

The Politicization of Mobility Infrastructures in Vietnam – The Hanoi Metro Project at the Nexus of Urban Development, Fragmented Mobilities, and National Security

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This paper critically discusses the Hanoi Metro and its role in contemporary urban development processes in Hanoi. It aims to disentangle the complex interplay between the state's urban development goals, local mobility patterns, and Sino-Vietnamese relations that influence discourses surrounding the Hanoi Metro. This paper argues that the Hanoi Metro project demonstrates that mobility infrastructures serve as an arena for state-society negotiations in Vietnamese cities. Rooted in the state's vision of modernity, the metro is promoted as offering an alternative to individual motorized transport, improving urban traffic and mobility for all residents. However, controversies regarding corruption, safety, and Chinese involvement in the financing and construction of Line 2A have negatively affected public perception of the project during its construction period. The potential impact of the Hanoi Metro on urban mobility in a setting dominated by motorbikes is discussed using the mobilities paradigm, with a focus on local mobility practices and experiences. The findings are linked to broader discussions on Chinese investment and historically-rooted notions of modernity and civilization in the context of the long-term development goals of municipal authorities and rising anti-Chinese sentiments in Vietnamese society.

Keywords: Hanoi Metro; Line 2A; Mobility Justice; Urban Mobility



INTRODUCTION

After nearly a decade of construction, Line 2A of the Hanoi Metro, from Cat Linh to Ha Dong, began commercial operation in Vietnam's capital city Hanoi in November 2021. The Hanoi Metro is the first rapid transit system in the country and is called Đường sắt đô thị Hà Nội (Hanoi Urban Railway) in Vietnamese. It is promoted as offering an alternative to individual motorized transport, thereby improving mobility and reducing congestion and pollution

(Dat Nguyen, 2021a). However, construction has been slow and public perception has been critical, especially concerning Chinese involvement in financing and constructing Line 2A (Tatarski, 2017). Due to this Chinese investment, the Hanoi Metro project is considered by some to be part of the Chinese Belt and Road Initiative (BRI) (Balcita, 2019; Le Hong Hiep, 2018; Niu Yilin, 2021), a global infrastructure development scheme aimed at fostering connectivity that has been met with ambivalence by the Vietnamese government (Le Hong Hiep, 2018). In the context of rising anti-Chinese sentiments in Vietnamese society, Chinese investment in Vietnam is a sensitive topic for the Vietnamese government, which has to carefully balance its own development agenda with public interest (Morris-Jung, 2015; Morris-Jung & Pham, 2017). Besides the issue of Chinese financial investment, controversies regarding corruption, safety, and workers' security accompanied the construction of Line 2A (Vietnamnet, 2015).

This paper critically discusses the Hanoi Metro project and its role in contemporary urban development processes in Hanoi. It puts forth two main arguments. First, the Hanoi Metro project is embedded in a specific vision of modernity of Vietnamese municipal authorities that is rooted in historically developed notions of civilization. It serves as a symbol of power and is an example of the top-down approach to urban planning, rather than actually addressing shortcomings in Hanoi's urban transport system. Second, the already completed Line 2A is contested through everyday practices and serves as an example for urban residents to address broader issues, such as Chinese investments in Vietnam, through public discourse. The Hanoi Metro project can therefore be seen as an example of how urban infrastructures are politicized and can serve as an arena for state-society negotiations in Vietnamese cities.

Methodology

The findings in this paper are based on a literature review, insights from personal observations and conversations, and a review of newspaper articles. Data collection began in 2019 before the opening of Line 2A, with a focus on newspaper articles and academic literature. After the lifting of travel restrictions to Vietnam in 2022, a period of participatory observation was conducted in August of 2023 to observe how and by whom Line 2A is used. The articles selected from the various state-run Vietnamese newspapers serve two functions: first, to give insight into officially sanctioned narratives regarding the Hanoi Metro and urban interventions in general, and second, as a source of numeric data, such as the height of investment costs. This information is contextualized and complemented by referencing foreign newspapers such as *The Diplomat* (Fawthrop, 2018), as well as academic literature on topics such as state-society relations in Vietnam (Koh, 2006), Sino-Vietnamese relations (Morris-Jung & Pham, 2017), urban mobility practices (Jamme, 2019), and discourses on urban modernity and civilization (Harms, 2014). The theoretical discussions are supplemented and illustrated by photographs taken in August 2023 and insights gained during informal conversations with around 10 passengers of Line 2A. Passengers were approached in an informal manner and asked about their experience traveling on Line 2A and their general opinion regarding the state of Hanoi's urban traffic. Insight gained in these conversations served the author to

contextualize observations made during several trips on Line 2A. The negative perception by the public of the Hanoi Metro during its construction period found in the literature review was not reiterated during conversations in August 2023; however, more comprehensive ethnographic engagement regarding Line 2A metro passengers is needed.

The first section of the paper establishes the theoretical framework, linking transport infrastructure to mobility. It introduces the *mobilities* paradigm and the concept of *mobility justice* (Sheller, 2018a, 2018b). The second section of the paper gives an overview of Hanoi's urban transport system and Vietnamese mobility practices, with a specific focus on the link between motorbike mobility and notions of modernity. The third section of the paper introduces the Hanoi Metro and Line 2A as a case study. It first gives an overview over the planning and construction process, situating the project within contemporary urban development processes. Second, it illustrates discourses surrounding the metro and current mobility practices of Line 2A passengers. The fourth section of the paper discusses how notions of modernity in urban planning are linked to historical discourses on 'civilization' shaped by Sino-Vietnamese relations. In the final discussion, the different sections are brought together to discuss the role of the Hanoi Metro in state-society negotiations in Vietnamese cities and its potential impact on urban mobility.

THEORETICAL FRAMEWORK

Urban Transport Infrastructure

A large body of research exists on urban transportation systems and how they facilitate the physical movement of people through urban space. For example, Harvey understands urban movement in the context of Lefebvre's concept of space production (Lefebvre 1991; McGee, 2002, p. 638, cited after Harvey, 1989). From this perspective, road and street networks are part of what Lefebvre calls the material dimension of space production, enabling the flow of goods and people (Harvey, 1989). However, research on urban transportation is not limited to an analysis of physical infrastructure but questions how transportation influences the relationship between material space and society (Yago, 1983, p. 171). For example, McGee (2002, p. 637f) considers transport infrastructure essential to the modernization of the nation-state, which he mentions specifically for the mega-urban regions of Southeast Asia. He views the building of roads as a spatial practice because it shifts the relationship between two spatial points – for example, between urban and national space (McGee, 2002, p. 650). The development of transportation networks reduces travel time, which positively affects the accessibility of urban space. For instance, it enables the upper strata of society to live on the outskirts of the city and still comfortably access the urban core (McGee, 2002, p. 648). He calls this process the reduction of the *friction of distance* (McGee 2002, p. 638). In his discussion on HCMCs outskirts and the development of the Trans-Asia Highway, Harms (2011) emphasizes the ability to move in and out of the city is a resource for those on the margins and says, "The power of the road . . . emerges from the way in which people use it to transcend time and space" (p. 183).

The Mobilities Concept

Viewing urban transport systems from a mobility perspective means going beyond transport infrastructure to include local mobility patterns, experiences of movement, and practices (Cresswell, 2010, p. 556). As people also represent knowledge, ideas, and aspirations, their mobility shapes urban spaces and influences the planning of urban transport systems. Beyond the physical movement of people, things, and ideas, mobility also refers to the representations of movement, which concerns how it is interpreted and given symbolic meaning (Adey, 2010). Finally, mobility refers to practices of movement, that is, how movement is experienced in daily life. Cresswell (2010) focuses on these politics surrounding mobility, arguing that mobility “lies at the center of constellations of power, the creation of identities and the microgeographies of everyday life” (p. 551). In 2006, several authors propagated a *new mobilities paradigm* or *mobility turn* (Hannam et al., 2006; Sheller & Urry, 2006), which offers new perspectives on the topic of movement that can be summarized as follows: 1) a new focus on social practices and local perspectives including an individual’s experience of movement, 2) analyzing discourses that surround mobility that give insight into how framing shapes mobility policies, and 3) an ethical lens that questions power constellations and how these lead to unequal mobilities (Sheller, 2018b, p. 20).

