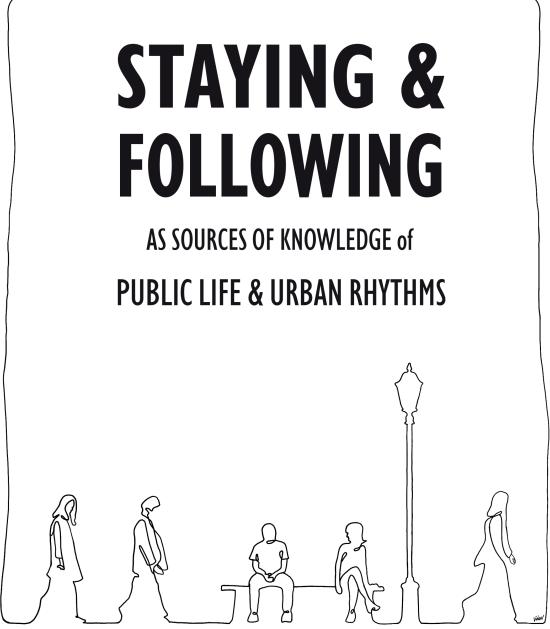


VIVIAN MONTEIRO MALTA SUPERVISOR: HENRIK REEH I SECOND READER: CARMEN HIDALGO 4 CITIES I ERASMUS MUNDUS MASTER COURSE IN URBAN STUDIES MASTER'S THESIS I ACADEMICYEAR: 2019-2021 I SUBMITTED ON SEPTEMBER 6, 2021



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ABSTRACT

Public life studies emerged in the second half of the 20th century through authors like Jan Gehl and William H. Whyte as part of a counter-movement against the dominating functionalist urban planning. While Gehl and Whyte had a behavioural and objective view on public life in cities, other authors like Michel de Certeau and the artist Sophie Calle approached the topic by movement and experience.

In an endeavour parallel to the emergence of public life studies, Henri Lefebvre developed a concept around cyclical and linear rhythms, with the human body as the point of intersection. His idea on Rhythmanalysis provides a theoretical departure point for considering urban rhythms, but it is yet under-explored through empirical studies.

Therefore, this thesis performed an empirical exploration of the theoretical framework provided by Lefebvre's rhythmanalysis, converging it with methods of public life studies. By staying and observing, walking and following, I studied public life in Vienna and in Copenhagen and applied an urban rhythms lens to discuss my findings. By doing so, I gained insight into the spatial, social and bodily rhythms of public life expressed in urban space.

Further, research suggests investigating the relationship between the use of public spaces and social rhythms in different cities. Both to research and policies, the investigation of public spaces by observing routes and sequences of movement in many public spaces could provide a better understanding of walking in the city to plan accordingly.

This thesis was undertaken during the COVID-19 pandemic. The empirical data was collected in two situations. First in Vienna, in July 2020, when face masks were only mandatory in supermarkets, banks and post offices but not required in public spaces outside. Also, there was no limit for gathering (Pollak et al., 2020). The second moment was in Copenhagen, in October 2020, when facemasks were mandatory in public transport and when standing in restaurants, but not required in other places and public spaces outside. The limit number of the gathering was 50 people meeting simultaneously (Kehlet, 2020).

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INTRODUCTION

As an architect and urbanist, it is inherent to my field to conceive and design urban spaces. In the training process, we are taught to draw plans and abstract representations which are immobile, stable, looking at the city as an object, overstressing function and layout. Whereas, in reality, city spaces are lived spaces. Therefore, in some way, when we work on a project or manage cities, we should think of this *mobile dimension* of city life. But how to do it? It is easily said, but it is much more challenging to integrate it into methodologies that allow us to design and extract knowledge, which is what I am looking at in this thesis.

I start by exploring the classical¹ texts of Jan Gehl and William Whyte and their approach to study public life in public spaces. These two authors are considered observers of the city when it was dominated by functionalist planning and public life had nearly disappeared from the streets (Elsheshtawy, 2015). Since then, they have established public life studies as an interdisciplinary field, developed methods and conducted studies of public life to inform city planning and inspired a people-centred approach in cities worldwide (Fitzpatrick, 2016; Gehl & Svarre, 2013; Whyte, 1980). Based on their view on pedestrians, streets and methods of public life studies, I conduct the first exploration of city life. Then, I add other approaches, inspired by Sophie Calle artwork, in which a woman is moving in the city. This more artistic approach will be used for urban studies in the second exploration of public life in this thesis. It is based on the understanding that Calle's oeuvre participates in developing the ideas of many authors who addressed the *quotidien* in city life (Sheringham, 2006).

Furthermore, public life is conceived not momentary but repetitive and cyclic, changing over the day, weekdays and weekends, seasons, years and even lifetime (Lefebyre, 2004), and urban spaces are more than just urban form. They consist of change, movement and social activity re-occurring over time and space (Whyte, 1980; Wunderlich, 2008b). In this sense, public life relates to the concept of *urban rhythms* as the movements of people and interactions with urban spaces, architecture and cycles of the day, seasons and years merge into rhythms that give city spaces temporal distinctiveness (Wunderlich, 2013). Much of the concept of urban rhythms derive from Lefebvre's work on *Rhythmanalysis* (Lefebvre, 2004). Recently, fields within urban studies increasingly paid attention to this concept and the study of urban rhythms as an approach to look at city life and public spaces in the contemporary context. However, although Lefebvre provided a general conceptual framework to his theory, the tools of rhythmanalysis presented in his studies are "frustratingly elusive" (Amin & Thrift, 2002, as cited in Elden 2006), and the empirical grounding of the discussion remains insufficient (Lehtovuori & Koskela, 2013). Therefore, methods for understanding urban rhythms are still under development. Given the relationship between public life and urban rhythms (Elden, 2004), I intend to study public life with two methods, explore what they may inform about urban rhythms, and in this way provide an empirical exploration of Lefebvre's theory. Finally,

¹ Gehl's first book, Life Between Buildings (1971), completed fifty years this year, and Whyte's The Social Life of Small Urban Spaces (1980) is slightly older than forty years.

this exploration could indicate new ways to study public life, assist our understanding of city movements and rhythms, and suggest integrating this knowledge into further research and planning approaches.

Therefore, I am studying public life in public spaces using two methods, one derived from classical authors of public life studies, and another based on an experimental approach to study public life. Firstly, by observing people staving in a shared street in Vienna. Secondly, by following pedestrians walking in the city centre of Copenhagen. Thereby, I intend to test these two methods to study public life and learn what they may inform about urban rhythms in those cities.

Research Question:

How may the study of public life in public spaces by two methods - staying and observing, walking and following - inform a sense of urban rhythms?

Sub questions Part II - Chapter 3:

How may I study public life in public spaces by observing people from a stationary perspective?

And what may I learn from this about urban life and urban rhythms in Vienna?

Sub questions Part II - Chapter 4:

How may I study public life in public spaces by following pedestrians?

And what may I learn from this about urban life and urban rhythms in Copenhagen?

Research Objectives:

Drawing upon the study of public life in an everyday context, I argue that observations on staying (standing, sitting) activities in public spaces and the experience of walking in the city can be used to the understanding of rhythms in urban spaces. Therefore, the objectives are:

First, to test two methods - staving and observing, walking and following - in their point of view to study public life in public spaces.

Second, to discuss how they inform a sense of urban rhythms.

Third, to offer an empirical exploration of the theoretical framework provided by Lefebvre's *rhythmanalysis* concept.

APPROACH & STRUCTURE

This thesis follows a phenomenological methodology to study public life as a source of knowledge for uncovering urban rhythms, with the assistance of two methods and case studies. The research is structured in a comprehensive framework divided into three main parts.

In Part I, I discuss the theoretical framework of public life, public spaces and urban *rhythms.* The first chapter presents a review of the literature concerning the study of public life within the urban context. The second chapter focuses on literature that defines urban rhythms and discusses the topic.

Part II presents the methodology and empirical work of this thesis subdivided into two chapters. In the first chapter of this part, the methodology and Vienna's case study are presented, explained, and accompanied by the findings. These methods are based mainly on the work of Jan Gehl, as given in his first book, Life Between Buildings (1971) and his more recent book, How to Study Public Life (Gehl & Svarre, 2013). And it is also influenced by William Whyte's texts from his book The Social Life of Small Urban Spaces (1980) and CITY - Rediscovering the Center (1988).

In the second chapter of *Part II*, the methodology and Copenhagen's case study are introduced, explained, and followed by the findings. The methods of this chapter are based on the artwork of Sophie Calle as given in her book Suite Vénitienne (1988) with the theoretical support of Michel de Certeau mainly in the third part - Spatial Practices - of his book The Practice of Everyday Life (1984). Each chapter ends with a brief conclusion of the cases and methods.

In *Part III*, the final part of this thesis, I discuss my empirical findings together in the light of the theoretical framework laid out in Part I. This last part is followed by the conclusion of this study and reflections on further research.

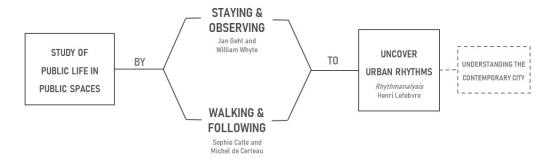
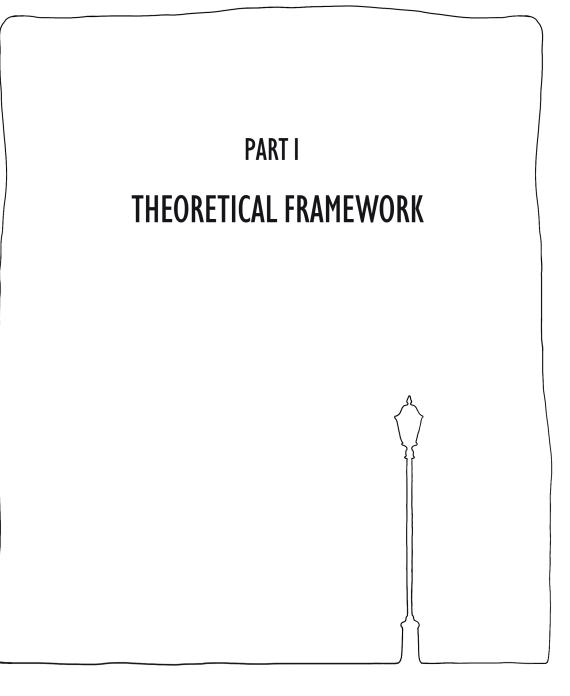


Figure 1: Diagram of thesis approach (by author).



CHAPTER 1 – PUBLIC LIFE IN PUBLIC SPACES

The walker in the midst of the crowd, strolling and lingering in streets and plazas, represents the very essence of urbane. The *flâneur*, the archetype immortalised by Walter Benjamin, is the uppermost example of an explorer of urban life (Elsheshtawy, 2015). As Baudelaire would describe it, "The crowd is his element, as the air is that of birds and water of fishes" (Baudelaire, 1965, p. 9). With little domestic life, the urban walker strolled Parisian streets of the nineteenth century when the city had acquired scale and complexity that was strange to its inhabitants (Solnit, 2000). Since then, many observers of urban life have wondered and tried to understand how the city 'hangs together' in contrasting approaches to articulate city life, where the urban is both subject to and source of complex relations (Smith & Hetherington, 2013). Among many others, Jane Jacobs, William Whyte, and Jan Gehl are modern observers of the city when it became dominated by functionalist planning and public life nearly disappeared.

The *flâneur* could not have imagined that the crowded industrial city would meet Le Corbusier (1923) and his *new architecture* that presented the modern way of building and living. The functionalist city was designed to be an efficient machine for rapid urban growth, with highrise buildings, highways, and large green areas. Urban life was expelled from public spaces to be reduced in dwelling privately and moving in private cars (Sheller & Urry, 2003) following an extensive analysis of the multiple meanings of the `public' and `private', criticizes such a static conception and maintains that massive changes are occurring in the nature of both public and private life and especially of the relations between them. We consider flows and networks that enable mobility between and across apparent publics and privates. These mobilities are both physical (in the form of mobile people, objects and hybrids of humans-in-machines. In this context, planning practice "changed from a kind of craft [...], into an apparently scientific activity in which vast amounts of precise information were garnered and processed in such a way that the planner could devise very sensitive systems of guidance and control" (Hall, 2014, p. 393). That is, a practice based on positivistic, technocratic, and rational concepts. Modernism has also imposed the panoptic view over the city, where the planner observes from above, and spaces become a geometric abstraction instrumentalised to create master plans of sectorised zones. However, this scale forgets the pedestrian and is far from the reality of those who walk the streets (Certeau, 1984). Such thinking still influences the education and practice of architects, engineers, and city planners nowadays; according to Hall (2014), "the evil that Le Corbusier did lives after him" (p. 238). Therefore, three interrelated consequences of modernist planning may be specially observed here: the panoramic point of view provided to planners, the scientific treatment over the city, and its harmful effects on public life.

As a reaction to functionalist planning and its effects on cities, public life studies arose in the 1960s when academics and practitioners from different disciplines focused on the relationship between public life and public spaces. Jane Jacobs (1961) published her protest book against modern planning and advocating for public life by basing her writings on ordinary things observed in her neighbourhood's streets in Manhattan. Jan Gehl (1971) identified public life activities and connections between environmental qualities and the use of public spaces. William Whyte (1980) published his work on the study of pedestrians in streets and plazas

and design elements that make one place more used than the other. Appleyard (1981) wrote on the effects of traffic and neighbourhood design on social life. Marcus and Francis (1990) explored how people relate emotionally to their physical surroundings and identified necessities of different user groups of public spaces. Among others, these authors developed public life studies as an interdisciplinary field, considering perspectives from anthropology, sociology, geography, and architecture to collect systematic data on people and public spaces (Fitzpatrick, 2016). These studies often had two common objectives: to acknowledge the importance of people using the city's spaces and to gather data to inform architects, urban design, and planning towards a people-centred approach to enhancing urban life.

