. 2020; Chattopadhyay 2012). This understanding of infrastructure allows me to interrogate the meanings embedded within Line 2A and Line 3, particularly the *promises* of these two projects.

Appel et al. (2018) have argued that infrastructure is used as a central symbol of state modernity, as 'shiny' new infrastructure projects are often promoted by states alongside discourses of development and modernization, with these discourses tightly intertwined with the projects themselves. Line 2A and Line 3 have both been promoted and sustained by such development discourses, with the State and State-controlled media sources circulating how these lines will help usher in a 'civilized' [*văn minh*] and 'modern' [*hiện đại*] Hanoi. These promises have had such a powerful effect that many residents who I interviewed used these same terms to discuss the urban railway network, echoing the State plans and propaganda word for word (see also Section 5.2.1).

Infrastructure projects, such as Line 2A and Line 3, are touted as the next – seemingly inevitable – step on a linear path toward 'progress' (Appel et al. 2018). Line 2A in particular, as Vietnam's first urban railway line, represents a shift in the country's 'development' of modern public mobilities, with the Line becoming one of several infrastructure projects that signify this switch (others include a similar urban railway system in Ho Chi Minh City). During my fieldwork, I found traces of the promise and politics of these infrastructure projects frequently reflected in the responses of interviewees, such as when they described Line 2A as 'the vehicle of the future', 'an iconic symbol of Hanoi', or when they explained its role in 'changing the face of the city' (see also Section 5.2.1). These discourses of development and modernity are so embedded in the project that interviewees even spoke of the negative impacts of the construction, particularly the cutting of 400 ancient trees, as 'necessary sacrifices' for this prized future. This discourse of progress and prosperity extends beyond the material infrastructure itself, further supported by the policies and plans that prop up the new transport system. Through my research, it became clear that the Vietnamese state's promotion of 'modern' mobilities in Hanoi, prioritizing cars and public transport, along with the proposed motorbike ban by 2030, are important dimensions that further structure and enforce this narrative. The initial phases of this promise becoming a reality are then made visible through Line 2A's presence – and Line 3's construction – across Hanoi's urban landscape.

However, as both Scwhenkel (2015) and Appel et al. (2018) have demonstrated, these narratives of technological progress are often undermined by the lived realities of infrastructure. Lesutis (2022: 942) has posited that infrastructures "unfold through an interplay between spectacle and ruination", with promises of development or progress almost immediately undone

by their "devastating materiality", or the material cracks, breakdowns, and failures that accompany these projects. While Line 2A and Line 3 have delivered on some of their promises, they have failed on others, and with each scandal and delay, particularly in the case of Line 2A, they were further undermined. During Line 2A's construction, safety concerns, corruption, delays, and controversies regarding both the choice of contractor and rising cost all created cracks in this promise. The narrative was even further broken down by the concerns with usability and perceived 'outdatedness' of the Line upon operations, as raised by interviewees (see Section 5.2.4). The signs of wear and tear in Line 2A's stations have already begun to degrade and question the initial promises of a 'clean, civilized, and modern' future that Line 2A would help usher in. Only half a year since it started operations, Line 2A was already viewed by many as outdated or 'backwards'. Along with distrust in the quality of the materials used, were critiques of the unappealing design as a whole. This "devastating materiality" has further solidified the perceived failings of the state's initial promise (Lesutis 2022: 942).

8.1.1 Experiences of Passive Infrastructural Violence

The lived realities of Line 2A and Line 3, as discussed in my three results chapters, help us uncover how these promises fail, and call our attention to the infrastructural violence that has accompanied these projects. Over the course of my fieldwork and analysis, it became clear that the construction of Line 2A and Line 3, and the operations of the former, have enacted passive infrastructural violence due to the limitations and omissions of these projects. Residents who live along both lines have been subjected to the clearing of land and the destruction of houses to make way for these new 'modernizing' transport infrastructures. They have been left to grapple with the subsequent impacts and precarity with little support from the contractors or government, especially after the initial provision of (often grossly undervalued) compensation. This passive infrastructural violence is particularly evident in the experiences of those who lost land for the construction of Line 2A. 'Unlucky' residents who lost their homes and had to accept below-market value compensation or were offered discounted apartments in a district far from their former home is one poignant example of this kind of violence. Another is the 'least lucky' who ended up with devalued land and diminished livelihood opportunities due to their house being blocked by one of Line 2A's stations or staircases. The 'unlucky' experienced forced displacement and the destruction of their houses and many elements of their neighbourhood. In