Cresswell notes that the body of literature on the *new mobilities paradigm* emerged in a Western context and that Asian mobility practices have not been given enough attention yet (Cresswell, 2016, p. 1082), with mobility research in a non-Western context needing to consider local “modes of moving” (Cresswell, 2016, p. 1083). Gillen (2015, p. 1) echoes Cresswell’s sentiment and applied his ideas to motorbike mobilities in Vietnam. He argues for theorizing from the global South and considering “the spatial specificity of the means and use of transport” (Gillen 2015, p. 1 cited after Cresswell, 2014, p. 714). Jamme (2019, p. 2770) suggests observing social interactions and spatial arrangements on the micro-level of urban streets to conclude social transformations on the macro-level of urban society. She argues that mobility practices on the street level shape “everyday social interactions and long-term social integration, or lack thereof” (Jamme, 2019, p. 2770). In order to refer to this combined system of material infrastructure and immaterial practices, in this paper the term *urban mobility system* is used.

The Concept of Mobility Justice

In cases where urban mobility systems are not equally accessible to all residents, they produce or exacerbate societal inequalities and render specific segments of society immobile, both physically and socially. Accessibility in transportation refers, first, to the design of the transport system regarding the needs of people with physical limitations, including disabilities or illnesses. Second, accessibility refers to the experience of movement, meaning the level of comfort and ease in reaching one’s destination (Sheller, 2018a, p. 159). From a *mobilities* perspective, lack of access combined with an unsafe or risky mobility system produces patterns of *uneven mobility* (Sheller, 2018b, p. 1), which primarily impact lower socio-economic groups.

Mobility justice (Sheller, 2018a, 2018b) in turn describes an urban mobility system that is based on equal accessibility, safety, and an equal level of service, which links back to the importance of the experience of movement. Enhanced mobility in urban space significantly improves access to labor opportunities (Appadurai, 1986). This access hinges on an individual's capability to use some form of urban transport, which in turn presupposes financial means to either afford a private motorized vehicle or pay for bus fare. Municipal authorities have to assess the different needs of the population and pay particular attention to those members of society that are already marginalized. One important principle of *mobility justice* is the “rule of mutuality” (Sheller, 2018a, p. 159), which means that the mobility of one segment of society should not infringe on the mobility of other segments. This includes street usage, which should be designed with equal space for all different modes of transportation. Sheller explicitly criticizes the role of private automobility, which is often given advantages over other modes of transport (Sheller, 2018a, p. 159).

HANOI'S URBAN MOBILITY SYSTEM

Hanoi's Mobility Image

Vietnam's capital city Hanoi is situated in the Red River Delta in the northern part of the country. The city covers a total area of 3,324 square kilometers and has a population of 7.7 million people. The public transport system in Hanoi is still underdeveloped and has limited coverage. In 2021, public transport, including buses, taxis, and cyclos¹, met only 9-15% of the mobility demand (Huu & Ngoc, 2021, p. 6). In 2016, Hanoi launched its first bus rapid-transit (BRT) route. (NhanDan, 2016). However, the BRT in Hanoi was met with criticism by the Vietnamese public and the media because of its limited capacity (Zung Nguyen, 2017). In 2020, the Hanoi People's Committee issued a plan to expand the city's mass transit network (Anh Kiet, 2020).

Motorcycles² are the dominant mode of transport, and their numbers are still increasing. Most urban residents prefer to travel by motorbike for several reasons: motorbikes are well suited for short-distance travel, and narrow streets and alleys, and occupy little road space. Furthermore, purchasing and operating a motorcycle is relatively inexpensive, mainly due to the low cost of fuel in Vietnam, considering the average income of Vietnamese in urban areas (Gillen, 2015, p. 2). The average income of Hanoi citizens in 2022 was 6.4 million Vietnamese dong (VND) (EUR 242 as of November 2023). Used motorbikes can be purchased from around VND 5 million. In the year 2011, a total of 3.9 million motorcycles were seen on the streets of Hanoi, a number that has risen to 5.7 million in 2019. The number of cars is increasing at an even higher rate, with a total of 281,507 cars in Hanoi in 2011 and more than double of that in 2019 (750,000 cars) (Pham, 2017).

The high reliance on motorized personal mobility, especially motorbikes (United Nations, 2018, p. 18) partly explains congestion, traffic accidents, and pollution,

1 A three-wheel bicycle taxi used in Vietnam

2 Most people in Vietnam drive what in English is referred to as a *scooter*. The Vietnamese language does not differentiate between the words motorbike, motorcycle, scooter, and moped. They are all known as *xé máy* (“motorized vehicle”) (Pragasm, n.d.; Truitt, 2008).



Figure 1. (left) A view of a street junction in Hanoi from Line 2A (author, August 2023)

Figure 2. (right) A view of car traffic on a city highway in Hanoi from Line 2A (author, August 2023)

which are significant problems in Hanoi (see Figure 1). The widespread presence of motorbikes produces what Jamme (2019, p. 2769) refers to as the city's *transportation signature* or *mobility image*. Concerning Vietnam's traffic patterns, Gillen describes this mobility image as characterized by both intensity and disorder, especially when compared to the Global North (Gillen, 2015, p. 3).

Beyond everyday traffic, motorbike mobility has also shaped the urban landscape and social interactions. Ramps built into sidewalks or in house entrances are designed explicitly for motorbikes (Crook, 2014, p. 5). This practice reflects the fluid connection and overlapping of private and public spheres between the motorbike and the home. Beyond the production of meaning and the influence on the spatial environment, motorbikes influence mobility practices and street activities. In her case study of interactions between motorcycle drivers and street vendors in HCMC, Jamme (2019) demonstrates "the consubstantial relationship between transportation flows and social interactions" (p. 2786). She describes the flow of motorcycles through urban space as "sticky", because the vehicles are "integrated in the built environment", taking up space and using it, for example, when the drivers stop at any given place to take part in an activity such as buying food from a street vendor (Jamme, 2019, p. 2786). The interplay between sticky flows and the built environment creates a mechanism that Jamme (2019) calls "productive friction" (p. 2770), which creates economic opportunities for street vendors, and access to services for drivers. In this way, the informal economy is deeply intertwined with motorbike mobility in a symbiotic relationship (Crook, 2014, p. 9).

Motorbike Mobilities

Motorbikes play an essential role in both historical and contemporary Vietnamese society. Several researchers have analyzed motorbike mobilities in Vietnam (Freire, 2009; Gillen, 2015; Hansen, 2017, 2014; Jamme, 2019; Truitt, 2008; Turner, 2020). Freire (2009) calls the motorbike a “symbol of new emerging values” (p. 83), which includes materialistic values as well as a desire, especially for urban youths, for independence from old traditions (Freire, 2009, p. 72). As Hansen (2017) puts it, the motorbike allows city-dwellers to participate in “practices associated with the post-*doi moi* Vietnamese society” (p. 391). According to Truitt (2008), Vietnamese people associate the motorbike with both consumerism and urban life in general. However, Freire also considers the motorbike an object of social differentiation (Freire, 2009, p. 70) and an instrument of social control (Freire, 2009, p. 84). Gillen (2015, p. 3) argues that the Vietnamese view the motorbike as an extension of the individual, representing both status in society and aesthetic taste. In that sense, he captures both the symbolic value of the motorbike for the Vietnamese as well as its role in social differentiation.