Furthermore, also in the 20^{th} century, concerns with notions of the everyday emerged from a body of literature whose aim was also to bring to the fore people and things in the city that had previously been neglected by planning or even academia as too ordinary (Middleton, 2011). Lefebvre wrote several books on the critique of everyday life, addressing the change in the concept of politics, as not only connected to state and planning institutions but that can also be challenged by everyday life (Elden, 2006). And de Certeau discussed the dichotomy between planning and control strategies and the tactics that people use to live the everyday in the city, arguing that in the everyday dwells the reality of city life (Certeau, 1984). These and others authors then placed the *Quotidien* at the heart of the contemporary agenda (Sheringham, 2006).

Therefore, one body of literature focused on finding methods to study public life and consider people when planning cities. At the same time, the other discussed the understanding of everyday life as the essential ground of human existence in the urban. These two bodies of literature had a relatively similar critique, concerns and interests, in the sense that they both wrote against the modernist planning perspective and focused on bringing attention to people living, moving and using spaces in the city. In this context, the pedestrian was the uppermost object of their studies and writings. The walker represents the forgotten human scale, the speed and senses in which the city is experienced (Gehl, 2011). Also, pedestrians are social beings moving in a complex and efficient manner, filling the streets with human life (Whyte, 1988). And by making their daily movements, they are dancing the sidewalk ballet that never repeats itself and is full of improvisations (Jacobs, 1961). Besides, from the eye-level perspective of the ordinary person, the city is experienced, and by the activity of walking, one practices everyday life. Those pedestrians are the walkers whose bodies write urban texts by using the lived space (Certeau, 1984).

The importance that was given to the pedestrian also determined that the street belongs to him over cars, buildings and functions. It acknowledged the understanding of the street as a necessary and relevant public space for walking, lingering and living everyday life in the city. Much of the first body of literature produced from the 1960s to 1980s are still considered the core texts for public life studies (Gehl & Svarre, 2013). And over recent years, these researches have inspired other studies and planning approaches based on public life data to develop on pedestrianism, walkability and concepts, as the 15 minutes cities in relation to improved quality of life and well-being (Rogers et al., 2011; Suarez-Balcazar et al., 2020; Tiwari, 2015). Governments and institutions worldwide have started to use public life studies to promote physical activity in cities, to enhance liveability and walkability (Mobilitätsagentur Wien GmbH, 2018; NYC Department of City Planning, 2014; WHO & Gehl Institute, 2017). However, public life studies have also been applied through more technological methods that use GIS² and satellite data to observe people's activities in public spaces (Cerrone et al., 2021). In those, users are studied and represented as a data point geolocated in an abstract map of a place the researcher has not necessarily visited. This approach, yet claiming to be based on public life methods, can be seen as contradictory to the essence of observing people in public spaces with human senses. In fact, this way of looking at city life may relate more to the panoptic and technocratic view that functionalist planning promoted than to the reality experienced in the street. Therefore, it demonstrates the remaining influence of the scientific approach to the city and the remaining need to question how to consider urban life and how to account for the experience of living publicly in the city.

As aforementioned, public spaces have always been essential to social life aspects that happen outside of the private realm. They are spaces for sharing encounters and practising ordinary activities that define urban life in the everyday context. Indeed, public life is a multidisciplinary realm dealing with an ensemble of complex and interrelated concepts in discussion over accessibility and private or public divisions. Sheller and Urry (2003) following an extensive analysis of the multiple meanings of the `public' and `private', criticizes such a static conception and maintains that massive changes are occurring in the nature of both public and private life and especially of the relations between them. We consider flows and networks that enable mobility between and across apparent publics and privates. These mobilities are both physical (in the form of mobile people, objects and hybrids of humans-in-machines present different notions on those ideas and refer to *public life* as the one that "takes place within politics, the workplace, religion, education and other public spaces, as opposed to private life which is seen as occurring within the domestic realm." And *public spaces* "are those areas and locales, especially in cities, outside the private spaces of the home and workplace, where people can congregate, socialise and organise in relatively unregulated ways" (p. 110)following an extensive analysis of the multiple meanings of the `public' and `private', criticizes such a static conception and maintains that massive changes are occurring in the nature of both public and private life and especially of the relations between them. We consider flows and networks that enable mobility between and across apparent publics and privates. These mobilities are both physical (in the form of mobile people, objects and hybrids of humans-in-machines. Similarly, but with a focus on public life studies, Gehl defines that "public space is understood as streets, alleys, buildings, squares, bollards: everything that can be considered part of the built environment" and "public life is everything that takes place between buildings, to and from school, seated, standing, walking, biking, etc. It is everything we can go out and observe happening." (Gehl & Svarre, 2013, p. 2). Therefore, as this thesis attempt to study public life, this is understood as everything that can be observed in the city's public spaces, outside of the domestic realm, considering the activities and interactions between people and the environment.

² Geographic Information System.

CHAPTER 2 – URBAN RHYTHMS

Public life and urban rhythms are interrelated subjects as the movements of people, interactions, and rest in relation to urban spaces, architecture and cycles of the day, seasons and years merge into rhythms that give city spaces temporal distinctiveness (Wunderlich, 2013). However, before developing on urban rhythms, it is necessary to situate the study of rhythm, its basic categories, and interrelations. Rhythm, as a concept for urban analysis, received attention mainly after Lefebvre's work. In his lifetime exploration of everyday life, he developed a concern for rhythm, most articulated in his last book *Rhythmanalysis* (Lefebvre, 2004). This chapter presents the main points of Lefebvre's work on rhythms, recent literature on urban rhythms, and the combination of everyday life and spatial rhythms as urban rhythms.

RHYTHMANALYSIS

Lefebvre argued that "everywhere where there is interaction between a place, a time and an expenditure of energy, there is *rhythm*." (p. 15), starting his discussion towards the understanding of rhythm as a lost connection for the consideration of time and space together. This relation is what later he would call an idea of "localised time" or "temporalized space" (Lefebvre & Régulier, 2004a, p. 89). Elden (2006), writing on Lefebvre, says that *rhythmanalysis* was for the author a "new science, a new field of knowledge", but that has been articulated in his previous works and is not seen as a separated science, but instead offers a way of thinking space and time as a continuation of the understanding of everyday life (p. 195).

Rhythm is a concept applied in prosody, poetry, music, physiology, and other fields before the attempt to use it in the urban context. The etymology of rhythm comes from classical Latin "*rhythmus*", also as a spelling variant of rhyme n. (metre, measure, measured flow) from the 16th century. The *Oxford English Dictionary* defines rhythm as "senses relating to a regular repeated pattern of sound or movement." In prosody, it is "the measured flow of words or phrases in verse, forming various patterns of sound". In music, it is "the systematic grouping of music sounds, principally according to duration and periodical stress; beat". In physiology, it is defined as "the recurrence at (normally) regular intervals of the heartbeat, breathing, or other physiological processes". And the general meaning of the word is defined as "regularity in the repetition in time or space of an action, process, feature, condition, event, etc.; periodic or cyclical change or movement; an instance of this. Also: continuity of movement or delivery; pace, flow, stride." (Oxford English Dictionary, n.d.). Therefore, it is roughly acknowledged as a repetitive sequence.

Lefebvre suggests that there is a general concept of rhythm and that everyone possesses it. However, it often only accounts for the mechanical overtone of rhythm (Lefebvre, 2004, p. 5). Then, in Rhythmanalysis, he considers two contrasting categories of repetition: cyclical rhythms and linear rhythms. The *cyclical* originates in the cosmic, associated with natural processes such as days and night, hours and months, bodily functions, characterised for always beginning again, returning, becoming. They are processes, movements, vibrations, rotations, and the numbering systems that "best suited to it are duodecimal" (e.g., twelve months, twelve hours, 360° of circumference). Lastly, cyclical rhythms "are perceived as favourably". In contrast, *linear rhythms* originate from human and social practice, as imposed structures and particularly from movements of work. They are repetitive series of almost identical facts separated by long or short periods, considered the point of departure for mechanic rhythms. They include lines, trajectories and repetitions measured on a decimal base. Lastly, linear rhythms are "perceived as monotonous, tiring" (Lefebvre & Régulier, 2004a, p. 90; 2004b, p. 76). These two are the basic types to which all other rhythms relate; thus, they can be a starting point for the analysis of rhythms.

Further, cyclical and linear are contrasting but interrelated categories of rhythm. For the rhythmanalysis, they may be, at first, separated, but in all practical situations, they coexist (Elden, 2006, p. 195). Also, Lefebvre and Régulier (2004a), in their *Attempt at the Rhythmanalysis of Mediterranean Cities*, clarified that these two types are distinct, but "the analysis that separates them must join them back together because they enter into perpetual interaction and are even relative to one another to the extent that one serves as the measure of the other" (p. 90), giving the example of the term "so many days of work" that combines cyclical and linear rhythms. Extending on the idea about the relativity of rhythms, they argue that "a rhythm is only slow or fast in relation to other rhythms" (p. 89).

From the understanding that multiple rhythms coexist and interrelate, Lefebvre develops on three complementary considerations: Polyrhythmia, Eurhythmia and Arrhythmia. *Polyrhythmia* is the diversity of interrelated rhythms working in complex rhythmic fields, to which the body is one example. The other two considerations drift from this first understanding of overlayed interdependent rhythms influencing each other. In this, *Eurhythmia* is when rhythms are in harmonic interrelation, "unite with one another in the state of health, in normal everydayness." Lastly, *Arrhythmia* is the opposite of the latter, which is when rhythms are disruptive, discordant, or broken. They bypass synchronisation (Lefebvre, 2004, p. 16). These concepts are fundamental because, in real situations, rhythms function in a complex of multiple relations that work in harmony or discordance—for example, the complexity in urban settings where various rhythms interrelate.

In his consideration of rhythm and attempt to a rhythmanalysis, Lefebvre continually focused on the *body*. Its importance lies in the body being the point of contact where social (linear) and biological (cyclical) rhythms coexist, and it is where we are closer to rhythms (Lefebvre, 2004). Further, he suggests that the body serves as a metronome, as the first point to use rhythm as analysis. Therefore, the *rhythmanalyst* "does not simply analyse the body as a subject, but uses the body as the first point of analysis, the tool for subsequent investigations." (Elden, 2004, p. xii). The rhythmanalyst use their body rhythms and draw on all their senses.

Therefore, the repertoire of fundamental concepts from Lefebvre's work, *Rhythmanalysis*, was presented in the main categories, interrelations and starting point of

analysis to grasp senses of rhythms in relation to everyday life. As Elden (2006) stresses, Lefebvre returned to several of his earlier themes in this last book and underlined the importance of grasping space and time together and without losing sight of the body (p. 198).

URBAN RHYTHMS

As developed by Lefebvre, *Rhythm* is a complex and experimental concept. While he provided a general conceptual framework, the tools of rhythmanalysis presented in his studies are "frustratingly elusive" (Amin & Thrift, 2002, as cited in Elden 2006) and the empirical grounding of the discussion remains insufficient (Lehtovuori & Koskela, 2013). Therefore, methods for understanding urban rhythms are still under development. Recently, fields within urban studies have paid increasing attention to *Rhythmanalysis* and the study of urban rhythms as an approach to look at city life and public spaces in the contemporary context. They attempt to explore it by associating rhythm with mobility, spaces and interaction (Smith & Hetherington, 2013); by managing time and space in the twenty-four-hour city (Smith & Hall, 2013); and in the social production of urban space, working with the idea of the street as an oeuvre (Lehtovuori & Koskela, 2013). These examples reinforce the value of applying urban rhythms to the analysis of cities and seek methods to do so. However, Simpson (2008) argued that "whilst many have called for or suggested the usefulness of Rhythmanalysis in examining 'the city', little work has appeared in print which engages in detail in actual, specific, everyday practices and performances *in* these cities through the lens of the Rhythmanalyst." (p. 813). Therefore, literature demonstrates the current relevance of the topic but still lacks empirical explorations.

Across rhythm in general, urban rhythms are specific to the urban context. Therefore "urban" offers a frame with location and specificity to rhythms (Wunderlich, 2008a). In this context, urban spaces are polyrhythmic fields where public life in public spaces holds social and human activities that presuppose the combination of body/biological and social rhythms with spatial rhythms (Lefebvre, 2004). Some examples of *urban rhythms* are: morning time when people go to work, and children go to school, lunch time, routines, movements in traffic, people walking, sounds like a church bell, seasonal festivity, gestures like people waiving, building facades, light-shadow progression over the day, etc. These rhythms relate to each other in the urban context as social and cultural routines reflecting on the use of urban spaces and giving these spaces the perception of time or day progression.