turn, the ‘least lucky’ experienced marginalization and abjection, left to cope with the difficulties the Line’s construction has created for their livelihoods entirely on their own. The multiple accidents that occurred during the construction of Line 2A resulting in the injury and death of workers and passersby are other upsetting and extreme examples of the infrastructural violence caused by Line 2A. While these three examples of infrastructural violence were directly caused by the Line’s construction, Line 2A was not actually designed to harm or exclude the impacted groups. Instead, the hardships experienced by those marginalized or injured by the construction were *secondary* to the purpose of the Line, rather than occurring as *violence by design*.

In the case of Line 3, the ‘least lucky’ residents of Alley X – those who have been severely impacted by the construction either through the cracking of houses, the loss of land, or the economic losses to their business –, have also experienced severe infrastructural violence. Interviewees from Alley X often described the negative impacts of Line 3’s construction as due to a lack of consideration or support from those responsible for the project, resulting in the interviewees being ‘left behind’. Interestingly, all Alley X participants still supported the construction of the railway network as a public work and appeared to view the project as almost beyond critique. The problematic nature of Line 3, they explained, lay in the omissions and lack of accountability central to its construction, not in the creation of the Line. This violence can also be understood as passive, as although it caused significant difficulties and harm to the community of Alley X, these impacts were not goals of the project itself, but once again due to the inadequacies and failings of the plan. It is important to note that labelling such instances of infrastructural violence as passive is not to undervalue the experiences of those who have been impacted, but rather, to help us better understand the roots and processes that allow for and contribute to this harm.

8.1.2 Experiences of Active Infrastructural Violence

When we consider the *promise* of Line 2A and Line 3, however, and their relation to recent transport policies and plans that aim to transform Hanoi into a ‘modern’ city, more active forms of infrastructural violence begin to surface. This can be seen in the operations of Line 2A when we look at the kinds of mobilities that are being prioritized or sidelined. Two forms of control along Line 2A can be understood as active forms of infrastructural violence. The first form of violence is executed by the ward police through their dispersal of street vendors underneath Láng

station during inspections of the Line, and their more general controlling of the spaces underneath it. The second is enacted by state officials and planners through their failure to integrate Line 2A with other modes of transport, particularly the lack of official motorbike parking at 10 of the 12 stations. When we consider the political and policy contexts in which these railway lines have been designed and constructed, particularly the recent Master Plan and transport plans that envision a 'modern' and 'civilized' transport system for Hanoi, the violence that has resulted from the two lines appears even more insidious. As one example, it is possible that Line 2A's lack of integration with other forms of transport, notably the motorbike, could simply be an oversight on the part of planners. Considering that motorbikes serve as the primary mode of transportation in Hanoi and are labelled as 'outdated' in transportation policies, such as the proposed 2030 motorbike ban, one must question whether the absence of motorbike parking for the Lines is a deliberate move to discourage their usage on a larger scale. Moreover, if we think of active infrastructural violence as including discriminatory laws or policies that explicitly target a particular group, leading to tangible harm such as exclusion, persecution, or violence, is this design flaw of the Lines not a case in point (Rodgers and O'Neill 2012)? That is, taking into consideration the politics and significance of Line 2A as a 'modernizing' infrastructure, can this form of exclusion be understood as a form of active infrastructural violence?

Furthermore, given the most recent iteration of the 'Clean up the street campaign', as well as other decrees and ordinances used by city officials and police to control certain 'undesirable' users of the sidewalk space, such as street vendors or motorbike taxi drivers, the control of spaces around the lines can also be understood as a form of infrastructural violence. These exclusions and impacts are not unintended but by design. In turn, these instances of infrastructural violence are connected to the *promise* of Line 2A, and to the city's more extensive Master Plan and vision of Hanoi. These impacts occur on a spatial and temporal scale that extends beyond the immediate, felt impacts of the construction of these two lines and are instead stretched into the future as a new Hanoi is envisioned and controlled.