Arnold & DeWald (2011) trace the emergence of two-wheeled, individual mobility in Vietnam back to colonial times when French bicycle manufacturers marketed their products to Vietnamese consumers. Over time, bicycles became more affordable and localized, with local manufacturers and repair shops (Arnold & DeWald, 2011, p. 979). This development shows that the notion of modernity in Vietnam is historically connected to individual mobility and consumerism. The perception of the bicycle as a “symbol of consumerist modernity” (Arnold & DeWald, 2011, p. 978) is replicated in the 1990s with the perception of the motorcycle and nowadays with the automobile. The bicycle has generated a new form of mobility, the “vehicular commute” (Crook, 2014, p. 9), and has influenced the shape of cities, allowing a more considerable distance between the workplace and the home, which encouraged the development of peri-urbanization (Arnold & DeWald, 2011, p. 988). The bicycle allowed people to “transport themselves, on their own time, using their own manpower” (Crook, 2014, p. 9).

As Gillen (2015) points out, moving by motorbike in Vietnam “comes with its own forms of knowledge, sets of representation and embodied experience” (p. 2). According to Freire (2009), the motorbike symbolizes “a shift from a culture of discipline towards a culture of pleasure” (p. 73). In Vietnamese society, “going out” (VN: *đi chơi*) is associated with movement and interacting with people outside of the domestic space (Nguyen, 2020, p. 15). Hence, mobility is associated with positive notions of freedom, leisure, and social interaction. Freire (2009) has found this to be true also for the time spent on a motorbike itself. Vietnamese people do not view motorbikes just as a vehicle to transport people and goods to a destination. They see the act of driving as a leisure activity. Hence, especially in the evenings and on weekends, many urban residents drive around aimlessly to enjoy conversations and sightseeing (Freire, 2009, p. 81).

Shifting Perceptions of Motorbikes

The perception of motorbikes has started to shift with the younger generation who were born after the economic rise that characterized the 1990s in Vietnam. While urban youths have adopted aspirations of modernity and individual consumerism

(Le, 2009, p. 43), these notions are not as deeply connected to the motorbike as they were for the older generations (Crook, 2014, p. 22). To the younger generation, a motorcycle is connected to notions of personal freedom. They perceive motorbikes as private places allowing for intimacy (Freire, 2009, p. 74). This intimacy includes cuddling and kissing on motorbikes parked on sidewalks, along lakeshores, and in dark corners of urban parks. Especially, urban youths lack privacy at home due to a lack of space and conservative parents surveilling their behavior. Hence, couples cuddling on motorbikes is a common sight in public spaces in Hanoi during the evening hours.

Public transport is viewed by many youths as a solution to transport problems and offers certain advantages over motorbikes (Crook, 2014, p. 24; Lai Tan, 2019). Buses are affordable and protect passengers from pollution, heat, and rain. Buses are also perceived to be safer than motorbikes (Crook, 2014, p. 24) and offer a level of flexibility given that drivers often allow people to travel with many goods, especially on bus lines from rural areas. There is always one staff member on the bus to inspect tickets. On a crowded bus, the ticket inspector assigns seats, reprimands loud passengers, and shifts luggage to accommodate a large number of goods for travelers' convenience. Conduct on buses is mostly civil, which includes passengers offering their seats to the elderly, children, and pregnant women. However, senior citizens have criticized increasingly disrespectful behavior by younger bus passengers (Lai Tan, 2019). Furthermore, the level of service regarding punctuality, reliability, and safety on Vietnam's buses is low. Due to congestion, buses arrive at irregular time intervals. Buses are often crowded, drivers exhibit unsafe driving behavior, and buses are often dusty. Furthermore, as observed during several bus rides in Hanoi during the summer, bus drivers often turn up the air conditioning, making seats right under the ventilation slots very cold. These factors negatively impact the mobility experience for passengers.

In recent years, there has also been an increased awareness among the urban population regarding health risks related to urban mobility. Air pollution is particularly significant in Hanoi, which regularly records Air Quality Index (AQI) levels that are considered hazardous to human health (Phan Anh, 2020). The effects are worse for those who are stuck during rush hour traffic with only face masks protecting them from the smog (Zung Nguyen, 2017). Besides air pollution, noise pollution from the heavy traffic and the continuous honking is a problem, which can affect sleep, blood pressure, and also lead to long-term hearing loss (Vi Vu, 2017).

THE HANOI METRO - A MODERNIZATION AND CIVILIZATION PROJECT

Planning Process

The Hanoi Metro is a rapid transit system that includes both elevated and underground tracks and has been under construction since 2010. After its completion, the entire Hanoi Metro will consist of ten routes covering 318 kilometers with a passenger capacity of 200,000 passengers per day (Dat Nguyen, 2021b). As of September 2023, only one line, Line 2A, was operating.

The Hanoi Metro project can be seen as an example of the Vietnamese government's general top-down approach to planning. Gibert & Segard (2015) argue that urban planning in Vietnamese cities takes part in "the recent evolution of the political

regime towards what can be called a *negotiated authoritarianism*” (p. 1), because the government has to consider public responses in the short term and legitimacy issues in the long term. Planning involves different institutions and experts; however, it seldomly includes perspectives of local residents. While statistical data regarding transport demand and travel patterns influence traffic policy, there is no forum for local residents to voice their various needs. The stakeholders involved in urban planning and policy making are part of a knowledgeable group of experts or of a political powerful urban elite. They can partake in policy debates because they are already in a privileged position and possess the tools to make their opinions heard (Mela & Toldo, 2019, p. 78).

In Vietnam, urban residents renegotiate government policies on the local level in the *mediation space* (Koh, 2006). This term explains the negotiations taking place between residents and local-level officials. These officials often adapt government policies to the needs of residents based on personal relations and negotiations. However, this negotiation space is not institutionalized and not equally accessible to all residents. For example, migrants traveling to the city from rural areas often have no personal connections to local officials and hence limited bargaining power since *mediation space* depends on the social relationship’s reciprocity. One of the examples of the *mediation space* discussed by Koh (2006) is the use of Hanoi’s pavements. While official regulations reserve these spaces for pedestrians, in reality they are used by residents as parking spaces, for household activities (like dishwashing), or as seating areas for restaurant owners. Negotiations with local officials, often including the payment of a small fee, allows for a continuation of these activities.

Urban planning in Vietnam is also part of what Joss et al. (2019) call a *global discourse network*, given that narratives in urban planning are often borrowed from other contexts. Since many urban projects are financed by foreign investors and master plans for urban development are designed by foreign architects, foreign ideas influence urban planning in Vietnam. Increasingly, foreign investment comes from Asian investors, mainly Japan, South Korea, and China. Megacities such as Seoul, Tokyo, Shanghai, and Singapore are used as reference points for urban development in Vietnam and perceived as ideal visions of modernity (McCann, 2011; Söderström & Geertman, 2013).

An urban rail transit system was first proposed in the year 1998 in the “Hanoi Capital Construction Master Plan to 2030”, which was conceptualized by both Vietnamese authorities and foreign design companies. The vision formulated in this plan was to make Hanoi one of the “most livable, sustainable, and attractive world capital cities by 2050” (Perkins Eastman, n.d.). The long-term ambition of the Vietnamese government is to create modern megacities (Gibert & Segard, 2015; NhanDan, 2018; Perkins Eastman, n.d.; Söderström & Geertman, 2013;), while, in recent years, the government started to promote sustainable urban development and include environmental issues in their official discourses and agendas. Ultimately, officials aim to reduce what they perceive as urban chaos (Harms, 2014). In this context, the government aims to tackle several urban challenges related to transport, such as congestion, traffic accidents, and pollution.