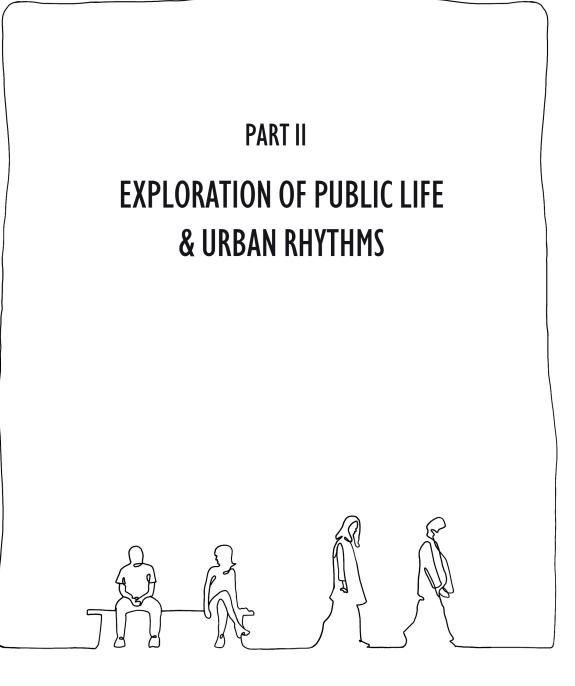
Urban rhythms are fundamentally composed of two types: everyday life rhythms and spatial rhythms. *Everyday life rhythms* are socio-cultural, natural and physiological regularities that can be of linear or cyclical type. And *spatial rhythms* can be classified in patterns of dynamic or static (Wunderlich, 2008a). Dynamics are spatial rhythms that move in space in relation to still objects. And static are spatial rhythms that are still but appear rhythmic from the perspective of the moving observer (e.g., windows pattern in a building façade). The dynamic spatial rhythms are very much related to everyday life rhythms. However, while everyday life rhythms are *influenced* by location, spatial rhythms are *inherent* to location (Wunderlich, 2008a). This follows the understanding that everyday life rhythms are, in part, shaped by

location and physical features and appears in urban spaces by the movements, frequencies and speeds of rush hours, traffic, slow walking, group meetings, and others. In contrast, spatial rhythms are those rhythms that are necessarily part of a spatial context.

ARCHITECTURAL RHYTHMS

Aforementioned, spatial rhythms are composed of dynamic and static rhythms (Wunderlich, 2008a). In this, architecture is much of what is understood as static rhythms. Concerning art and architecture, the *Oxford English Dictionary* defines rhythm as "the harmonious sequence or correlation of colours, elements, or masses." (Oxford English Dictionary, n.d.). Rhythm in architecture can be seen as part of the streetscape in facades of buildings, by the number of units or doorways for a given distance or within a street block (Gehl et al., 2006). And in many other examples of subtle variation within strict regularity. Rasmussen (1962) writes on rhythm in architecture by comparing it to music and dance. He gives different examples of patterns found on facades that alternate solid and void in simple rhythms of *one, two, one, two,* or that follows a waltz measure of *one, two, three, one, two, three.* However, Rasmussen reminds the reader that "architecture itself has no time dimension, no movement, and therefore cannot be rhythmic in the same way as music and dancing are. But to experience architecture demands time" (p. 135). Therefore, in the perception of architecture, one experiences rhythm have what he calls a "rhythmic experience" (p. 135).

Further developing on the same concept, Rasmussen explores rhythm in historical architectural styles by relating them to its times' culture, costumes and dances, in connection to the ways people moved. He develops by saying that over time, the rooms and arrangements between rooms should be determined by the way people would live in them and move through them (p. 136). Therefore, Rasmussen highlights rhythm in architecture as a way to think about cultural and social movements in space. Through the time of moving through architecture, architectural rhythm is experienced. And "the design of buildings, which must be stationary, should be based on the movement that will flow *through* them." (p. 150). The same remains valid and can be applied to the city. On the streets, architectural rhythm is also perceived by the movement experience that should flow through them. In the city, the rhythms of facades subdivisions, rhythmic sequence of street lights on sidewalks, or trees planted in a garden can only be perceived as rhythmic through the expenditure of time in the experience of passing by these elements.



Part II addresses this thesis's methods, case studies, and empirical work subdivided into *Chapters 3* and *4*. As this research is exploratory in nature, the research design was created to support the aim of this thesis in studying public life to reveal urban rhythms.

Chapter 3 introduces the "staying and observing" methodology and conducts the first experiment to study public life. Based on the writings of Jan Gehl in Life Between Buildings and on his more recent methodological book on How to Study Public Life, as well as on the work of William Whyte in The Social Life of Small Urban Spaces and CITY – Rediscovering the Center, the study is realised in Mariahilferstraße, a shared street in Vienna, followed by the findings, and a short conclusion of the chapter.

Chapter 4 presents the second methodology named "walking and following". This is based on the artwork of the French artist Sophie Calle in her book Suite Vénitienne and on the writings of Michel de Certeau present in the third part – Spatial Practices - of his book The Practice of Everyday Life. Then, the second case study realised in Kongens Have and nearby streets in the centre of Copenhagen is presented, followed by findings and a short conclusion.

Both case studies, *Mariahilferstraße* and *Kongens Have*, will be further described. However, I want to highlight that both have been part of my everyday life when I lived first in Vienna and then in Copenhagen. Therefore, I consider myself a user of these spaces before I became an observer. In addition, this research is based upon a phenomenological outlook, which stays aware of its non-representativeness due to a limited sample. Nonetheless, it provides an understanding of urban rhythms by exploring public life in these urban spaces.

CHAPTER 3 – STAYING & OBSERVING IN THE SHARED STREET

In the present chapter, I will discuss the first attempt at studying public life and urban rhythms through *"staying and observing"*. The methodology I am using is based on classic texts of public life studies, their perspective over the observed space and main methods to register and illustrate public life. *Mariahilferstraße* is this chapter's case study because, among other attributes, the street is part of Viennese's everyday life and was also part of my daily life when living in Vienna.

3.1 METHODOLOGY

The Danish architect Jan Gehl (b.1936) has built his work on public life studies over the past 50 vears. What started as a critique of functional urban planning and its disastrous consequences over city life has developed to create tools and methods to study public life, establish design criteria for public spaces, and inform city planning. His contemporary, the American journalist and sociologist William Whyte (1917-1999), shared the view that social life in public spaces is essential for quality of life in cities (PPS, 2010). Whyte observed people as part of his nine vears-long 'Street Life Project' for informing the open-space zoning code of New York City (NYC). There, he investigated the behaviour of the everyday users of the city to understand and improve liveability (Whyte, 1980, p. 10, 112). These two authors are prominent figures of public life research. Whyte has influenced Gehl's work, and they both have acknowledged each other in their books³. Their methods and approaches share many similarities and a few differences⁴. However, for the purpose of this chapter, I am focusing on their similarities, which are shortly summarised in: both have conducted systematic research on people in public spaces (focusing on pedestrians staying); both have looked for behaviour patterns, quantifiable data on public life and spatial features conditioning those; and both have drawn specific remarks from general observations to inform urban planning and design. Therefore, their research experiences and development of methods to study public life could offer a way also to reveal urban rhythms.

In his first book, *Life Between Buildings*, Gehl raised awareness for people moving about spaces (p.7). He focused on the 'void' between architecture instead of the excessive attention that architects and city planners had over buildings or layouts. Gehl observed how people use public spaces in cities worldwide, gathered data and presented through text and black-and-white photography suggestions to inform urban design that promotes sociability among urban dwellers (Warner, 1993). Alongside, Gehl talked about three types of activities that develop in public spaces: *necessary, optional,* and *social* activities. According to him, necessary ones will happen anyway because they relate to things we "must" do, such as going to

³ For the reader's reference, see: Gehl (2011, p. 34), (Gehl & Svarre, 2013, p. 52), Whyte (1980, p. 22; 1988, p. 2). 4 Whyte's work has more narrative quality than Gehl's. In his extensive book *CITY*, Whyte uses anecdotes to narrating common characters of the street. He writes about common persons, for example, "vendors" (p. 26) and "undesirables" (p. 156). Or more specific figures from the street life he observed, as "Mr Magoo" (p. 43). This way, Whyte acknowledges people in a social depth that is less seen in Gehl's writing.

work or school, doing groceries, or waiting for the bus. On the contrary, optional activities are highly dependent on the quality of the environment because they relate to the desire to stay in space, strolling, or being outside to enjoy life. Besides, social activities are encouraged by the presence of other people in spaces (p. 9-12). In this, two conclusions were drawn: spaces impact behaviour, and two, those social activities are a human need for contact where "people attract people" (p. 15, 73).

Moreover, Gehl focused on an anthropological and behavioural perspective that considers the similarities of homo sapiens as of a similar height, sight angle, walk speed, smell range, tactical senses, and the desire to experience environments with those stimuli (p. 21, 63-68). These senses, communication and human-scale experienced by people should be observed and considered to study urban life. Gehl concludes with the idea that cities need to be thought from the following other: "first life, then spaces, then buildings" (PPS, 2008), in which buildings can facilitate engagement, staying activities and stimulate senses in a way that enriches the experience of public life. For example, Gehl says that a 500m walk can be experienced differently. If the path is straight and dull, it is experienced as very long and tiring, while the same length can be perceived as a shorter distance if the route is subdivided into stages (p. 137).

Whyte, in the book and documentary, The Social Life of Small Urban Spaces, shared his observations on pedestrians in streets, corners, and plazas to understand why some spaces were more used than others and to defend centrality and density as a determinant for sociability (Whyte, 1988, p. 4). He examined how people positioned themselves in public spaces and in turn measured their responses to designed elements for standing, sitting or socializing (Fitzpatrick, 2016). The 'Street Life Project' was later presented in a more extensive form in his capstone book CITY: Rediscovering the Center. The book is full of anecdotes of street characters where Whyte deals with safety, crime, and traffic through the narrative of situations he and his team have observed. In addition, design lessons are also taught in narrative form accompanied by black-and-white photography extracted from his time-lapse films. In carefully watching pedestrians, he bridged theories from anthropology, sociology, and environmental psychology, to draw conclusions on which elements compose a good open space and how they affect behaviour. Whyte had a deterministic view that some settings are more conductive to encounters and shape behaviour because of their physical design (Fitzpatrick, 2016).

In view of their methods and research experience, Gehl has published his latest book How to Study Public Life (Gehl & Svarre, 2013). It features the field's history, the primary methods to study public life and a compilation of previous research work on the topic. This book can be accounted as a common ground that bridges the other texts from Gehl and Whyte and builds the foundation for the methods used in this chapter. More precisely, the methods were founded on two main themes: firstly, the point of view from which Gehl and Whyte look at public life by *staying and observing* people, also focusing on people staying in public spaces. Secondly, the way they register and illustrate public life in public spaces (by inquiry, maps, photography and text).

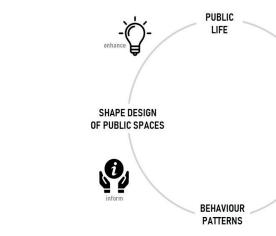


Figure 2: Diagram of Gehl's and Whyte's approach to study public life (by author).

POINT OF VIEW: STAYING AND OBSERVING

As soon as one stands in a place attempting to observe public life, it is made clear how hard it is to do such thing because "there are so many bits of information in front of you as to be somewhat overwhelming, and, by looking at everything you may see nothing" (Whyte, 1980, p. 109). Then, it is crucial to "take the time needed to really see the ordinariness unfolding in public space" (Gehl & Svarre, 2013, p. 5). Gehl and Whyte look at everyday life situations by observing people (walking, lingering, standing, sitting) in public spaces, taking research as an action. They focus on finding things that seem obvious once seen but that are often overlooked (Whyte, 1980, p. 15). For that, direct observation is the core of Gehl's and Whyte's studies on public life (see Gehl & Svarre, 2013, p.3; Whyte, 1980, p. 112, 1988, p. 4). Any other data, methods, and metrics are, first of all, based on observations made on site, in public spaces, where observer must use their eyes, senses and "good common sense"⁵ (Gehl & Svarre, 2013, p. 11). Gehl and Whyte adopt a stationary point of view that oversees the space observed, usually by staying on the same level as the ones being watched or sometimes a few storeys up.

Moreover, in the observation, the researcher should not interfere in the space. Just like a "fly on the wall", one should be "an invisible non-participant who takes in the big picture without taking part in the event" (Gehl & Svarre, 2013, p. 5). Their view as observers is objective, looking for quantifiable data, similarities and patterns that illustrate people's behaviour in public spaces. They mainly focus on people staying (stopping, standing, sitting) in public spaces and what elements may invite them to do so. For example, Gehl cites the "edge effect", defined as a tendency of people stopping and occupying first the edges of space before staying in the middle.



⁵ Although this can be subjective to the researcher, Gehl does not define what he means as "good common sense".

Also, people tend to stand near elements (columns, trees, benches) in space as physical support (Gehl, 2011, p. 149, 151). And Whyte notices that one of the most significant factors for having more people sitting in public spaces is actually the availability of places to sit, where "people tend to sit most where there are places to sit" (Whyte, 1980, p. 28).

Then, their observations are often followed by a design intervention or planning policies to interfere in the space that is once again surveyed to compare the public life changes. In conclusion, 'staying' means adopting a stationary position to observe people in the city and focusing on the lingering ones. And 'observing' means, first, to attentively watch behaviours and activities in loco', and second to remark it (to make observations) for a city planning overview.

REGISTERING AND ILLUSTRATING URBAN LIFE

Gehl and Whyte use notes and simple questions systematically taken to register urban life. Whyte would perhaps use his journalistic background to ask "who, what where" towards people as in "who (gender) is walking on the left instead of the right?" or towards space as "how much seating is a good amount?" (Whyte, 1980, p. 109). Gehl follows the same logic to document life, identify behaviours and where activities happen. The question of "how many?" is frequently used as an attempt to measure city life, and starting with this question is basic (Gehl & Svarre, 2013, p. 13).