Lesutis (2022) has described a form of infrastructural violence that he has called 'infrastructural spectacle and ruination' as unfolding and experienced as a disquieting ambivalence. The violence of Line 2A and Line 3 are similarly experienced "as the ruination of (already highly) precarious spaces of everyday life", where residents feel the ambivalent force of infrastructure as "shifting from spectacle to ruination" and must cope with and reconfigure their

lives “within pernicious materialities” of the project (Lesutis 2022: 943; Schwenkel 2015). The promise of development that Line 2A and Line 3 represent has been degraded through the on-the-ground realities of the construction and implementation of these infrastructures, which have been characterized by both active and passive forms of infrastructural violence.

8.2 Line 2A: Disconnected Mobilities

Line 2A was expected to be a ‘game changer’ in Hanoi’s urban mobility transition, with this project alone stated to help public transportation meet up to 45 percent of demand and ‘modernize’ Hanoi’s landscape (Doan Loan 2021). However, the realities of Line 2A’s construction and operations have failed to meet these high expectations to date. Cresswell’s (2010) six facets of mobility (introduced in Chapter 3), particularly rhythm and friction, help us untangle the different mobility needs of Hanoi residents and how they relate to disconnected visions and broader mobility injustices of Line 2A. The inclusion of a range of groups, especially the socially marginalized, in transportation policy and planning is crucial to ensure mobility justice (Cook and Butz 2018). However, the top-down approach to planning and implementation of the urban railway lines in Hanoi begs the question –whose movements are being stopped, or slowed down by such initiatives? Here, we can think of how street vendors have been policed and controlled along Line 2A, causing friction, as certain rhythms and uses of space have been viewed as inappropriate or ‘unmodern’, particularly with the recent re-launching of the ‘clean up the sidewalk’ campaign to re-establish ‘order’.

The many barriers to use Line 2A, particularly the lack of transport connectivity, motorbike parking, pedestrian infrastructure around the Line’s stations, and incompatible rhythms (especially among different socio-economic groups) point to further mobility injustices. For example, office workers spend most of their day in one stable location, with this static time bookended by travel, or commute time, in the morning and evening. Those with no static work environment, however, have different rhythms of movement, with many starts and stops throughout the day. This staccato rhythm of informal workers, whose frequent movement through the city by motorbike is punctuated by starts and stops, appears incompatible with the fixed rhythms of Line 2A (Eidse et al. 2016). Furthermore, users of the Line have found it lacking connectivity and not nearly as practical and convenient as their flexible motorbikes. Though the urban railway has been put forth as a ‘fast’ and ‘modern’ form of transportation – in

contrast to motorbikes – its disregard for the local realities of Hanoi residents, along with its mobility disruptions, will maintain Line 2A's reputation as an unrealistic mode of transport for many Hanoi residents, perpetuating many interviewees' belief that Line 2A is only good 'for the experience' *(đi chơi).* If planners continue to ignore the mobility needs and rhythms along the Line and instead continue to prioritize and plan for a particular kind of 'ideal' user, the benefits of the project will be reserved only for those who fit within the vision, forcing those who do not to 'get used to' the resulting frictions.

8.3 Claiming space: The Everyday and Street Politics Along Line 2A

The reconfigurations residents and workers have had to make and continue to make due to the construction and operations of Line 2A and Line 3 can be considered forms of everyday and street politics. Through an analysis of the ways people have been living with Line 2A since its inauguration (see Section 5.4), I found that individuals are responding to the infrastructural violence (be it active or passive) of the Line by appropriating and seeking out new opportunities in the urban spaces the construction has created. Throughout my research, I found five groups of individuals demonstrating different appropriations of either the spaces around Line 2A or the stations themselves. These groups include drink sellers, particularly at *trà đá* stands and cafés near Láng Station; street vendors; informal motorbike parking attendants; motorbike taxi drivers; and youth who, rather than appropriating the spaces to make a living like the former four groups, are using the Line's stations and trains as spaces to 'hang out', perhaps creating a new, local youth culture, in the process.