In Vietnam, there is a high risk of traffic accidents, especially for pedestrians, who made up 39% of the estimated 24,970 road fatalities in 2016 (Global Road Safety Facility, n.d.). While road fatalities were reduced significantly with the introduction

of new safety laws, the number of accidents is still high. Motorbike accidents account for 70% of the total number of accidents (United Nations, 2018, p. 24). Driving abilities of many Vietnamese are lacking, which is due to lax controls, high consumption of alcohol, and inadequate driving tests (VietNamNews, 2018). Lawmakers in Vietnam have begun to address these safety issues in urban traffic; for example, in 2007, lawmakers made helmets mandatory for motorbike drivers (United Nations, 2018, p. 20). While helmet wearing has since gone up to 90%, a study in 2020 found that the percentage of helmets that do not meet national safety standards is equally high, namely 90% of tested helmets (Snell, 2020). In 2011, the government implemented a law on traffic safety, which included high punishments for driving under the influence of alcohol (United Nations, 2018, p. 21).

Because Vietnam does not have the means to fund large infrastructure projects without foreign investment, financing plays a significant role in decisions regarding development contracts. In the case of the Hanoi Metro, this has led to controversies regarding safety, quality, and foreign influence, with the case of Line 2A being fueled by the general skepticism regarding Chinese investment in Vietnam (Tatarski, 2017). Rumors of corruption by officials during the construction period further negatively influenced the public's view on the Hanoi Metro project (Vietnamnet, 2015). Contractors involved in the construction of the Hanoi Metro at times also expressed their discontent with proceedings. Hyundai E&C-Ghella (HGU), the main contractor for Hanoi's second metro line, had to stop construction because of incomplete site clearance. In October 2021, HGU therefore demanded a payment of USD 114.7 million as compensation for losses caused by several delays. Another case of compensatory payment relates to the elevated section of the Hanoi Metro. The main contractor, Dealim Korea Co., Ltd., requested an additional payment of USD 19 million in July



Figure 3. (left) View of the Ha Dong station from a pedestrian bridge (author, August 2023)

Figure 4. (right) View of Cat Linh station from the street (author, August 2023)

2020 to compensate for a two-year extension of the construction process due to late site clearance (Vo Hai, 2021).

Line 2A

The first metro line that was operational is the Line 2A Cat Linh to Ha Dong, which was built with Chinese development assistance of around USD 868 million (Dat Nguyen, 2021b). The line is an elevated track covering 13 kilometers and with a total of twelve stations.

The completed stations are massive and highly-visible structures, each with a unique design (see Figure 3 and 4). They are built right next to busy streets and are thus easily reached by motorbike or taxi, albeit with limited parking spaces available, especially for cars. Pedestrian overpasses are available for crossing the streets and Cat Linh station is equipped with a small restaurant.

The initial investment capital was VND 8.7 billion (around USD 553 million), with a credit loan by the Chinese government of around USD 169 million (Hoa Binh, 2020). On 10 October 2011, the construction on Line 2A from Cat Linh to Ha Dong was opened in a ceremony held by the Vietnamese Ministry of Transport and the Hanoi Municipal government, and attended by members of the Chinese Embassy in Vietnam, the Vietnamese Minister of Transport, and the General Manager of China Railway Sixth Bureau Group Co., Zhao Zhanhu. The “China Railway Sixth Group” has experience building subways and transit systems in China and was the main contractor responsible for the construction of Line 2A (Dat Nguyen, 2021b). On the Vietnamese side, initially, the Ministry of Transport was assigned to be the main investor and implementer of Line 2A. However, responsibility for the project was then handed over until July 2014 to the Vietnam Railways Department (Cục Đường sắt Việt Nam), which lacked professional experience and human resources (Hoa Binh, 2020).

According to the original plans, operation was supposed to begin on 30 June 2015. In July 2015, however, less than 50% of the stations were completed. Additionally, legal



Figure 5. (left) A view of completed tracks from the train (author, August 2023)

Figure 6. (center) Houses and a canal visible from inside Cat Linh station (author, August 2023)

Figure 7. (right) Stairs for pedestrians to reach one of the stations of Line 2A (author, August 2023)

problems regarding an addition loan of USD 250 million from Eximbank of China stalled the project in 2017 (Hoa Binh, 2020) and funding and land acquisition issues pushed completion back to 2018. While construction of the line was completed by September 2018, several stations, electrical wiring, and ticketing systems were still under construction, and safety tests had not been finished (Dat Nguyen, 2021b). By April 2019, the opening of Line 2A was postponed eight times. Meanwhile, the project's investment costs increased from the initial VND 8.7 billion to VND 18 billion. The initial design drawings, on which budget estimates were based, did not include railway bridge piers and other details of the main structure. Also, initial plans did not account for adjustments that needed to be made to treat areas of weak soil, and operation costs were not included in the analysis of the project's economic efficiency. Trial runs finally began in October 2019 with a final safety check in December 2020 (Dat Nguyen, 2021b).

Commercial operation of the Cat Linh to Ha Dong metro line (Line 2A) in Hanoi started on the morning of 6 November 2021. During the first six months of operation, there was a train leaving every 10 minutes and the trains ran between 5.30 am to 8.00 pm every day. In May 2022, service times were extended to 10.30 pm and the frequency was increased to a train every six minutes during rush hour. A ticket for the metro costs VND 8,000-15,000 (USD 0.35-0.662), which is comparable to bus ticket prices. Monthly tickets are also available for VND 100,000-200,000 (USD 4-8) (Dat Nguyen, 2021b).

As observed in August 2023, Line 2A is used by Hanoi residents of all ages. Trains become more crowded towards the outskirts of the city and during rush hour after 5.00 PM. The stations are equipped with elevators and escalators and, similarly to high-end shopping malls in Vietnam, they are very clean (see Figure 8 and 9).

Signage has been installed both in Vietnamese and English, including passenger rules, such as not being allowed to smoke on the train (see Figure 10). Instructions are also given to guide new passengers through the process of buying a ticket and how to enter the platform (see Figure 11).

The platforms further provide seating areas (see Figure 9). Several staff members wait on the platforms to assist and guide passengers entering and exiting the trains,



Figure 8. (left) Elevator inside of Cat Linh station (author, August 2023)

Figure 9. (right) Chairs on the platform at Cat Linh station (author, August 2023)

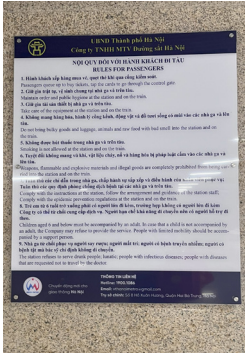


Figure 10. (left) Rules for passengers in Vietnamese and English at Cat Linh station (author, August 2023)

Figure 11. (center) Entry point to the platform with instructions on how to use the ticket (author, August 2023)

Figure 12. (right) Sign with rules to be observed on the train inside a cart of Line 2A (author, August 2023)

and posters on the train remind passengers to “keep silent and clean” (see Figure 12). While this is observed by most passengers, mainly those traveling for work, groups of pupils often ignore the rules and eat snacks or watch videos on their phones on loudspeakers. While most passengers stated that they were commuting to or from their workplace, a family with young children was visiting family members and was using Line 2A for the first time. They expressed that they did not find it as convenient as traveling by car but shared that they wanted their children to be able to enjoy the view over the city. This shows that Line 2A does not just serve commuters but attracts other segments of society that have access to other modes of transportation.

Most passengers, however, appeared to be experienced travelers, barely noticing the view or paying attention to the announcements, but rather staring at their phones or resting (see Figure 13 and 14).



Figure 13. (left) Passengers on Line 2A. (author, August 2023)

Figure 14. (right) Passengers on Line 2A (author, August 2023)

THE HANOI METRO IN THE CONTEXT OF SINO-VIETNAMESE RELATIONS

The Civilization Discourse

The declared development goal of Hanoi municipal authorities is to create a “green, cultured, civilized, modern city” (*đô thị xanh, văn hiến, văn minh, hiện đại*) (Dien dan doanh nghiệp, 2021). The Vietnamese discourse on ‘civilization’ has its roots in the historical narrative used by the Chinese imperial court to describe their relations to their tributaries, including the Vietnamese Nguyen dynasty (Yu, 2009). During this time, the Chinese court viewed the Vietnamese as barbarians and in need of learning proper behavior and bureaucracy. However, during the reign of the Qing dynasty in China, the Vietnamese emperors considered themselves to be more civilized than the Manchu emperors because they followed proper Confucian conduct (Yu, 2009). This differentiation between those that are considered to be modern, educated, and in the center and those that were seen as backwards and uncultured was continued in colonial times through the French *mission civilisatrice* (Taylor, 2000), where Vietnam was depicted as a primitive society. To counter this depiction, in postcolonial times, writings and historiography emphasized achievements of Vietnamese civilization (Pelley, 2002, 1998). This history of involuntary deference to foreign powers and recurring aggression by China towards Vietnam, for example in the Sino-Vietnamese War of 1979 (Nguyen, 2017), or since 2014 in the South China Sea (Do, 2021), affects Vietnamese policymaking until today.