This inquiry process led Gehl and Whyte to develop the most used methods to study public life: counting, mapping, tracing, and photographing (Gehl & Svarre, 2013, p. 24). Counting is a quantifiable approach to gather qualitative data. In Gehl's work, counting is a significant way to measure city life as pedestrians flow and stationary activities, because "in principle, everything can be counted" (Gehl & Svarre, 2013, p. 13, 25). He sees the pedestrian as a unit and counting as the way to make people visible to the city's planning department, in an approach to "measure what we care about" (Andersen & Schuff, 2017). The same process can be used to quantify behaviours, compare the number of activities before and after an intervention is made, and provide a picture of daily rhythms by quantifying pedestrian flow in a public space, often representing this data through charts. Whyte also used counting to register people sitting in different plazas in NYC and compare their numbers (Whyte, 1988, p. 111). Furthermore, mapping and tracing are methods developed from questions of "what" and "where", therefore, to localise the behaviours and activities of people in a space. They should work as an aerial picture of a moment in a given area, "freezing" the setting and showing where people stay, in mapping, or drawing the lines of people's movement, in the case of tracing. Both representations can be done several times during the observation and be overlaved to illustrate the patterns of staving and moving activities (Gehl & Svarre, 2013, p. 26, 28; Whyte, 1980, p. 23, 1988, p. 56).

Photography is part of Gehl's and Whyte's way of documenting public life and is used as a method to illustrate interactions and to describe or communicate observations (Gehl & Svarre, 2013, p. 31). Whyte is most famous for using time-lapses to film "street ballets". Usually, he would place cameras overlooking plazas or street corners and film for several hours the scenes that should also be observed directly. These can videos capture moments and work as documentation for analysis beyond the time of the study, for watching people's behaviour in the scene over and over while making key questions and testing hypotheses about public life (Gehl & Svarre, 2013, p. 118; Whyte, 1980, p. 102). Thus, these are the main methods to measure, register and illustrate city life and things that would otherwise happen without being noticed. They should work together to give a picture of everyday life in the studied space.

STAYING AND OBSERVING IN MARIAHILFERSTRABE: METHODS AND **APPROACH**

Having considered the main features of Gehl's and Whyte's work relevant to this thesis, I will explain them as instruments to how the research is structured, approached, and analysed. The first exploration of public life and urban rhythms happened in Vienna, in Mariahilferstraße. In this chapter's research question: How may I study public life in public spaces by observing people from a stationary perspective? 'Public life' is understood as people's interactions with other people and the environment, where these people are the users of Mariahilferstraße, focusing on pedestrians. And 'public spaces' is the street in Vienna where those interactions developed and were observed. In order to answer the research question, several methods were designed and used, but direct observation was the core of this work, as well as it was for Gehl and Whyte. The following diagram (Figure 3) presents the overall methods and schedule of data collection in Vienna.

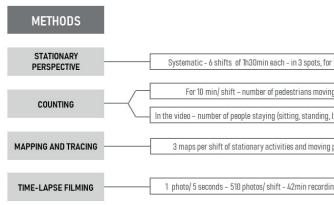


Figure 3: Overview of methods and shifts of observations conducted in Mariahilferstraße -Vienna (by author).

	SCHEDULE	
days	20.07.2020 Monday 25-28 °C	29.07.2020 WEDNESDAY 25-28 °C
	MARIAHILFERSTRAßE	
l down)	LOCATION	SHIFTS
IS	SPOT 1	2-3:30pm
S	SPOT 2	4-5:30pm
nift	SPOT 3	6-7:30pm

STATIONARY PERSPECTIVE

Mariahilferstraße is a public shopping street with a shared mobility concept. Locally called "Mahü", this street is daily used by locals, citizens, visitors, and tourists, and it was also situated only at a 5-minute walking distance from my residence. I have walked, stayed, shopped, crossed, and biked there many times before it became the case study of this thesis. Because Mariahilferstraße has a length of 1,6km, I have chosen three spots along the street to observe public life systematically. The three spots, as well as the days of observation, were chosen based on prior visits to the street where it was observed that weekdays have a similar use trend, on Saturday the use is more intense, being more crowded, and on Sunday when the shops are closed, the number of users reduces significantly. Hence, to study the street in an everyday setting, I decided to observe it on weekdays.

The systematic observations of public life in Mariahilferstraße were done in 6 shifts of 1h30min each, for two days, by adopting a stationary position in each of the street spots. On one day, I observed the space as given, and on the second day, I added a table and two chairs to the scene to see if how it affected the user's behaviour and urban rhythms of the street. In all shifts of observation, all upcoming methods were repeatedly used to create consistent data from the three spots representing the street.

COUNTING

As said before, this method is widely applied in classic public life studies (Gehl & Svarre, 2013). In Mariahilferstraße, it was used in two ways. First, to count how many people were moving through the spaces of observation. In the shifts, I placed myself standing still and looking at the profile of the street. Then, I focused on a point on the opposite side, counting for 10 minutes for everyone that would cross that imaginary line to grasp the pedestrians' flow in each spot and days of observation. To do so, I used the timer on my phone and a spreadsheet from Gehl Institute (Gehl Institute, 2020) that divides pedestrians into five categories (walking, running/ jogging, wheelchair, stroller, rolling skateboard) and accounts cyclists.

Further, counting was also used for asking how many people were staying - standing, sitting, lying down - in each spot observed. For this, I watched the videos from the time-lapse filming while counting the ones staying in the scene. Finally, the analysis comes through charts and graphs to process the data and visually represent the daily activities of pedestrians moving and staving in *Mariahilferstraße*.

TRACING AND MAPPING

For these two methods, I represented the observation spots in a top view considering sidewalk elements as benches and trees, the street dimension in each spot and subdivisions. Then, I traced people's movements as if they were drawing lines in space and mapped the locations where they were stopping, standing or lying down. These were done three times per shift. Later, I overlayed the draft maps to create a map of the movement patterns and patterns of stationary activities per spot on each day.

TIME-LAPSE FILMING

Time-lapse filming was used in *Mariahilferstraße* to document people's activities and behaviours during the shifts of observation. When recording time-lapse film, a few criteria should be observed - as pointed out by Whyte - the equipment, the placement, the intervals, and the evaluation of the images (Whyte, 1980, p. 102-111). For equipment, I used an app called 'Skyflow' installed on my phone⁶. The camera placement was not an easy task, and it took a few tries to place it where people would not notice. First, I tried with a tripod, but it grabbed attention, and people would change their behaviour to wonder what it was doing there. Then, I tried taping my phone on a sign, which resulted in fewer people noticing it. Lastly, what worked best was to place the phone on my bike using a phone holder (Figure 4). This way was effective to record the street at the height of 1,45m. Nearly everyone ignored it because the bike would pass by as an ordinary object.

For the intervals, I used 5 seconds between each picture taken. This way, I could easily observe sittings patterns in contrast to people moving. The frames considered horizontally the entire space observed and vertically two storeys of the facades. For each shift of observation, it was recorded 42 minutes of video taken into 510 frames7. Finally, for evaluation, all I had to do was "to interrogate the film" (Whyte, 1980, p.109), to ask questions one at a time. Therefore, the tapes served as a source to count how many people were staying in the spaces, illustrate what interactions and activities they were doing, and observe for how long some of them remained in the same spot.



Figure 4: Camera position (by author).

⁶ An iPhone 11model.

⁷ The time-lapse films from *Mariahilferstraße* are available as a separated document and can be provided to readers upon request. I can be contacted at maltamvivian@gmail.com

3.2 VIENNA - MARIAHILFERSTRAßE

Vienna is often ranked as one of the most liveable cities in the world. Part of this relates to the city's concern with providing a good quality of life for citizens by developing green and open spaces near residential areas for daily life use (Vienna City Administration et al., 2015). Another concern of the city relates to the mobility patterns and choice of daily transportation. Vienna aims to enhance walking by providing high-*quality* infrastructure in planning for a better quality of life for citizens. In 2020, pedestrians represented 37% of Vienna's modal split, as people who daily choose to walk as their primary mode of transportation (Wiener Linien, 2021). In following the concepts to provide suitable open spaces to citizens and enhance walking through investment in infrastructure, Vienna's city executed the redesign of *Mariahilferstraße* in 2015.

'*Mahü*', as called by the Viennese, is a 1,6km-long street located at the border between the 6th (Mariahilf) and 7th (Neubau) districts of Vienna. It goes from the Museums Quartier to the Gürtel, connecting the centre to its newer neighbourhoods (Figure 5). The redesign of *Mariahilferstraße* changed the road function *from* intensive car traffic to what is now a shared street between pedestrians, cyclists, and drivers. Locals, visitors, and tourists use the area for shopping, walking, accessing the metro, and other activities. Because of its dimension, design, and use, the city department considers *Mariahilferstraße* as a linear green and open space⁸ (Vienna City Administration et al., 2015).



Figure 5: Location map of Mariahilferstraße (by author).

Mariahilferstraße was named in 1897 after the former suburb of Mariahilf. It is historically a shopping and business street in Vienna, but its past goes back to Roman times when the road was already used. In the 17th century, the settlement became a centre for artisans and tradespeople. In the 18th century, it was the first street outside the city centre to receive public lighting and pavement. In the 19th century, industrialisation pushed back businesses and traders, and retail and department stores replaced them. By then, *Mariahilferstraße* developed into the leading shopping street in Vienna. Its suburban character changed to multi-storey houses with grand facades in a historical mix of styles, and the shops became larger. Later, in the 20th century, it was redesigned to allocate the U3 metro in replacement of the old tram. Sidewalks were widened, and trees, benches and cafes were added. Since then, the street has developed into a shopping and promenade boulevard (Wien Geschichte Wiki-Bearbeiter, 2021).

Between 2013 and 2015, the last redesign took place in *Mariahilferstraße*, this time to increase its capacity for pedestrians. The Bureau B+B urbanism and landscape architecture firm worked with the city of Vienna and local citizens to reduce car traffic and create more room for people (Figure 6). *Mariahilferstraße* was remodelled to be a continuous shared space with one pedestrian zone and two shared zones, including many benches, trees, water elements, and a few parking spots. Also, the pavement was replaced so that the street could be all on the same level (Bureau B+B, 2021).

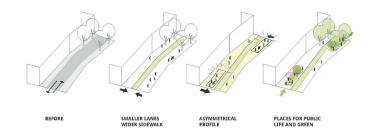


Figure 6: Diagram of Mariahilferstraße redesign (Bureau B+B, 2021).

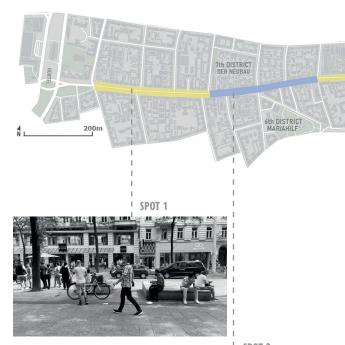
The street design follows a minimalistic aesthetic, with furniture made of wood and local granite, also used for the floor tiles. The benches have various arrangements and dimensions, some with water elements or vegetation (Bureau B+B, 2021). On the floor, the same granite tile revests the entire street surface, creating a continuous tactile space. Two lines, made with lighter colour granite, visually subdivides Mariahilferstraße to mark the central road where bikes and cars share the space with pedestrians, and along the street, the sidewalk follows an asymmetrical profile. The fine design presents the contemporary aesthetic of the recent intervention while having unity with the buildings' historic facades in the street. The constructions vary in ornaments and architectural styles, but regard use, most buildings have shops on the ground floor and residences or offices on the upper floors.

⁸ The city of Vienna document for open spaces includes *Mariahilferstraße* as one that functions for everyday life, recreation, social meeting point and a place for walking and cycling (Vienna City Administration et al., 2015, p.5).

The socio-economic profile of residents living in *Mariahilferstraße* and its surroundings, both 6th and 7th districts present similar numbers in population and population density, gender ratio, nationalities, age group, income, and education level (Landesstatistik Wien (MA 23), 2020a, 2020b). The population number is 31.651 dwellers in the 6th district and 31.961residents in the 7th district, with a density of about 20.000 inhabitants per km², which is about five times the average of Vienna (4.500 people/km²). Both neighbourhoods have a gender distribution of 51% women and 49% men, like the city number. The nationality percentage of residents is analogous in both districts, with 70% of residents coming from Austria, 17% from other EU countries, and 13% from countries outside the EU (similar to the city's average). Most immigrants in these districts come from Germany, Serbia, Italy, Poland, Hungary, or Romania. The average age of their residents, both in the 6^{th} and 7^{th} district, is 42 years, like Vienna's (41) average age. Both neighbourhoods have a majority of residents in the "working age" group, with 75% of people 15-64 years old, followed by 15% with 65+ years and 10% with age between 0-14years. The annual average income of the residents is about 24.500 euros, slightly higher than Vienna's average of 23.000 euros. Lastly, both districts have a high education level, with about 45% of residents holding a university degree. This number is almost twice higher than Vienna's university degree average (26%) (Landesstatistik Wien (MA 23), 2020a, 2020b).