The concepts of everyday and street politics, as outlined in Section 2.3 of my conceptual framework, help elucidate the meanings behind these urban spatial practices. As outlined earlier, there are four forms of everyday politics – support, compliance, modifications and evasions, and resistance – that involve "people embracing, complying with, adjusting, and contesting norms and rules… in quiet, mundane, and subtle expressions and acts" (Kerkvliet 2009: 232; Scott 1985). I would argue that many informal workers along Line 2A are engaging in forms of everyday *resistance* by contesting the norms and rules of these new, controlled urban spaces around the Line to include them and their uses. These workers, through their appropriations and negotiations, are carving out a space for themselves and their informal livelihoods along Line 2A. They do so despite their exclusion from official visions and plans for the Line – and more

broadly, from the new vision for Hanoi – making their very presence a form of resistance (Kerkvliet 2009).

These workers' evasion of punishment through their careful negotiations of these spaces and those that control them, can also be understood as acts of everyday *modifications, evasion, and compliance.* One clear example of this can be found in the dispersal of street vendors beneath Láng Station when an inspector came to examine Line 2A before its opening. The street vendors *evaded* punishment by *modifying* their behaviour and avoiding the area until the inspector had left. They then reoccupied the area and continued to sell their wares. Tactics of *compliance* can be found in the actions of many informal motorbike parking attendants, such as Mr. Ta, and drink sellers such as Ms. Quan (introduced in Section 5.4), who face conflict with ward police and must pay bribes to these officials to continue their sidewalk businesses. This system of bribes-for-sidewalk space is common throughout Hanoi, not just in the spaces along Line 2A. However, the heightened control of the area immediately surrounding the Line due to its significance (or *promise*) adds to the heightened scrutiny and political nature of these everyday acts.

8.3.1 Carving out a better life?

Within his work on street politics, Bayat (2013: 43) has suggested that some acts that can be categorized as resistance, for instance, the 'stealing' of urban services with which residents are not formally provided, are not always done by marginalized groups to express their defiance, rather, they are done because residents "feel the necessity of those services for a decent life, because they find no decent way to acquire them". Turning to informal workers along Line 2A, Bayat's interpretation of the meaning behind these acts is crucial. Although the practices of the informal workers can be read as forms of resistance due to the political context and the control of Hanoi's urban landscape, it is important to note that these workers are ultimately occupying these spaces because they need to make a living. They need to support themselves and their families, and this location has proven opportune to do so. This argument for their actions was often expressed by informal workers during interviews; when I would ask why they had set up an informal business underneath or next to Line 2A, they would frequently reply that despite knowing they could be chased away by officials, the location was close to their home and yet to be occupied by other competing users, and therefore was a good place for them to make a living.

The notion of the 'quiet encroachment of the ordinary', as discussed in Section 2.3 of my conceptual framework, also helps us understand the urban spatial politics of these groups. This concept turns our attention to the more practical motivations behind informal workers' presence around the Line. Bayat (2013: 46) has described 'quiet encroachment' as "the silent, protracted, but pervasive advancements of the ordinary people on the propertied, powerful, or the public, in order to survive and improve their lives". The informal motorbike taxi drivers who wait by station exits along Line 2A, waving over potential customers, ready to take them on the last mile of their journey, are engaging in practices of 'quiet encroachment'. So too, are the informal workers operating *trà đá* stands along the Line, or those running informal café spaces near Láng Station. Informal parking attendants such as Mr. Ta, are also establishing new norms and practices on the ground, pushing against the exclusionary 'order' of these controlled environments, and importantly, supporting themselves and carving out a living in these spaces in the process. Ms. Quan, a 60-year-old worker at one of the cafes by Láng Station, passionately described the necessity of these practices for survival, especially due to the precarity she and other informal workers face in these spaces:

> Let me be honest, this space [café underneath the Line] is this nice because of the local people. Because we need to make our own fishing rods [*cần câu*] to earn food to feed ourselves. That's why we need to invest in these spaces, we have to spend our own money on it. But it's still a twilight zone, a grey area, so whoever jumps on it first will get the piece of cake. Who knows what will happen later. What if later they [local authorities] tell us that they need the space to build parking spots? What can we do then? Because they are the authorities, we cannot do a damn thing against them. So, it's better to claim as much as we can now when things are still up for grabs (Interview, Láng, 27/08/2022).