Communicative framing with the notion of ‘civilization’ is used in various settings relating to contemporary Vietnamese society. One example is the case of the COVID-19 pandemic, where societal support of the government’s COVID response was framed in similar terms. ‘Civilized’ behavior during the pandemic consisted, for example, of neighborhood support networks and community donations (Hànộimới, 2020; Lê & Nguyễn, 2020). This dichotomy between the ‘civilized’ center and the ‘uncivilized’ periphery extends to the portrayal of rural migrants as uncivilized and uncultured (Carruthers & Dang Dinh Trung, 2018).

The civilization discourse also plays an important role in Vietnamese transport planning. For example, in 2008, the municipal government of Hanoi implemented a policy prohibiting street vendors from selling goods in several streets of the city center (Eidse, 2018, p. 41). The argument was that keeping the vendors off the streets would improve traffic flow (Eidse et al., 2017). In these cases, the informal sector was problematized as impeding the development of Hanoi into a civilized world city (Kurfürst, 2012, p. 95). In 2019, the ride-hailing company *Grab* joined the “civilized ride campaign” (Hoài Nhơn, 2019), which promotes traffic safety. It can be argued that the adoption of the civilization discourse by Vietnamese policy makers serves as a tool for mobilization, which links both civilization and mobilization to the Vietnamese history of repeated invasions, promising a global future with continued economic development. Thereby, this discourse serves both as a tool of control, because it encompasses a specific set of tolerated behaviors, as well as a way to strengthen government legitimacy, by playing on currents in Vietnamese society, such as anti-Chinese sentiments (Vu, 2014).

Vietnamese Perspectives on the BRI and Chinese Investment

The Hanoi Metro does not officially fall under the BRI (Ghiasy et al., 2018, p. 16), but is still considered as part of the initiative by both Vietnam and China. While this classification strengthens Sino-Vietnamese relations, it also links controversies surrounding the Metro's construction to the BRI, which might negatively affect the perception of Chinese investment in the future (Ghiasy et al., 2018, p. 16). Debates on Chinese investment in Vietnam are linked to broader discussions on (urban) development and national security. In his analysis of Asian responses to China's BRI, Gerald Chan (2018, p. 20) categorizes Vietnam as a "cautiously supportive" country, together with Myanmar and the Philippines. Ghiasy et al. (2018) consider Vietnam's view of the BRI as characterized by "distrust and skepticism" (p. 13), explaining this skepticism with the help of the difficult historical relations between the two countries and concerns over China's increasing economic dominance in the region, which, in the context of China's activities in the South China Sea, is linked to security concerns (Ghiasy et al., 2018, p. 16).

Nevertheless, Vietnam has joined the Asian Infrastructure Investment Bank (AIIB), which was initiated by China. This indicates that the Vietnamese government is aware that there is a need for infrastructure development in the country as well as foreign investment to realize this development (Chan, 2018, p. 8). Similar to other countries in the region, Vietnam aims to diversify the investment from foreign powers to limit its dependence on China. Given that the largest competitor for infrastructure investment in the region is Japan, the urban metro in Vietnam's most populated city and economic center, Ho Chi Minh City (HCMC), is currently being built by Japanese companies. Even though the construction of the HCMC Metro also experienced some issues regarding corruption (Gia Minh, 2021, 2020; Thanh Nhien News, 2013), the project is viewed more favorably by the public than the one in Hanoi (Tatarski, 2017).

DISCUSSION

The Hanoi Metro as Arena for State-Society Negotiations

Urban space in Vietnam is clearly an arena of state-society negotiations (Koh, 2006), with urban development as a tool for the Vietnamese government to assert control over urban space. Urban planning in Vietnam follows a clear-cut vision of modernization: Large infrastructure projects and wide streets with an unimpeded traffic flow of automobiles symbolize the *utopia* of a civilized city, where citizens follow specific conduct, adhere to traffic laws and move about in an orderly fashion (Harms, 2014; see also Figure 2). Urban spaces in Vietnam, however, are shaped by specific mobilities and practices that are locally rooted. This paper demonstrates that the Vietnamese state aims to create a city representative of a civilized society by introducing modern infrastructures that, as in the case of the Hanoi Metro, promote a different mode of moving that is deemed less chaotic. In practice, this means excluding people that the authorities view as disturbing the order and creating chaos. The ban of street vendors and cyclo drivers from the Old Quarter in Hanoi (Phan Anh, 2019; Purvis, 2000; VietNamNews, 2009) exemplifies this. The ambivalence in urban mobility planning in

Vietnam questions whether the government's vision of a modern city includes all segments of society. Linking back to the notion of *mobility justice*, current urban planning processes do not consider all modes of transport equally. In the past, when the state failed to consider local needs in the construction of urban infrastructure, this has led to various types of conflict and citizenship negotiations (Le & Nicolaisen, 2021).

The Vietnamese government aims for highly visible infrastructures such as bridges, skyscrapers, and sky-trains because it views them as signs of urban and economic development and symbols of modernity and economic prosperity. The same can be said about the Hanoi Metro project. These projects help the government to demonstrate its power and strengthen political legitimacy, an idea that is essential in the Vietnamese context, where local-level negotiations (*mediation space* as in Koh, 2006) and cooperation (*cooperative citizenship* as in Le & Nicolaisen, 2021)) build the foundation of state-society relations. Transport policies are part of larger urban development strategies and long-term goals. How they are conceived and implemented gives insight into processes of decision making and knowledge production. Urban planning is future oriented and gives insight into past visions of the ideal city. Constructing large infrastructure projects can take several months to several decades. Thus, they symbolize the visions of modernity held at the time of the conception of the respective project. The Vietnamese government looks increasingly at the East regarding urban development models (Söderström & Geertman, 2013), which leads to new dependencies, and planning designs that are not necessarily adapted to local practices and needs.

Currently, the Hanoi Metro is still limited in its scope. Only one line is running as of September 2023 and there is no comprehensive plan regarding first- and last-mile connections. With the increasing car ownership in recent years and a rising urban population, the metro system offers no long-term relief and the benefit of the metro system for the entire Vietnamese society at this time is questionable. It can be argued that the Hanoi Metro serves as a symbol of state power and the government's vision of a modern city. Once the entire Hanoi Metro project is finished, it does offer a certain potential to shift power structures in urban society because it allows more people to access public transport without some of the risks involved with public buses and urban traffic. However, failure to deliver the project on time, and safety issues during construction have negatively impacted the public's perspective of the government's capability to improve urban traffic and create a modern city.

The COVID-19 pandemic has not only made visible some of the points discussed above but also exacerbated them. Since the beginning of the COVID-19 pandemic, health concerns regarding public transport existed among authorities and the public. As a consequence, in March 2020, Vietnamese Prime Minister Nguyen Xuan Phuc ordered the suspension of public transport services (Reuters, 2020). People also refrained from traveling by bus, especially to other provinces, out of fear of infection (Tat Dinh et al., 2021). As recently as August 2023, some passengers on Line 2A donned masks when sitting in close proximity to other people (see Figure 13). This development has shown how public transport as a public good can be curtailed, rendering people without private modes of transport immobile. These developments put into question the long-term commitment by municipal authorities to provide equal mobility to all residents. The recurring criticism regarding transport projects and the handling of urban traffic suggest a general decline in trust towards the government's

ability to tackle congestion and other urban challenges (Zung Nguyen, 2017). This may lead to an increase in the politicization of Vietnam's urban residents and future power struggles regarding urban development projects.