In summary, *Mariahilferstraße* surrounding residents correspond to the Viennese standard from a socio-demographic point of view, with a slightly more significant proportion of women. It is a predominantly middle-class neighbourhood. Users may vary on young, students, families with children, older academics, immigrants, and elders. Furthermore, for the local community, Mariahilferstraße offers daily transport connections, shops, and open space for leisure. The last is especially true because the 6th and 7th districts have a high population density and a low percentage of green and open spaces (with 4% and 2% of green areas, respectively), making the street a significant green and open space for the neighbourhoods. (Landesstatistik Wien (MA 23), 2020a, 2020b).

Mariahilferstraße context demonstrates that the street suits well as the location of analysis for studying public life in an everyday context. Besides, as mentioned in the methodology section, it was part of my daily life in Vienna. Figure 7 shows the three spots where I conducted the systematic observation of public life. The first point is in the shared zone in the western end, the second is in the central pedestrian zone, and the third is in the shared zone in the eastern end.











DAY PROGRESSION IN MARIAHILFERSTRAßE

The perceived number of people in *Mariahilferstraße* changes with the day. In summer, observations showed that an ordinary day goes accordingly:

Before 10 a.m.

Before shops are open, most people walk to take the Metro, go to work, or school. A few are walking with their dogs or drinking coffee. Usually, people sitting are on spots under the sun. There are many trucks delivering goods to the shops. Mostly bikes go in the middle of the street and a few cars. Much fewer people are using the road than at other times of the day.

10 a.m. to 2 p.m.

As the shops open, more people come to use the street and occupy the benches. Still, a few trucks are delivering goods to the shops in the street – which is allowed until 1 p.m. It is noticeable the presence of elders among user groups. Some people come to spend lunch break either in restaurants or on the benches in the street.

2 p.m. to 7 p.m.

This is the busiest period in *Mariahilferstraße*. The trucks are gone, and a lot of people are shopping, sitting, and walking. At this time, the plaza feeling that qualifies the street as more than a transient space is more noticeable. The street scene is diverse in activities and users, but primarily young people and adults are seen at this time.

7 p.m. to 11 p.m.

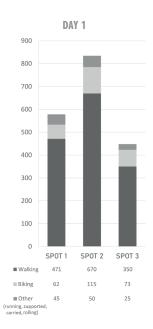
Most shops close between 7-8 p.m., and progressively fewer people transit in Mariahilferstraße, but still, many are sitting and enjoying the sunset in a more serene scene than earlier. The street is well illuminated, allowing the extended stay after shops close. Teenagers and young adults stand out among user groups. A few homeless stays around as well.

THE FLUX OF PEOPLE

Mariahilferstraße is a long street with at least three distinct parts. Closest to the Gürtel, its profile is wide and flat. There is the beginning of the first shared zone and the main entrance for cars and bicycles. The area is hectic with many pedestrians and cyclists and some drivers deviating from obstacles placed there to reduce their velocity. Spot 1 is in this first zone, located in front of a pharmacy. On observed days, the flow of people walking went in both directions towards inside and outside of Mariahilferstraße. In 10 minutes of counting, a flux of 471 people walking, 62 biking, 20 on skates, 22 in strollers, one in a wheelchair and two jogging was considered (see Figure 8). Although this area is shared and the floor is all on the same level, pedestrians still walked primarily on the edges of the street, on the "sidewalk" (See Spot 1 in Figure 9). Cyclists mostly bike in the middle, and cars can only drive in the middle of the road. This area also has a few parking spots along the street, which spatially divide it into two subareas. Besides, the pharmacy is the most often used entrance in the facades of this spot.

Further walking on Mariahilferstraße, walkers pass by the Metro entrances and arrives in the pedestrian zone, where Spot 2 of observation is located. There was an evident change in the walking pattern in this area if compared to the other two. Pedestrians walked in the middle of the road (See Spot 2 in Figure 9), creating a spatial unity in the area. The flux of people increased considerably, making this zone the most used, with as many as 731 pedestrians counted in 10 minutes (see Figure 8). Pedestrians walk in both directions, and a few come and go through the Mariahilferstraße-Esterhazystraße corner. Driving and cycling are not allowed in this part, but cyclists still bike, yet less frequent than in other zones -some were also seen walking while pushing their bikes. The walkers varied greatly, young people in groups of six, families accompanied with strollers and small children, people walking alone, couples, a few wheelchair users, elders, and beggars. In Spot 2, the presence of children was more perceived than in other spots. There, a women's clothing store was the most frequently used entrance in the facade.

Going towards the third zone, where *Spot* β is located, the character of the Mariahilferstraße changed as the street concept shifted to be shared again, and the pedestrians moving pattern went back to walking on the "sidewalks" (See Spot 3 in Figure 9). Also, this spot is after a hill and still has a slight inclination until the Museum Quarter. There were noticeably fewer people walking in this area



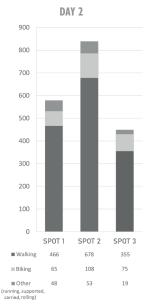


Figure 8: Amount of people moving (by ahuthor).

than in the other two spots, with the number going almost to half of what was counted in Spot 2 (See Figure 8). The majority of pedestrians were walking down towards the "exit" of the street. Car flux, on the contrary, flowed towards the inside until the pedestrian zone. And bikes were seen going in both ways. In this area, a few parking spots also subdivide the space into two when cars were parked. The facade of a burrito restaurant was the most frequently used entrance.

Mariahilferstraße was observed as heavily used by pedestrians that also contribute to creating its perceived spatial rhythm. The movements of the walkers filled the space of the street, giving a hectic feeling to the scene. Also, the flux of pedestrians changed along *Mariahilferstraße*, which created a variety of perceived crowds within the space as one walks. The figures 8 and 9 represents the wave of masses of people moving in comparison between the three spots. Likewise, the patterns of movements changed in space, mainly influenced by the traffic concept of the zones when observed during the busiest period of the day. Lastly, the reasons to walk varied, but shopping and window shopping was the most evident. However, many were also strolling or walking to access public transport, and necessary, optional and social activities happened simultaneously, which was challenging to divide into categories but demonstrated the character of *Mariahilferstraße* as a space for pedestrians.

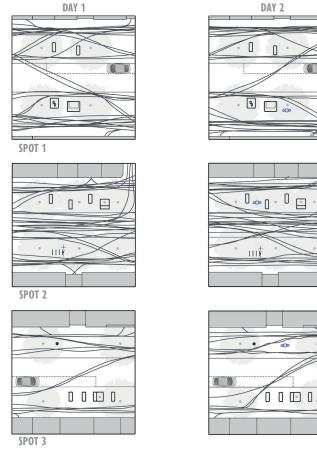


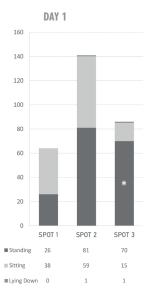
Figure 9: General patterns of people moving (by author).

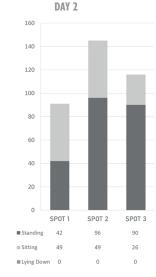
A GOOD STREET TO STAY

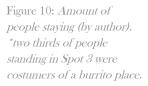
Out of the many walkers, pedestrians also enjoy lingering (standing, sitting or lying down) along *Mariahilferstraße*, and the three distinct parts of the street appear in the analysis of people's staying activities as well. However, spots 1 and 2 share more similarities among them than with spot 3. In Spot 1, the street profile is extensive (about 30m), and there are two sitting areas on each side of the "sidewalks". During the observations, there was a constant background noise of people talking, mixed with sounds from bikes and cars passing. The benches were never empty, and sitting space was kept occupied by a constant group of 6-7 people (See Spot 1 in Figure 15). The bench with back support was the most popular one, and people would sit closer together there, while on the other bench, they tended to keep more distance from each other. Most people sat facing the sidewalk instead of the centre of the road. And some people stayed for 40 minutes or more on the benches. In a situation, a man and a woman were sitting back to back, alone there for 1 hour (Figure 11). The man kept using his phone, sometimes read a paper he brought, and in between smoked a few cigarettes. While the woman was first reading a magazine and, after done, she was watching people passing by.



Figure 11: Sitting possibilities in Spot 1 (by author).









In the people standing patterns, the "edge effect"⁹ proves itself. Most people stood close to the façades, stopped for window-shopping (the pharmacy has the most popular vitrine), and stopped close to the trees facing the sidewalk. Some also stood close to others sittings, indicating that more places could be used there. On the second day of observation, I added two chairs and a table to the scene, demonstrating that people use it if provided¹⁰. First, they occupied the standard benches, but after, people sat on the added furniture. Most teenagers used the new furniture, and a mother also used it to feed her child, taking the table as support. The reasons to stay in Spot 1 vary, but the activities most observed were to rest from walking or shopping, playing or talking on the phone, or waiting for someone else. Some people stopped/ sat to eat, drink or smoke, and some were reading or just watching other people passing by. Others were also sitting in groups for having a conversation. Mainly, groups varied from 1-2 persons, rarely bigger than three (this was a constant in all the spots). The gender distribution of users was even on average, and groups varied in age but mainly were observed to be between 15-55 years old.



Figure 12: Spot 1 with added furniture (by author).

Spot 2 is clearly in the "centre" of Mariahilferstraße, not only from a geographical point of view but also in popularity for staying (see Figure 10). The street profile is narrower (about 23m), and the tree crowns meet, forming a "green roof" that gives a sense of enclosure to the street scene. It was a vibrant area with a loud background noise of people talking, mixed with a few "tinkling" from bike bells. On summer daytime, benches in this spot were never

empty. At least eight people were constantly using them (See Spot 2 in Figure 15). And some people stayed there for long minutes; for example, two teen girls were cross-sitting and facing each other, giving their back to the surroundings, just talking for one hour. Frequently, two different groups of people, rarely three, shared the benches sitting facing opposite directions. The groups usually had a size of up to three persons. In Spot 2, as in Spot 1, it would take less than 2 minutes between someone leaves and another person comes to sit. Besides, in this spot, three bunny statues were popular among children. They often came to sit and play, making the parents stop there for a few minutes. However, dogs also enjoyed "marking their territory" on the bunnies.

Moreover, people tend to stop close to facades, trees, and benches (See Figure 15). However, a difference in the standing pattern here is that sometimes people also stopped in the middle of the street, while car traffic in the shared areas prevented this in the other spots. When the two chairs and a table were added, people used them as part of the scene. It took about 5 minutes after the first person sat there, a group of three teen boys, two sat on a bench, and the third one sat on the chair facing them. Still, as observed in spot 1, people first sat on other fixed benches before sitting on the added chairs. The activities observed were similar to the ones in spot 1. Among activities, people were resting, watching others, having a conversation, waiting for someone, or reading the newspaper. Especially in this spot, there were more women with children or families stopping so kids could play and they could rest. In one case, a family came with two kids, a baby and an 8-year-old boy. The mother sat on the bench to breastfeed while the dad try to help and the old brother waits (Figure 13).



Figure 13: Spot 2, breastfeeding (by author).

⁹ The edge effect is a concept used by Gehl based on the work of sociologist Derk de Jonge and observations in public spaces. It argues that people tend to stay first along the borders of a given space, where they can stop and watch others, before the middle start to be occupied (Gehl, 2011, p. 149).

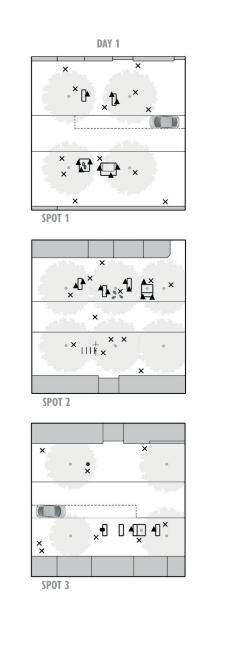
¹⁰ As Whyte would say, "people tend to sit most where there are places to sit" (Whyte, 1980, p. 28).

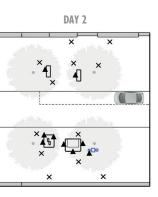
Spot 3 was the least frequented out of the three zones in Mariahilferstraße. The street profile is narrower there (about 22m), but spatially, it feels more open and relatively desert if compared to the other zones (as seen before, the number of people moving here was half of in Spot 2). This area was also much quieter. The sounds heard were similar to other spots (people talking, cars, wind on trees, bikes) but generally more silent. There are benches only on one side of the street, and they were used less often, staying empty for 15 minutes after one person left and another arrived. The average was of three people sitting there, intercalating with moments of emptiness or more people (See Spot 3 in Figure 15). Still, as in the other spots, the groups' size was usually up to three persons. When there was more than one group of people, they would sit on different benches, rarely sharing. The area's biggest attraction is a burrito restaurant. Customers habitually queue outside on the sidewalk and are the most significant number of people stopping in the area (see Figure 10). In comparison to Spot 1, this area has more people standing, but less than half sit or stay for longer. A water fountain present in this spot is a design element that influenced people to stop, drink, or in the case of children, to play with it. Throughout *Mariahilferstraße*, there are beggars and homeless, but in Spot 3, they are more noticeable. One went to the trash to look for something, laid down for about 5 minutes on one of the benches and then he sat to keep begging the passers-by for money. Just when he left, people came to sit on any of the benches (see Figure 14).

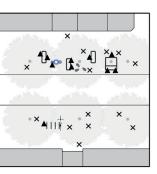


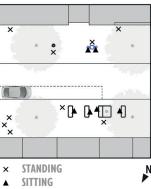
Figure 14: Spot 3, a beggar sitting alone (by author).