This idea of claiming as much space as one can when 'things are still up for grabs' to support oneself and financially survive, demonstrates the urgency and necessity of these practices of 'quiet encroachment'. However, Ms. Quan also touches on another important point in the above quote. These practices along Line 2A do not just benefit and improve the lives of those who claim these spaces to operate an informal business. Such practices also create new urban spaces for other Hanoi residents to enjoy and benefit from. Without the presence and spatial practices of informal motorbike attendants, for example, many users of Line 2A who commute to a station by motorbike (and do not begin their journey at Cát Linh or Yên Nghĩa) would lack a place to leave their motorbikes, creating a barrier to their use of the Line. Similarly, motorbike taxi drivers,

street vendors, drink sellers and informal café operators all meet important needs, providing services and spaces to users of the Line and its surrounding environments that, without their 'quiet encroachment', would not exist. Even the young people who 'hang out' in the stations of Line 2A (analysed in Section 5.4.3) are engaging in forms of quiet encroachment, gaining access to these controlled spaces and, through their presence, imagining alternative, more inclusive uses and possibilities for these spaces. All such practices, though gradual and small in scale, have the power to transform cities by changing the meaning and uses of controlled urban spaces to include different users, namely youth and informal workers (Geertman et al. 2016).

Near the end of my photovoice interview with Ms. Vu, a 29-year-old local resident, she shared a photograph she took of a man selling *bò bía* [sweet coconut sugar rolls] on the sidewalk, just outside Cát Linh Station (see Figure 8.1). She spoke of how she had also seen many motorbike taxi drivers – both Grab drivers and *xe ôm* – waiting at the station exits for customers to take home. The two empty motorbikes in the left of the photograph, she told me, belonged to two *xe ôm* drivers who were out of frame, trying to attract and wave over potential customers. "It's a street photo reflecting the life of the people", Ms. Vu, explained. "This space is a chance for them to get more customers and a more stable life" (Photovoice, 23/09/2022). Such opportunities for a 'more stable life', however, are marked by persistent insecurity and negotiations, with no guarantee of how long such practices will be allowed to continue or exist. As Ms. Vu added: "In the long term, when the motorbikes are banned in the future, this will no longer be stable work" (Photovoice, 23/09/2022). As such, the appropriations of the urban spaces along Line 2A have created new livelihood opportunities for residents in the short term, allowing these individuals to improve their lives and carve out a space for themselves in the shadow of the Line. How such practices – around Line 2A and no doubt Line 3 in the future – will play out over the long term in a city and state bent on a specific vision of modernity, is yet to be seen.

Figure 8.1 Man selling* bò bía *outside Cát Linh Station. Source: Photovoice participant

8.4 Thesis Conclusion

In this thesis, I have drawn on conceptual ideas from the infrastructure turn, mobilities paradigm, urban spatial politics, and data gained from qualitative fieldwork, to focus on the aim of my study: to *investigate how the first two lines of Hanoi's urban railway system are impacting the livelihoods, physical environment, and mobilities of local residents, those working nearby, and railway users, and how these groups are negotiating these infrastructures.*