However, similar to the idea of the *mediation space*, Hanoi residents make use of Line 2A in a way that is adapted to their respective needs. This includes high school students who ignore regulations regarding food and noise on the train as well as families that use the metro as an outing rather than a regular commute. Passengers also find their own solutions to the last-mile connection problems: for example, one passenger brought a foldable bicycle on the train, as observed during August 2023.

Solving Traffic Issues or 'Civilizing' Urban Society?

Public transport in Hanoi so far only covers a small percentage of the urban mobility demand. Furthermore, current options, like the public bus, are unreliable and inconvenient. They are often crowded and not easily accessible for people with physical disabilities. This contributes to *uneven mobility* because it poses a barrier to labor opportunities for those living in rural areas or possessing little financial means. Lack of financial means limits the choice of transportation mode for a specific segment of society. High costs and lack of urban transport infrastructure, such as street space and parking spots, make automobiles inaccessible for most city dwellers (Huu & Ngoc, 2021, p. 2).

Motorbikes are relatively affordable, especially due to upkeep and low fuel prices in Vietnam, for low-income groups. They also offer more flexibility than public transport and automobiles. Because people can use motorbikes to access narrow alleyways, relatives and passengers can be picked up and dropped off at home, which increases mobility for those who cannot walk to a bus stop or drive themselves, for example, due to physical impairments. However, those that can afford to travel by motorbike are at risk of getting wet or dirty, especially during the rainy season. While public transport is affordable, it has poor last-mile connectivity, which means that people still need to find ways to get to the station from their homes. To conclude, certain barriers to mobility are built into modern mobility systems in Vietnam. These barriers are predominantly the result of policymaking. They mediate access to specific modes of transportation or impact the attainment of resources for a specific segment of society.

While the Hanoi Metro theoretically offers an alternative mode of transport for those who cannot afford individual mobility or do not want to use public buses, there are significant limitations in terms of coverage and last-mile connections. Hence, people still have to rely on other forms of mobility to reach their respective destinations. While taxis, both private and public, are available, municipal authorities are already pushing two-wheelers to the margins by increasingly favoring cars in their policy making. Traditional modes of transport, that is, the bicycle and cyclo, have been used less since motorbikes became affordable during the 1990s. While the bicycle is making a comeback in recent years as a middle-class transport option for recreational purposes, the current traffic situation, the ever-expanding city, and high levels of air pollution do not make the bicycle a viable alternative as a mode of mass transportation. Cyclos are almost exclusively used for tourists in limited areas in the city center (Phan Anh, 2019; Purvis, 2000).

The Hanoi Metro project is not inclusive because it only serves a limited amount of people and negatively affects the mobility of others. During the construction of the different metro tracks and stations, streets are blocked, which increases traffic jams for road users. Current transport policies are geared towards promoting the Hanoi Metro as a sustainable transport option while at the same time adapting street networks for automobile users, making motorbikes less attractive to use. The Hanoi Metro is linked to notions of modernity for urban youths who use their time on the train to listen to music and chat with friends, as observed during a trip on Line 2A in August of 2023. Older residents struggle with navigating the metro, with one veteran missing his stop because he did not have enough time to get up from his seat, check the station name, and ask for help before the doors closed again. The Hanoi Metro does not allow passengers to eat or drink on the trains and does not offer space for luggage. While this promotes a specific vision of ‘civilized’ behavior, it does not serve all groups of society, such as rural migrants that could benefit from using the metro for the long distance from the outskirts into the city center.

Since there is only one line in operation, it is too early to make a final assessment regarding the potential of the Hanoi Metro to have an impact on urban mobility in Vietnam. On a positive note, the need for last-mile connections opens up a market for taxi drivers, especially motorbike taxi drivers. In the first two weeks of operation, the metro was free for all passengers. This allowed urban residents to experience this mode of transport and gain knowledge about its use, making more informed decisions regarding their transport options.

CONCLUSION

The Hanoi Metro project demonstrates that urban transport planning in Vietnam is shaped by concepts developed and implemented in a top-down approach, often with the support of foreign development agencies and architects. In some cases, top-down policies are re-negotiated on the local level or circumvented to better fit residents’ needs. Seldomly, these negotiations turn into larger protests when they mobilize a large amount of people. Urban residents struggle for access to resources in their local contexts and aim to improve their own mobility rather than directly confront the state or contradict the governments vision of the modern city. The recent developments in urban mobility planning in Vietnam represent more extensive processes in Vietnamese state-society relations regarding societal fragmentation and citizenship negotiation. Public resistance and controversies accompanying official urban transport initiatives suggest that these initiatives do not meet public demands.

In the case of the Hanoi Metro, controversies regarding corruption, safety, and workers’ security and Chinese involvement in financing has negatively impacted public perception of the project. Although contractors from other countries, such as Japan and France, have also been involved in the project (Tatarski, 2017), existing anti-Chinese sentiments in Vietnamese society make the Vietnamese public especially sensitive when it comes to any Chinese investment in the country. In the long term, the Vietnamese state must carefully balance its ambitious development goals with its need for public cooperation. The limited effect of the Hanoi Metro on reducing congestion due to its slow construction process and the increasing weariness of the public towards

China undermine the potential and success of future BRI projects in Vietnam. Previous public outrage in 2018, when protests erupted against a law on special economic zones (Fawthrop, 2018), demonstrate that the Vietnamese government has to tread carefully when it comes to Chinese financing and ensure positive public perception of infrastructure projects, such as the Hanoi Metro, built with Chinese involvement. The government has to carefully balance the need for foreign investment to reach its goal of modernization with national security concerns and the need for public cooperation.



REFERENCES

- Adey, P. (2010). *Mobility*. Routledge.
- Anh Kiet (2020, November 23). Hanoi to expand public transport network in period 2021-2030. *Hanoi Times*. 2020. <https://hanoitimes.vn/hanoi-to-expand-public-transport-network-in-period-2021-2030-314585.html>
- Appadurai, A. (1986). *The social life of things: Commodities in cultural perspective*. Cambridge University Press.
- Arnold, D., & Dewald, E. (2011). Cycles of empowerment? The bicycle and everyday technology in colonial India and Vietnam. *Comparative Studies in Society and History*, 53(4), 971-96.
- Balcita, M. (2019). *BRI-backed Hanoi metro rail line set to open for passenger travel*. <https://beltandroad.hktdc.com/en/insights/bri-backed-hanoi-metro-rail-line-set-open-passenger-travel>
- Carruthers, A., & Dang Dinh Trung (2018). On the myth of ‘uncivilized’ rural people in the city. In C. Earl (Ed.), *Mythbusting Vietnam: Facts, fiction, fantasies* (pp. 163-182). NIAS Press.
- Chan, G. (2018). *China’s high-speed rail diplomacy: Global impacts and East Asian responses*. http://www.eai.or.kr/main/english/search_view.asp?intSeq=9447&board=eng_report
- Cresswell, T. (2016). Afterword – Asian mobilities/Asian frictions? *Environment and Planning A*, 48(6), 1082-1086.
- Cresswell, T. (2014). Mobilities III: Moving on. *Progress in Human Geography*, 38(5), 712-21.
- Cresswell, T. (2011). Mobilities I: Catching up. *Progress in Human Geography*, 35(4), 550-558.
- Cresswell, T. (2010). Towards a politics of mobility. *Environment and Planning D: Society and Space*, 28(1), 17-31.
- Crook, J. (2014). Traveling through space: A look at the evolution of transportation in Vietnam and its implications. *Independent Study Project (ISP) Collection*, 1825. (unpublished)
- Dat Nguyen (2021a, November 26). Hanoians reluctant to rely on metro. *VN Express*. <https://e.vnexpress.net/news/business/economy/hanoians-reluctant-to-rely-on-metro-4394351.html>
- Dat Nguyen (2021b, November 6). Hanoi gets country’s 1st metro service. *VN Express*. <https://e.vnexpress.net/news/business/economy/hanoi-gets-country-s-1st-metro-service-4382113.html>
- Dien dan doanh nghiep (2021, October 10). Xây dựng Hà Nội thành đô thị “xanh, văn hiến, văn minh và hiện đại (Building Hanoi into a green, cultured, civilized, and modern city). *Dien dan Doanh Nghiep*. <https://diendandoanhnghiep.vn/xay-dung-ha-noi-thanh-do-thi-xanh-van-hien-van-minh-va-hien-dai-208192.html>
- Do, T. H. (2021). Vietnam and China: Ideological bedfellows, strange dreamers. *Journal of Contemporary East Asia Studies*, 10(2), 162-182.
- Eidse, N. (2018). Negotiating access: Urban planning policy and the social production of street vendor micro-mobilities in Hanoi, Vietnam. In: T. P. Uteng & K. Lucas (Eds.), *Urban mobilities in the Global South*. Routledge.
- Eidse, N., Turner, S., & Oswin N. (2017). Contesting street spaces in a socialist city: Itinerant vending-scapes and the everyday politics of mobility in Hanoi, Vietnam. In K. Mei-Po & T. Schwanden (Eds.), *Geographies of mobility: Recent advances in theory and method* (pp. 340-349). Routledge.