I added the chairs and table on the side without furniture in this area, and people used it unrelated to the pre-existing benches on the other side. But they were also mostly empty, being used once by two girls that stayed for about 15 minutes and afterwards by people who stopped shortly. Lastly, the gender distribution differs the most if compared to the other spots. The distribution was 45% female and 55% male, counting among the people staying, while it remained even in the other observation points.









- LYING DOWN
- **ADDED FURNITURE** 000

THE INCIDENT

One of the most bizarre experiences happened on Spot 3 during the first day of systematic observation, after many visits to the street. I parked my bike with the camera in front of a store that was closed already. I was sitting on the steps of the store, counting people. A man that seemed to be homeless was sitting on the floor about 15 meters distance from me. He was there the whole time since I arrived. After almost one hour, he came walking in my direction, speaking a language I didn't understand. As he was getting closer to me, I thought he was asking for money as in Mariahilferstraße, a few people were begging. I said I didn't speak German, but he ignored me and kept walking in my direction to the point that he was almost on top of me while I was still sitting on the step. At this moment, I stood up, and suddenly he pulled my hair very strongly. I screamed, and he let it go, leaving as if nothing had happened. I was utterly shocked and confused. Some people were passing by but ignored the case. Maybe afraid to take part in it? However, three girls were walking down the street, and one seemed to have watched everything that happened, but she was also scared. By a distance from me, she asked if I was okay while telling her friends what had just happened with hand gestures. I said, "I'm fine, but he came walking and talking and pulled my hair out of nowhere", and she said, "Yes, I saw! I'm so sorry it happened to you. Are you sure you are okay?" and I said "yes". They left while I was still there for few minutes, trying to process what had just happened. The man walked back and sat in the same place as before; he held his arms around his legs and talked alone. I do not know if he was drunk or had any mental issues or if maybe he felt intimidated by my presence or saw me as a different person. A few minutes later, a police car came by I did not know what to do. I wondered if I should talk to the police officers, but I feared its consequences for him. Then, I decided to leave. By going to *Mariahilferstraße* many times, I started to recognize some people, but I have not seen him again.

3.3 DISCUSSION & CONCLUSION

The *staying and observing* methodology made it possible to see that *Mariahilferstraße* works to assemble people and functions in time and space. It is a vibrant street that invites people to stay in between their transitory activities. The observations showed the polyrhythmic character of this public space which is strongly marked by the linear rhythms of the shops open and closing hours. This imposed rhythm is integrated with the cyclical rhythm of the day, and combined they display the progression of daytime over this space. Also, the seasonal rhythm of summer in Vienna was marked by people using the street the most during the day's hottest hours, enjoying life outside in the sun. The crowds of people moving on the street were also strong and dynamic spatial rhythm giving to *Mariahilferstraße* much of its atmosphere. The observed changes in movement patterns demonstrated the urban traffic influence over people's behaviour and use of spaces. However, the crowds' number, noises, and standing differences over the three spots were combined with the static spatial divisions to produce various spatial rhythms along the street. People were affected by the traffic concept but also affected the spatial rhythms by their movements (Certeau, 1984). This reveals the understanding of space as fluid even when on the same street.

The observed staying activities also suggest many urban rhythms taking place at the same time. In a way, what Gehl subdivides as necessary, optional and social activities (Gehl, 2011) can be associated with the understanding of rhythms. Much of the necessary activities in public spaces are related to linear rhythms of socially imposed structures. For example, in Mariahilferstraße, movements of people going to school or work, arriving in the shops, or queueing are associated with Viennese work schedules. While many optional activities in the street were related to cyclical rhythms, as observed people sitting or standing for eating, drinking, or feeding a child have these activities connected to body rhythms of hunger, thirst or desire (Lefebvre, 2004). The social activities happened all in between when people were exposed or interacted with each other in space (Gehl, 2011; Whyte, 1980). However, as these activities cannot be strictly classified because people do many things simultaneously, the rhythms were also simultaneously happening in the street. And a necessity to sit and rest also demonstrates a bodily rhythm of being tired and perhaps the effect of linear rhythms stressing the body. Furthermore, the patterns of staying activities in the three spots of Mariahilferstraße were influenced by the physical structure and disposition of sitting areas, in the sense that people stopped close to other static objects in space, as Whyte and Gehl also suggested in their observations (Gehl, 2011; Whyte, 1980). But the patterns of staying also influenced the spatial rhythm as a relatively constant group of users were sitting on the spots.

In the polyrhythmic relation happening in *Mariahilferstraße*, most shifts of observation demonstrated a harmonic association of everyday life and spatial rhythms (Eurhythmia) (Lefebvre, 2004). However, the *incident* could be seen as a break in this normal state. Somehow, in a hardly explainable way, my presence in Spot 3 influenced an *arhythmic* relation exhibited in the violent act towards me. It is hard to understand how personal it was because I do not know what bothered the man in the first place. Still, it showed how urban spaces are constantly formed by a complex relation of rhythms that can be harmonic or not (Lefebvre, 2004), and

even a "good street to stay" has ruptures. In addition, this episode made evident that the researcher becomes part of the studied object as soon as one is in space. In Mariahilferstraße, I was another person standing or sitting there, and while observing public life, I was also part of the space, even if trying to be discreet. Contrary to what Gehl suggests as a detached scientific reflection (Gehl & Svarre, 2013), the observer of public life in urban space is always immersed and engaged in the surrounding environment, and before any analytical reflection about it, one is already "being-in-the-world" (Heidegger, 1996).

Moreover, based on Gehl's and Whyte's work on public life studies, the methodology of *staying and observing* had limitations for accounting for the experience of people moving in the street. Their behaviourist approach suggested a focus on the stimulus-response and restricted the research to visible actions of what people did in the street (Seamon, 1980). In their writings, Gehl and Whyte discuss the experience of people in public spaces, experiential distance, and the importance of senses being stimulated while living publicly (Gehl, 2011; Whyte, 1980). However, the quantification of behaviours in data collection neglected public life's experiential and intangible qualitative information. Not everything that counts can be counted.

While staying and observing in Mariahilferstraße, some urban rhythms that give spatial and temporal distinctiveness in the everyday context of the street could be grasped (Wunderlich, 2013). Gehl and Whyte contributed to this work and to bring a people-centred approach to urban planning, making their work still relevant nowadays (Cerrone et al., 2021). However, their approach to studying public life leaves behind intangible data connected to the bodily experience of walking. Therefore, it still raises the wonder of how to account for people in public spaces. Specifically, how to account for the ones moving in the street?

CHAPTER 4 – WALKING & FOLLOWING FROM THE GARDEN TO THE **STREETS**

The first study conducted in Vienna concluded with the need for new ways to look at city life in public spaces. Thus, in the present chapter, I will discuss the second attempt to study public life and urban rhythms through the methodology that I would like to call *walking and following*. It comprises aspects deriving from Sophie Calle's artwork *Suite Vénitienne* (1988) with the theoretical support of Michel de Certeau present in the third part - Spatial Practices - of his book The Practice of Everyday Life (Certeau, 1984). The methodology is followed by the case study in Kongens Have and Copenhagen city centre, the findings and then a brief conclusion of the chapter.

4.1 METHODOLOGY

Michel de Certeau (1925-1986) is a well-known French philosopher and writer. In *The Practice* of Everyday Life, he articulates about the everyday by indicating resistive habits done by the ordinary person that those in a position of power cannot grasp. In the section about Spatial *Practices*, he argues that walking is an everyday activity and is a blind movement to planners who observe the city from above and walkers who are unaware of their activities (p.93). In order to better understanding what walking in space might be, he makes analogies between walking and speaking, space and narrative. Although de Certeau raises awareness of the limits of planners' form of knowledge and acknowledges walking as an important everyday practice, he also does not engage with those movements on the sidewalk's surface. On the other hand, Sophie Calle, a French contemporary artist, does.

Sophie Calle (b. 1953), in her book, *Suite Vénitienne*, engaged with walking by following strangers in Paris at random until one day she followed a man whom she met again later that evening. She found out that he (Henri B.) was going to Venice and decided to secretly follow him. In the Italian city, Calle first looked for him by calling phone numbers and asking others to help. Once she found Henri B., she followed him, shadowing his movements in the city, photographing his daily routes, and meticulously recording the chase that was later presented in her book. In her oeuvre¹¹, the artist uses text and image (especially photography) to portray the habits of ordinary people and human relations in the city. In her creation process, Calle performs a methodical work where she chooses a subject or situation to investigate, establishes self-imposing rules to structure the probe, and presents the findings in a well-documented manner (Grossman, 2018). Through the examination of people's lives and documentation of lived experience, her artistic practice unveils reality. In doing so, it has also been described as ethnographic, sociological and anthropological (Ali, 2013; Grossman, 2018; Küchler, 2000 as cited in Seiten, 2018).

¹¹ For the reader's reference, see: The Shadow, 1981: The Hotel, 1981: Gotham Handbook, 1994 (in collaboration with Paul Auster); Room with a View, 2003; Take Care of Yourself, 2007, and others.

In this thesis, it is understood that the artwork of Calle in *Suite Vénitienne* can, simultaneously, assist and be assisted by de Certeau's work in *The Practice of Everyday Life* by providing an exploration of what he theorises. This association is based on the understanding that Calle's oeuvre participates in developing the ideas of many authors who addressed the *auotidien* (Sheringham, 2006). Therefore, de Certeau offers *walking* as a public life activity, and Calle offers *following* as a way to understand this practice and reveal everyday city life. More precisely, two main features in *Suite Vénitienne* and *Spatial Practices* inform this research. Firstly, the point of view that Calle looks at public life through the exploration of movement (namely walking and following). Secondly, the way she registers and reveals the everyday in her work (by inquiry, text, photography, and maps). The approach of *walking and following* is central to investigate public life as the lived experience of space, time, and human relations. Calle cultivates a detective spirit of investigation to explore human life as an artistic project. Yet, in this thesis, her methods are used to inspire the exploration of urban life for the benefit of urban studies. Here lies the novelty and relevance of this methodological part of the present research.

POINT OF VIEW: WALKING AND FOLLOWING

In *Suite Vénitienne*, Calle narrates Henri B's pursuit in a diary form by methodically taking notes on the day, time, and locations they have been to in Venice. In the narrative, she is walking on the street and following the man she investigates. Calle starts by randomly looking for him, desiring the experience, immersed in the plot "I see myself at the labyrinth's gate, ready to get lost in the city and in this story." (p. 6). The perspective that Calle adopts as she is *following* is one of movement and experience. This is the same scale as life is practised by ordinary people on the city's streets, by the walker on the ground (Certeau, 1984, p. 93). Calle is not directly studying public life and does not present a manual on the topic. However, she is a pedestrian in Venice, a woman walking in the city, a user of public spaces. Also, Calle is searching for a person and then is attaching herself to another object while narrating it. As she writes, she localises the experience, "I arrive at Piazza San Marco and sit against a column. I watch" (p. 6). Through *walking* and *following*, Calle explores city life by shadowing Henri B's activities, as in this passage when she mimics him "He turns his back to me and photographs a group of children playing. Quickly, I do the same" (p. 44).

In this narrative, Calle is self-reflexive and acknowledges herself immersed in the social context she observes. For example, towards the end of the story, she wonders about the chase of Henri B. "Am I relieved, disappointed?" (p. 51), inquiring herself about the experience. This approach is a quality of the artist's work, where usually she "conveys sensory impressions" and embodied understanding through her ongoing associations and entanglements with people and things around her" (Grossman, 2018, p. 28). In other words, Calle's point of view could be roughly classified as participant observation. By adopting *following* as her perspective, Calle observes the object with all senses that come with it by walking and moving through space, considering the subjectivity of the task. She takes the point of view of walking on the street, the one forgotten by the planning perspective that sees the city from a large, geometric, and abstract scale (Certeau, 1984, p. 93). Therefore, to adopt the view from the street, not only as a static observer but also by way of the mobile experience, can be a way to grasp the real scale of the city, lived by an ordinary pedestrian, that is, public life in public space.

REGISTERING AND REVEALING EVERYDAY

To investigate ordinary human interactions, Calle engages in methods of inquiry and systematic work. And to register and reveal the experience of *walking and following* Henri B., she uses a "spatialised" diary composed of text, photography, and maps. The text is in the form of narrative, where Calle uses reflective writing to make sense of the experience. Her narrative also generates some space imagination where she localises the story throughout the book in association with the passing time proper of a diary. In order to represent the movement of walking and passing through space, Calle uses a rhetorical figure - asyndeton - in her text. This was also previously articulated by de Certeau when making an analogy of walking and speaking. In his words, asyndeton is "the suppression of linking words such as conjunctions and adverbs", and this relates to walking and movement because "in the same way, in walking it selects and fragments the space traversed; it skips over links and whole parts that it omits" (Certeau, 1984, p. 101). By following Henri B, Calle narrates the route by skipping adverbs and emitting conjunctions (see p. 26). Venice is perceived as a labyrinth where "The city is built like a trap, a maze, a labyrinth that inevitably, however fortuitously, brings back people to the same point..." (Calle & Baudrillard, 1988, p. 84). Her text reflects the city by pedestrian eyes, the one that is not viewed in its totality form but in perspective and pieces that seek *legibility*¹².