In my first results chapter, Chapter 5, I answered my first research question: *What are the most notable impacts of Line 2A for local residents living alongside the Line or those working nearby, and how do these groups perceive of and negotiate these changes?* I highlighted how Line 2A is simultaneously perceived as a modernizing project that is changing the face of the city and a backward or outdated infrastructure project that cannot meet the mobility needs of many Hanoi residents. The controversial contractor choice, high costs, and corruption concerns all further tainted the positive perceptions of Line 2A. Regarding impacts, I found the most notable were the changes to the area around Line 2A, specifically the displacements and destruction of homes, cutting of trees, and the 'cleaning up' of spaces around the Line. I detailed how the displacements and 'cutting' of homes for Line 2A were forms of infrastructural violence and created 'lucky, unlucky, and least lucky' residents, as those impacted by the land acquisition process were forced to navigate and carve out new opportunities in the new spaces along the Line. Regarding how these changes are negotiated, I highlighted three groups who are appropriating Line 2A's new spaces, notably café workers by Láng Station, informal motorbike

attendants, and youth, either to carve out new livelihood opportunities or create a new space to 'hang out' and 'check in'.

Chapter 6 focused on the users of Line 2A to answer my second research question: *How are Line 2A's users responding to, being impacted by, and negotiating the Line, and in what ways has the urban railway affected their everyday mobilities?* I highlighted the uses of and barriers to use Line 2A and focused on an unusual user group of Line 2A; those who ride the Line 'for the experience'. I outlined how the poor transport connectivity and inadequate pedestrian infrastructure surrounding Line 2A's stations negatively impacted its usability and further discouraged residents from using Line 2A for their everyday mobility needs. The mobility needs and rhythms of Hanoi residents, particularly informal workers and those who rely on their motorbike for work, are also often incompatible with the services of Line 2A. Regarding the impacts of the Line on residents' mobility, I described two examples of disrupted mobilities: first, the controlling of street vendors' mobilities underneath the Line, and second, the motorbike ban by 2030, a policy that is closely related to the new vision for Hanoi that Line 2A is expected to help usher in.

I answered my third research question in Chapter 7: *With Line 3 now under construction, how are local residents and those working along the Line's route experiencing and perceiving this Line? Are there similarities and differences with Line 2A?* I detailed the different perceptions of Line 2A and Line 3, pinpointing the different contractors as a central reason for Line 3's limited controversy despite similar delays and setbacks. Through a case study at a site along Line 3's construction, I demonstrated how the construction has enacted infrastructural violence through displacements, the loss of land, the cracking of houses, and economic hardships due to the prolonged construction process. 'Lucky', 'unlucky', and 'least lucky' households have been created, as was the case for Line 2A, however, those who might have been deemed 'lucky' for Line 2A remain the 'least lucky' for Line 3 as, rather than benefitting from new economic opportunities along the Line, those close to Line 3 remain negatively impacted by the construction. Households who lost land are instead left to bear the weight of this extended period of instability on their own.

In Chapter 8, I highlighted how the encounters, entwinements, and tensions that have emerged along the lines are embedded in the politics, promise, and violence of these infrastructures. By comparing the state-endorsed narratives of 'modernization' and

'development' behind Line 2A and Line 3, and the lived experiences of infrastructural violence along the two lines, I demonstrated how these promises have failed, and the ways these failures have been embodied and experienced by those who live and work nearby. The different mobility rhythms and frictions along Line 2A have resulted in mobility injustices, particularly regarding who is able to access the Line and its surrounding environment. Finally, I demonstrated how residents are engaging in tactics of everyday and street politics to live with and navigate the impacts of Line 2A, carving out new opportunities and improving the otherwise under-utilized spaces underneath the Line in the process.

In sum, my research directly contributes to the literature on Hanoi's urban mobility transition. I provide an initial, critical investigation of the ways the city's two urban railway lines have impacted a range of local residents' everyday lived experiences, mobilities, and livelihoods. I demonstrate how residents' everyday acts of living with the lines offer insights into how top-down transportation plans and policies are experienced and contested on-the-ground, often in ways that deviate from state visions of a 'civilized and modern' Hanoi. Such insights can only be revealed through in-depth qualitative fieldwork that focuses on how infrastructure projects are lived with and undone in the everyday. Greater consideration of the local realities and mobility needs of Hanoi residents, particularly regarding the need for improved pedestrian infrastructure around Line 2A's stations and better connectivity with other modes of transport, is necessary if the urban railway has any chance of becoming a trusted and valued form of transport for Hanoi's residents and visitors.

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