The Politicization of Mobility Infrastructures in Vietnam

- Fawthrop, T. (2018, June 21). Vietnam mass protests expose Hanoi's China dilemma. *The Diplomat*. <https://thediplomat.com/2018/06/vietnam-mass-protests-expose-hanoi-china-dilemma/>
- Freire, A. (2009). Motorbikes against Ho Chi Minh? Or the consumption icons of a social transformation in Vietnam. *The Copenhagen Journal of Asian Studies*, 27(1), 67-87.
- Ghiassy, R., Su, F., & Saalman, L. (2018). The 21st century maritime silk road: Security implications and ways forward for the European Union. *Stockholm International Peace Research Institute*. <https://www.sipri.org/sites/default/files/2019-10/the-21st-century-maritime-silk-road.pdf>
- Gia Minh (2021, September 8). Completion of first HCMC metro line delayed again. *VN Express*. <https://e.vnexpress.net/news/news/completion-of-first-hcmc-metro-line-delayed-again-4353229.html>
- Gia Minh (2020, December 8). Unexplained HCMC metro line cracks raise serious concerns. *VN Express*. <https://e.vnexpress.net/news/news/unexplained-hcmc-metro-line-cracks-raise-serious-concerns-4202608.html>
- Gibert, M., & Segard, J. (2015). Urban planning in Vietnam: A vector for a negotiated authoritarianism? *Justice Spatiale/Spatial Justice*, 8(1), 1-24.
- Gillen, J. (2015). Urbanizing existential authenticity: Motorbike tourism in Ho Chi Minh City, Vietnam. *Tourist Studies*, 16(3), 258-275.
- Global Road Safety Facility (n.d.). *Vietnam/East Asia and Pacific: Vietnam's road safety country profile*. <https://www.roadsafetyfacility.org/country/vietnam>
- Hànộimới (2020, July 13). "Xây dựng nếp sống văn minh sau dịch Covid-19: Định hình tư duy mới (Building a civilized lifestyle after the Covid-19 epidemic: Shaping new thinking)". <http://www.hanoimoi.com.vn/tin-tuc/Xa-hoi/972589/xay-dung-nep-song-van-minh-sau-dich-covid-19-dinh-hinh-tu-duy-moi>
- Hannam, K., Sheller, M., & Urry, J. (2006). Mobilities, immobilities and moorings. *Mobilities*, 1, 1-22.
- Hansen, A. (2017). Transport in transition: *Doi Moi* and the consumption of cars and motorbikes in Hanoi. *Journal of Consumer Culture*, 17(2), 378-396.
- Hansen, A. (2014). Cars and capitalism in contemporary Hanoi. *Japan Perspectives*, 11, 21-24.
- Harms, E. (2014). Civility's footprint: Ethnographic conversations about urban civility and sustainability in Ho Chi Minh City. *Journal of Social Issues in Southeast Asia*, 29(2), 223-262.
- Harms, E. (2011). *Saigon's edge: On the margins of Ho Chi Minh City*. University of Minnesota Press.
- Harvey, D. (1989). From managerialism to entrepreneurialism: The transformation in urban governance in late capitalism. *Geografiska Annaler. Series B, Human Geography*, 71B(1), 3-17.
- Hoa Binh (2020, June 8). 'Của nợ' đường sắt Cát Linh - Hà Đông từ đâu mà ra? (Where does the 'debt' of the Cat Linh - Ha Dong railway come from?). *VTC News*. <https://vtc.vn/cua-no-duong-sat-cat-linh---ha-dong-tu-dau-ma-ra-ar550118.html>
- Hoài Nhơn (2019, May 27). Grab đồng hành chiến dịch 'Chuyến xe văn minh' (Grab accompanies the campaign 'civilized ride'). *VN Express*. <https://vnexpress.net/grab-dong-hanh-chien-dich-chuyen-xe-van-minh-3929695.html>
- Huu, D. N., & Ngoc, V. N. (2021). Analysis study of current transportation status in Vietnam's urban traffic and the transition to electric two-wheelers mobility. *Sustainability*, 13, 5577.
- Jamme, H.-T. (2019). 'Sticky flows' and Productive frictions': Untangling the mechanisms of street urbanism. *Planning for transition: AESOP 2019 Annual Congress*, 2769-2795.
- Joss, S., Sengers, F., Schraven, D., Caprotti, F., & Dayot, Y. (2019). The smart city as global discourse: Storylines and critical junctures across 27 cities. *Journal of Urban Technologies*, 26(1), 3-34.
- Koh, D. (2006). *Wards of Hanoi*. Institute of Southeast Asian Studies.
- Kurfürst, S. (2012). Informality as a strategy: Street traders in Hanoi facing constant insecurity. In C. McFarlane & M. Waibel (Eds.), *Urban informalities: Reflections on the formal and informal* (pp. 89-111). Ashgate.
- Lai Tan (2019, August 17). Văn hóa ứng xử trên xe buýt: Vui ít, buồn nhiều (Bus behavior culture: a little happy, sad a lot). *Kinh te Do thi*. <https://kinhtedothi.vn/van-hoa-ung-xu-tren-xe-buyt-vui-it-buon-nhieu-350321.html>
- Le, L. S. (2009). The politics of the Vietnamese post-war generation. *Education about Asia*, 14(2), 43-48.