Moreover, Calle's images perform essentially with her text to collaborate and reinforce meaning between them (Ali, 2013). Together with the text used as means of generating a space imagination, the photographs emphasise spatiality. In this way, they are used in a double-layered relationship that produces a larger narrative about spaces, everyday routines, and, therefore, city life. Her photography is reflecting the gaze of looking for Henri B., watching him and watching the city through the chase. In this way, the images do not attempt to be illustrative of public life but rather reveal what is hard to express: the experience and interactions of walking in contact with urban life. Also, another feature that Calle uses in the narrative is to take and present photographs in sequence (see p. 28-30, 35). The idea of sequentially, of succession, the following of one thing after the other, emphasises movement, where time is passing - as she notes in the diary - but also spaces are passing in the images. This can suggest a representation of moving through the city. Lastly, in addition to photographs, Calle uses maps to summarise the story. Together with text and photography, the maps give an overlook of the chase and complete the narrative of *walking and following*. In *Suite Vénitienne*

^{12 &}quot;Legibility" is a concept by Kevin Lynch. In The Image of The City (1960) he develops on the mental maps that people create to orient themselves in cities.

WALKING AND FOLLOWING IN COPENHAGEN: METHODS AND APPROACH

Having discussed the main features of Calle's and de Certeau's work relevant to this chapter, I will now explain how they were instrumental in the ways the research is approached and analysed. The second exploration of public life and urban rhythms happened in Copenhagen city centre, starting from *Kongens Have* to the city's streets. Thus, this chapter's research question: *How may I study public life in public spaces by following pedestrians? Public life* is understood as people's interactions with other people and with spaces where these people are pedestrians in Copenhagen. And *public spaces* are the *Kongens Have* and nearby streets where their walks were observed. In total, I have followed 29 pedestrians in 15 walks. Still, for the purpose of this work, I selected seven trajectories from 10 pedestrians (five female and five male) that had a similar duration (about 40 minutes). Several methods were designed and used to answer the research question. The following diagram (Figure 16) represents them together with the schedule of data collection in Copenhagen.

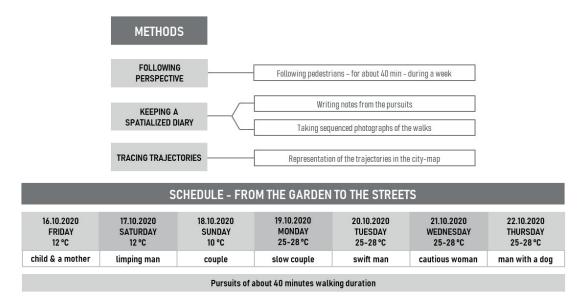


Figure 16: Overview of methods and schedule of observations conducted in Copenhagen (by author).

FOLLOWING PERSPECTIVE

This empirical work began with the decision of trying new ways to understand city life. After reading Calle's novel, I admired her courage to experiment and wondered how following people could add to the understanding of public life and urban rhythms. I left my house in Copenhagen and followed the first person I saw standing in front of the entrance. She led me to *Kongens Have*. There I sat, looked around, and decided on rules (or methods) to follow people

systematically. And the rules were: to follow people on foot for one week. To go anywhere they lead me until they take another kind of transportation or go inside a private space. And, lastly, to start every day from the same point in the city, which was *Kongens Have* (The King's Garden), more precisely at the fountain *Drengen og svanen* (The boy on the Swan) (Figure 17). The fountain is located in the centre of the garden, which opens the possibility of walkers using any exit. In seven days, I followed a total of 29 pedestrians in 15 walks with diverse trajectories and duration as a way to observe a "disseminated person", the ordinary pedestrian walking in the city (Certeau, 1984). Then, I selected the walks that had a similar duration (approximately 40 minutes) in other to keep time as a constant in the comparative analysis of their walks.



Figure 17: Fountain "The Boy on the Swan" in Kongens Have (by author).

Kongens Have is a royal garden inside Copenhagen city centre. It works as a park, cultural and historical site used by locals, citizens, visitors, and tourists, and it was also located only at a 3-minute walking distance from my residence. Because of its location in the city and its design, pedestrians use the garden daily as a shortcut. In fact, I was one of those pedestrians crossing *Kongens Have* to go to different parts of the city and go back home. Among many others, this everyday use quality of the garden was essential for this work's investigation of public life and urban rhythms. And the point that *Kongens Have* was also part of my daily life was a twin criterion alongside *Mariahilferstraße*.

SPATIALISED DIARY

Based on Calle's approach to narrating her pursuit of Henri B. (Calle, 1988), I combined writing and photography to document my observations into a *spatialised diary*. The notes were taken in three consecutive situations, first in *Kongens Have*, about the space; then while following someone, I took note of their movements and trajectories, and lastly, right after the pursuit ended. Later in the day, I typed the notes, adding any detail I could remember. There was one case that the person walked so fast that I could not write while following, so I audio-recorded my notes on my phone and wrote them as soon as the pursuit ended. Always considering the date, time, and movement, as well as my experience about the pursuit. Together with the notes, black and white photographs were taken in sequence from the walkers, their movements, what they photographed while on the walk, and from what they stopped for. To do so, I used my mobile phone in a lanyard, always at hand, and much more discreet than carrying a camera while following strangers.

TRACING TRAJECTORIES

Using the notes, memory, and photographs, I traced the trajectories done by the pedestrians on a city map to represent their walks in scale, orientation, and projection in relation to the city spaces. The maps support the visual understanding of the distances walked and are an objective and abstract representation to complement the experiential data from the *spatialised diary*. Additionally, they allow the comparison of the distances walked by different pedestrians in reference to a similar duration of the walks.

4.2 COPENHAGEN - KONGENS HAVE

Copenhagen, alongside Vienna, is repeatedly ranked among the most liveable cities in the world. The city invests in projects and infrastructure that prioritise pedestrians, cyclists, and quality of life for citizens. Also, it is a frequent example of a place where comprehensive public life studies are systematically conducted and used for the city's development – to which Jan Gehl and his methods play a significant role (WHO & Gehl Institute, 2017). Copenhagen also uses strategic planning to promote walking and urban life. Currently, walking represents about 17% of all passengers' journeys, but the commune is investing in increasing this number (Københavns Kommune, 2017). As the document used by the city council stated, their objective is to have "more urban life for all, more people to walk more, and more people to stay for longer in urban spaces" (City of Copenhagen & Gehl Architects, 2009, p. 7).

The selected case to study public life in this city is the *Kongens Have* (King's Garden) and nearby streets. *Kongens Have* is a living cultural-historical, open space of twelve hectares located in the city centre, by the Rosenborg Castle (Figure 18). On account of its history, it has the importance of a city park, used by Copenhageners and visitors. Still, it is also a local park for the surrounding residents and plays a very urban role in the city's everyday life because of its location and design. Pedestrians daily use *Kongens Have* as a shortcut to access different areas of the city. This quality presented the chance to observe an urban, cultural, and historical open space used by people to linger or walk through towards the inner city or outside.



Figure 18: Location map of Kongens Have (by author).

Kongens Have was established in the early 17th century as Christian IV's leisure and kitchen garden for his Rosenberg castle. In the 18th century, it was opened to the public and became one of the very first parks in the city (Møller, 2010). In the 19th century, Kongens Have was redesigned to have English Romantic Garden features. By then, the garden was used as a city park and for markets, exhibitions, and amusements, but this last use changed after the establishment of Tivoli. In the 20th century, the diagonal paths that facilitate the passage across the garden were added, and Ingwersen new plan reintroduced the Renaissance aesthetic to Kongens Have. Over the centuries, the garden adapted to different times and uses, however keeping its character. Nowadays, it is possible to see elements from various epochs (SES, 2007). The spatial division that was given in its construction, the trees from the Romantic period, the diagonal path from a functional concept in the 1930s, and, later, the reinterpretation of the Renaissance style with adaptations such as the rose garden, playground and sports fields.



Regarding the socio-economic profile of residents living by Kongens Have, in the city centre district, the population number is 56.420 dwellers, with a density of 6.283 inhabitants per km^2 , which is slightly less than the city density average (6.896/km²). The neighbourhood has a gender distribution of 51% women and 49% men, like the city number. The nationalities percentage of residents is 83% Danish, 14% from other western countries¹³, and 3% from nonwestern countries. And this is similar to the average proportion between Danish and non-Danish of the city. However, the centre district has a higher percentage of western countries nationalities than the city average of 10% and half of the rate of non-western residents compared to the city average of 6%. The neighbourhood has a majority of residents in the "working-age group" with 73% of people 15-64 years, followed by 14% with 65+ years and 13% with age between 0-14 years. Lastly, the annual average income of residents is about 41.500 euros, which is the highest of the city and is 30% higher than the city average (of 31.900 euros) (Københavns Kommunes Statistikbank, 2020). In summary, residents living around Kongens Have have an average age and gender demographic but are wealthier than residents of other areas of Copenhagen

13 The categories "western" and "non-western countries" are used by Statistics Denmark. Western countries are all 28 EU countries and Andorra, Iceland, Liechtenstein, Monaco, Norway, San Marino, Switzerland, Vatican State, Canada, USA, Australia and New Zealand (Danmarks Statistik, 2021; Elmeskov, 2019).

Figure 19: Kongens Have (by author).

SEVEN PURSUITS











Figure 20: A child & mother's walk (by author).

Friday. October 16, 2020 – 12°C.

4:00 p.m. *I am terrified.* I am outside. I have decided to follow people as an experiment in the city.

I arrive in *Kongens Have* and sit on a bench around the *Fountain*, where it is possible to watch all the entrances. Kids are playing on the grass while a tired-looking man slowly collects bottles from each trash can in the park. It is a fine day, but it feels cold if you are not moving.

5:00 p.m. There is a woman with a kid, the little girl is about four years old, and the woman is in her 30s. *Can I follow them? I wonder*. The kid stops often. She points to the floor and the façades and says something to the woman that patiently agrees. As the floor changes from concrete slabs to cobblestones, the little girl also changes her walk. She seems to dance on the cobblestones. Her arms up to the shoulders and the feet on the toes.

5:15 p.m. It looks like they do not have a place to go, just the path to see. The little girl plays with everything she finds on the way. A small something on the floor makes her stop and play in front of *BaseCamp*. And her image mirrored in the low window of the *GEUS* façade does as well. The little girl is leading the walk. The woman is calmly following her. She eventually looks around, having attention to keep the little girl safe. *I think she saw me, but it does not seem to bother her.*

5:40 p.m. Finally, they turn in the *Stokhusgade* and walk further until they go inside a building. The street is quiet. I see another woman walking home with a stroller and a dog. And a man leaving a house accompanied by a dog.









Saturday. October 17, 2020 – 12°C.

2:30 p.m. *Kongens Have.* I wait, sitting on a bench at the Fountain with a statue of a boy mounted in swan. It is a blue-sky Saturday, and all the seats under the sun are taken. As soon as someone leaves a spot, another one comes to take it. A little boy is playing over the Fountain, holding a wooden stick with which he touches the water. He walks on the border, circulating the water and his dad follows him around.

3:00 p.m. A teen girl comes running. She is determined, looking at a bench under the sun that just got free. Her two girlfriends watch her by distance. Just three seconds before she completes her run, a couple, serenely walking, comes and sit at her desired spot. The girl abruptly stops. With a frustrated face, she turns to her friends, that laugh at her. Almost at the same time, a girl in her 20s comes along with a notebook. She asks to share the bench with an older man that was sitting by himself. He promptly agrees, and they both sit on the very extreme of the seat, leaving the most space possible between each other. *It was the first time I saw strangers sharing a bench at the Fountain.* 3:30 p.m. A man, about 55 years old, leaves the *Garden* at *Gothersgade* exit, close to the *Cinemateket*. He crosses the street before me, but I observe while he is going in the direction of *Landemærket*. He limps while walking. At the *Rundetårn*, he sits on one of the stone block benches, takes his gloves out of his backpack, puts them on before he stands, and keeps walking again. He looks around him as if he senses I am watching. *I should try to be a bit further from him then*. He goes to *Købmagergade, Kultorvet*, and *Frederiksborggade*, all the way to *Nørreport Station*.

4:00 p.m. He goes to 7/11 for a few minutes before going down the stairs to the station platform. But, to my surprise, he comes back to the ground floor a few minutes after going down. *I am scared he has seen me.*

4:05 p.m. He sits on a bench and starts smoking a cigarette. I sit on another bench, where there is a trash can close to, so I can hide while watching him. At the same time, an older man is on a bike, talking to a young guy. He notices me sitting close and speaks to me. He is from Syria, but he lives in Denmark for several years. He is sorry I cannot speak Danish. He and the young guy keep talking in some other language. Then the older man takes notes on what looks like an old paper notebook for phone numbers. They hug, and he leaves on his bike. The young guy wishes me a good week and leaves as well.

4:10 p.m. The man I was following finishes his cigarette, goes down to the platform and takes the train.





Figure 21: A limping man's walk (by author).



Sunday. October 18, 2020 – 10°C.

3:00 p.m. There is not a single cloud in the sky, and people seem to have come to enjoy the sun. *Kongens Have* is especially beautiful today. The trees are in autumn colours, the grass and the *Fountain* are full of leaves. Spots under the sun are taken by people reading, napping, eating, sunbathing. Some other are sitting on the grass.

I sit on one of the benches and see the same guy collecting bottles as the other day. Today he notices me. I say '*Hi*', he smiles and says, '*How you doin*'?' while he keeps walking towards the next trash can, one at the time.

4:15 p.m. A couple in their 50s are walking, holding hands. The woman has a yellow backpack, and they walk harmonically together. Exit in the South corner, they go down walking *Gothersgade*. In *Kongens Nytorv*, they first make it to the right but then decide to go left into the *Store Kongensgade*. They walk, looking at the windows, and the man takes a picture of the *Marble Church. Quickly, I do the same.*

I wonder if they are tourists. But they seem to know where they are going, and they are not carrying any map. I get curious.