- Le Hong Hiep (2018, April 11). Potholes lie ahead for China's Belt and Road. *VN Express*. <https://e.vnexpress.net/news/perspectives/potholes-lie-ahead-for-china-s-belt-and-road-initiative-in-vietnam-3735310.html>
- Lê, H. V. L., & Nguyễn, P. T. (2020). Văn minh đô thị Việt Nam nhìn từ thái độ, hành vi ứng xử của người sử dụng mạng xã hội trước những thông tin liên quan đến COVID-19. *Tạp chí Khoa học Đại học Mở Thành phố Hồ Chí Minh*, 15(6), 119-127
- Le, M. & Nicolaisen F. S. (2021). Conflicted citizenship in Vietnam: Between grassroots mobilization and state repression. In J. Gillen, L. C. Kelley, & L. H. Phan (Eds.), *Vietnam at the vanguard: New perspectives across time, space, and community* (pp.33-51). Springer.
- Lefebvre, H. (1991). *The production of space*. Basil Blackwell.
- McCann, E. (2011). Urban policy mobilities and global circuits of knowledge: Toward a research agenda. *Annals of the Association of American Geographers*, 101, 107-130.
- McGee, T. (2002). Jalan, jalan; Invading, destroying and reconstructing the Southeast Asian city. *Bijdragen tot de Taal-, Land- en Volkenkunde / Journal of the Humanities and Social Sciences of Southeast Asia and Oceania*, 158(4), 637-652. .
- Mela, A., & Toldo, A. (2019). Differences, spaces and exclusion. In A. Mela & A. Toldo (Eds), *Socio-spatial inequalities in contemporary cities* (pp. 45-74). Springer Nature.
- Morris-Jung, J. (2015). The Vietnamese bauxite controversy: Towards a more oppositional politics. *Journal of Vietnamese Studies*. 10(1), 63-109.
- Morris-Jung J., & Pham, V. M. (2017). Anti-Chinese protest in Vietnam: Complex conjunctures of resource governance, geopolitics, and state-society deadlock. In J. Morris-Jung (Ed.), *In China's backyard: Policies and politics of Chinese resource investments in Southeast Asia* (pp. 229-255). ISEAS-Yusof Ishak Institute.
- NhanDan (2018, August 04). Vietnam approves sustainable smart city development plan. *Nhan Dan*. <https://en.nhandan.vn/society/item/6463402-vietnam-approves-sustainable-smart-city-development-plan.html>
- NhanDan (2016, December 31) Hanoi officially launches rapid buses. *Nhan Dan*. <https://en.nhandan.vn/society/item/4908002-hanoi-officially-launches-rapid-buses.html>
- Nguyen, V. M. (2020). Alone together: Intimacy and semi-mobility during Ho Chi Minh City's lockdown. *Anthropology in Action*, 27(3), 14-17.
- Nguyen, M. Q. (2017, February 23). The bitter legacy of the 1979 China-Vietnam war. *The Diplomat*. <https://thediplomat.com/2017/02/the-bitter-legacy-of-the-1979-china-vietnam-war/>
- Pelley, P. (1998). "Barbarians" and "Younger Brothers": The remaking of race in postcolonial Vietnam. *Journal of Southeast Asian Studies*, 29(2), 374-391.
- Pelley, P. (2002). *Postcolonial Vietnam: New histories of the national past*. Duke University Press.
- Perkins Eastman (n.d.). *Hanoi capital construction Master Plan to 2030 and vision to 2050*. <https://www.perkinseastman.com/projects/hanoi-capital-master-plan-to-2030/>
- Pham, H. C. (2017). Report on the result of collection and compilation 10 SUTI index in Hanoi City. *Transport Development & Strategy Institute (TDSI), Ministry of Transport of Vietnam*. <https://www.unescap.org/sites/default/d8files/knowledge-products/SUTI%20%20Mobility%20Assessment%20Report%20-%20Hanoi.pdf>
- Phan Anh (2020, November 6). Northern Vietnam records hazardous air pollution. *VN Express*. <https://e.vnexpress.net/news/news/northern-vietnam-records-hazardous-air-pollution-4187949.html>
- Phan Anh (2019, December 5). Hanoi considers banning cyclos to combat congestion. *VN Express*. <https://e.vnexpress.net/news/news/hanoi-considers-banning-cyclos-to-combat-congestion-4022265.html>
- Purvis, Jennifer (2000, September 3). The making of alternative history. *The Japan Times*. <https://www.japantimes.co.jp/culture/2000/09/03/arts/the-making-of-alternative-history/>
- Reuters (2020, March 30). Vietnam says to suspend public transport to curb coronavirus spread. *Reuters*. <https://www.reuters.com/article/us-health-coronavirus-vietnam-idUSKBN21HIZ2>
- Sheller, M. (2018a). *Mobility justice: The politics of movement in an age of extremes*. Verso Books.
- Sheller, M. (2018b). Theorising mobility justice. *Tempo Social*, 30(2), 17-34.

The Politicization of Mobility Infrastructures in Vietnam

- Sheller, M., & Urry J. (2006). The new mobilities paradigm. *Environment and Planning A*, 38, 207-226.
- Snell, G. (2020, December 24). What's the danger with Vietnam's motorcycle helmets? *South East Asia Globe*. <https://southeastasiaglobe.com/vietnam-motorbike-safety/>
- Söderström, O., & Geertman S. (2013). Loose threads: The translocal making of public space policy in Hanoi. *Singapore Journal of Tropical Geography*, 34, 244-260.
- Tat Dinh, Pham Chieu & Doan Loan (2021, November 5). Hanoi bus, railway stations deserted as Covid cases soar. *VN Express*. <https://e.vnexpress.net/news/business/industries/hanoi-bus-railway-stations-deserted-as-covid-cases-soar-4381873.html>
- Tatarski, M. (2017, July 30). Vietnam's tale of two metros, one built by the Japanese and the other by the Chinese. *South China Morning Post*. <https://www.scmp.com/week-asia/business/article/2104149/vietnams-tale-two-metros-one-built-japanese-and-other-chinese>
- Taylor, P. (2000). *Fragments of the present: Searching for modernity in Vietnam's South*. University of Hawaii Press.
- Thanh Nien News (2013, January 20). Corruption costs Vietnam metro millions of dollars, officials say. *Thanh Nien News*. <http://www.thanhniennews.com/society/corruption-costs-vietnam-metro-millions-of-dollars-officials-say-3739.html>.
- Truitt, A. (2008). On the back of a motorbike: Middle-class mobility in Ho Chi Minh City, Vietnam. *American Ethnologist*, 35(1), 3-19.
- Turner, S. (2020). Informal motorbike taxi drivers and mobility injustice on Hanoi's streets: Negotiating the curve of a new narrative. *Journal of Transport Geography*, 85, 1-8.
- United Nations (2018). *Road safety performance review—Vietnam*. https://unece.org/fileadmin/DAM/trans/roadsafe/unda/RSPR_Viet_Nam_FULL_e.pdf
- Vi Vu (2017, July 21). 15 million people being drowned out by noise pollution in Vietnam: study. *VN Express*. <https://e.vnexpress.net/news/news/15-million-people-being-drowned-out-by-noise-pollution-in-vietnam-study-3616666.html>
- Vietnamnet (2015, May 14). All work stopped at Hanoi metro project. *Vietnam Net*. <http://english.vietnamnet.vn/fms/society/130566/all-work-stopped-at-hanoi-metro-project.html>
- VietNamNews (2018, April 27). Driving schools at fault for easy driving tests. *Viet Nam News*. <https://vietnamnews.vn/society/426938/driving-schools-at-fault-for-easy-driving-tests.html>
- VietNamNews (2009, April 28). Street vendors to be banned from many Ha Noi streets. *Viet Nam News*. <https://vietnamnews.vn/society/187573/street-vendors-to-be-banned-from-many-ha-noi-streets.html>
- Vo Hai (2021, October 29). Hanoi metro contractor demands \$115 mln compensation for project delays. *VN Express*. <https://e.vnexpress.net/news/news/hanoi-metro-contractor-demands-115-mln-compensation-for-project-delays-4378956.html>.
- Vu, T. (2014). The party v. the people: Anti-China nationalism in contemporary Vietnam. *Journal of Vietnamese Studies*, 9(4), 33-66.
- Yago, G. (1983). The sociology of transportation. *Annual Review of Sociology*, 9, 171-190.
- Niu Yilin (2021). *Vietnam's first metro line goes into operation*. http://en.sasac.gov.cn/2021/11/10/c_11119.htm
- Yu, I. (2009). Vietnam-China relations in the 19th Century: Myth and reality of the tributary system. *Journal of Northeast Asian History*, 6(1), 81-117.
- Zung Nguyen (2017, February 18). Hope for Hanoi? New bus system could cut pollution...if enough people use it. *The Guardian*. <https://www.theguardian.com/cities/2017/feb/18/hanoi-brt-bus-rapid-transit-pollution>

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DISCLOSURE

The author declares no conflict of interest.