4:40 p.m. They stop for longer in an antique store window, close to a carpet store. Then they continue the route as following: *Hindegade*, *Borgergade*, *Fredericiagade*. *I see the yellow houses*. As they walk, the streets are getting quieter and with fewer people. *I worry that they will now notice me*. We are the only ones walking in this street. I should try to keep further distance from them. They walk until the end of the road where some cars are parked. They get inside of one and leave.

4:55 p.m. *I feel lost.* I walk alone along the street until I find the wall of *Kongens Have.* In the direction to the *garden*, it goes from a quiet place to a busy street with cars and bikes passing. *Funny enough, I am close to the start point.*







Figure 22: A couple's walk (by author).









Monday. October 19, 2020 - 8°C.

6 p.m. Davlight is almost gone. I find out that this time of the year Kongens Have closes at 7 p.m. A very few people pass running or walking dogs. The playground is empty now. At the Fountain, three couples are sitting on three benches. I join them.

One of the couples leaves. And I just realise that there is no street lighting in *Kongens* Have.

6:30 p.m. The second couple leaves the *Fountain*. They are in their 60s, but I cannot see much. It is dark. By distance, one can barely see people's silhouettes. They stop at the Rosenborg Castle and observe the lions. They stroll, the man carries the woman's purse. He often stops to look at the surroundings, the castle, the parked busses, the gate of the garden. I have to be careful. If I get too far, I cannot see them. If I get too close, they may stop and see me without giving me a chance to hide.

6:40 p.m. They exit the park at Gothersgade, turns right and keeps strolling slowly. There are not so many people walking by this street. Most of the passers are on bikes or cars. At Norreport Station they turn right, on Øster Voldgade. We are the only ones walking in this area at this moment.

A man passes by much faster than us. And we pass some teenagers sitting on the sidewalk with their skates.

The couple stops to look inside the windows of the *Livgardens Museum* building. They look at the details of the facade. They amble so slowly that eventually, I have to pass them.

7:10 p.m. I look back; they have disappeared! I look across the street, down and up. They could not have gone far. They were so slow to vanish like that.

It seems like the couple went inside of a building around the garden. I finish walking alone and face Kongens Have's closed gate.

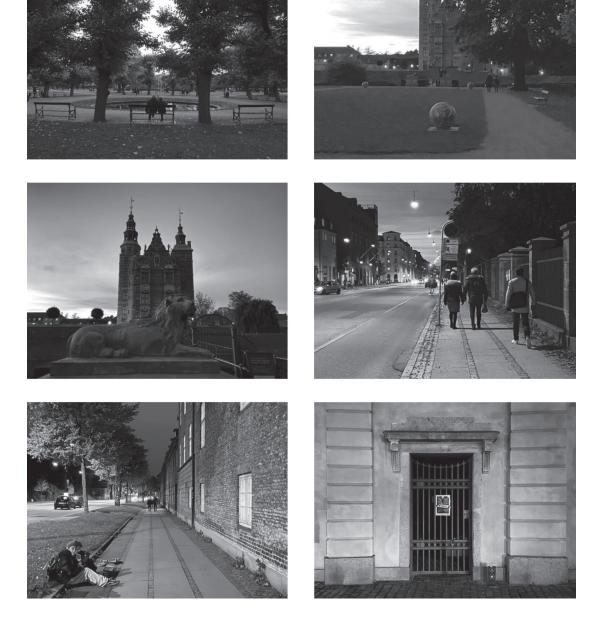


Figure 23: A slow couple's walk (by author).



Tuesday. October 20, 2020 - 10°C.

10:40 a.m. A few people walk in *Kongens Have*. Some with strollers. A two-year-old plays with a woman in the dragon at the playground. There are two trucks trimming bushes and cleaning the *garden*. No one is at the *Fountain*. It is a grey day.

11:00 a.m. A school group arrives, about 20 teens, divided into two groups subdivided into pairs. They walk towards the *Rosenborg Slot*. An old lady who needs support to walk, and a young man accompanying her, join me in sitting on the benches around the *Fountain*. He is wearing a face shield. He helps her to sit while they keep up a conversation. Soon, a couple joins the circle, taking some photographs of the Fountain, and an older man comes accompanied by his dog. It is windy.

11:20 a.m. A man, about 30 years old, passes through the *Fountain* and exits the park at *Georg Brandes Plads*. He goes north at *Sølvgade*, crosses *Øster Søgade* and walks straight to *Søerne* (the lakes). He is tall, and he walks very fast. Watching him looks like he has an easy walk, but I must sometimes run to keep a reasonable distance from him. I follow at speed.

He wears headphones, looks pretty concentrated on his thoughts. He does not guess the way; neither looks to the sides. He walks surely. He knows where he is going. *Where is he going?*

11:35 a.m. He surrounds *The Lakes* – parallel to *Fredensbro*, left at the *Sortedam Dossering*, left again – surprise! - he crosses the *Queen Louise Bridge*, walks towards the *Frederiksborggade* until he must stop in a red traffic light. Still, concentrated, hands in the pockets, he looks at the way in front of him. He does not look back a single time. *He does not notice me*.

I follow at a short distance. The fast man takes the following route: crosses *Norreport Station* to the city centre, *Kultorvet, Købmagergade, Amagertorv, Højbro Plads*, turns right to *Gammel Strand* – where he quickly goes inside of a building, abruptly, ending this chase.

Noon. The street is in a channel. Some constructions are happening and, contrary to the streets we were walking just before, *Gammel Strand* does not have many pedestrians, at least not at this time. Some restaurants are on the ground floor of the buildings, but they are all closed now. *I leave.*





Wednesday. October 21, 2020 – 12°C

12:50 p.m. It is heavily raining. There are two groups of teenagers in *Kongens Have*, one doing some sport activity on the grass and another walking towards the North exit at *Georg Brandes Plads*. Despite the rainy weather, women are walking in the garden with baby strollers. I can see at least five of them. One is under the trees where she pushes and pulls the stroller, trying to calm down her crying baby. I watch.

1:10 p.m. A woman in her 30s passes by the *Fountain*. She walks towards the exit at *Gothersgade*. As she walks, music starts to be heard, becoming louder and louder, until it is possible to see the Royal Guard a few seconds later. They walk perfectly synchronised to the sounds of the marching band. She follows the guard, with an excited look on her face, until they walk in at the side entrance of the *Livgardens Kaserne*. She stops, curious, takes pictures and stays for longer, looking from the grade to the inside of the *Kaserne lawn*. Other people also watch the Royal Band. Some turn their heads or smile while they keep walking.

1:25 p.m. She opens her umbrella and walks down the *Rosenborggade*. She stops in front of a restaurant, looks at the menu and the fall decoration and continues to walk. After not so many steps, she stops, goes back, and stays in front of the same restaurant once again. Now, she closes the umbrella, takes her phone and takes pictures of the place and menu. Then, she opens the umbrella and continues to walk.

1:30 p.m. In *Frederiksborggade*, she stops at the corner, looks right and left, thinking about where to go. She turns left. She looks at the surroundings, the street, shop windows, buildings, people. She does not take long to see me. *I try to hide in my umbrella, but she gets suspicious.*

1:35 p.m. I lose sight of her close to the *Rundetårn*. I stay there for a bit until I then see her leaving a store. She passes me and goes walking to *Pustervig, Suhmsgade, Landemærket*. I follow from a safe distance. She goes to *Krystalgade*, where a van is parked; as she walks past it, I lose sight of her.

1:45 p.m. By the time I pass by the van, I see the *Vor Frue Kirke church*, but the cautious woman is gone.







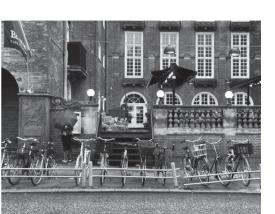






Figure 25: A cautious woman's walk (by author).



Thursday. October 22, 2020 – 13°C

5:00 p.m. Sunset time. I arrive in Kongens Have. I see some people biking - although the Garden rules prohibit it. A couple sits on the bench inside of the playground to watch their kids. The man holds a glass of white wine, somehow as if he is watching the kids playing on their home carpet.

5:20 p.m. At the Fountain, many people come along. I see the same man collecting bottles. He keeps with his ritual of going from one trash can to the next, collecting them with a big bag and gloves.

5:40 p.m. A man, in his 60s, is walking accompanied by a small dog.

I wonder who is leading the way, the man or the dog?

They are fighting for leadership. The man tries to walk towards the park exit, but the dog wants to stop often. He pulls the leash, goes to the grass and eventually, the man gives up and stop for a bit more before fighting for the lead again. It happens about three times until they finally leave the park at the South corner.

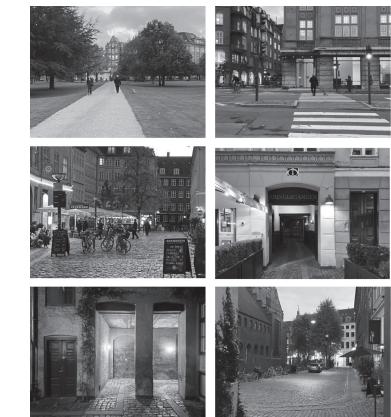
On the sidewalk, the dog meets another dog, and they play together. The owners shortly smile at each other and just wait. Then, the battle continues. The man tries to keep walking while the dog tries to stop every five seconds. Eventually, the man gives up and stops for a moment before resuming.

6:05 p.m. They walk to Møntergade, Klareboderne, Købmagergade, Løvstræde where it starts to have fewer people on the street, and I have to stay further from them.

The dog makes them to stop often. I try to keep following (the man or the dog?).

They go to Gråbrødretorv, a square with yellow lights, restaurants, and colourful buildings; they just go inside one of them. By getting closer, I see a kind of a secrete passage, Kringlegangen, a small street that is inside a courtyard. I get scared. Did he see me following him? Is he leading me to a dead-end place? I choose to follow. I wait for a bit before, hoping for him to finish the way first.

6:20 p.m. I go and cross the courtyard and in Valkendorfsgade I see them turning left at Strøget - a busy street - They continue in Badstuestræde, and finally, Brolæggerstræde where they arrive home (?)











4.3 DISCUSSION & CONCLUSION

The exploration of *walking and following* in Copenhagen was one that observed the "disseminated person" (Certeau, 1984), the untold wanderer walking in the city, moving through public spaces. This perspective revealed urban rhythms in Copenhagen City Centre, as marked by *Kongens Have* spatial rhythms, everyday life rhythms of pedestrians' routines in the city, and walking as a body and everyday rhythm, which was the most evident in this study. Also, the perspective of following accounted for my own body rhythm as a point of contact with other rhythms. All the senses were working together in the experience of using my body as a metronome to measure others walk (Elden, 2004).

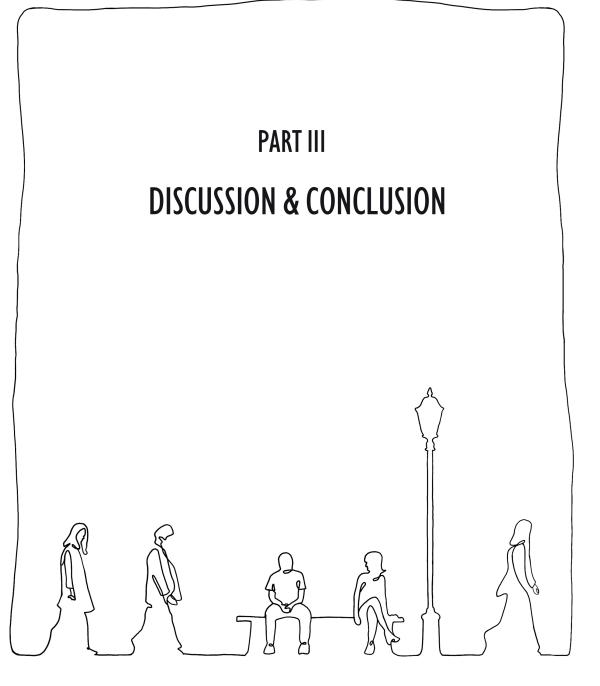
The rhythms of *Kongens Have* demonstrated it to be a very urban space despite the apparent royal aesthetic. The garden works for many activities that are part of everyday life in Copenhagen. It has a strong architectural rhythm that subdivides the space into clear and simple lines and allows one to oversee the entire garden while standing in one location. The Renaissance Style predominates the spatial aesthetic of Kongens Have bringing harmony and clarity, proper of regular shapes and proportional relation in subspaces (Rasmussen, 1962). During the observations, it was especially marked by the cyclical rhythm of the fall season, with leaves on the grass and fountain, yellow trees and people enjoying every bit of sun before winter arrived. Kongens Have day function and closing time was a strong linear rhythm, as during the day the garden was a connecting path and, in the evening, it was inaccessible, becoming an obstacle that forces people to go around it. The observations also showed the contrasting rhythms of weekdays and weekends. One mostly marked by linear rhythms of imposed schedules, seen in the maintenance, teenagers use for school activities, and the man collecting bottles as part of a work. On the weekends, the rhythms were more frivolous, with more people sitting around, playing and doing activities proper of "free time". Lastly, this exploration also observed the cyclical rhythms of weather, rain or sun, in *Kongens Have*, showing differences in use and the remaining importance of public spaces on rainy days.

These spatial, social and everyday rhythms from *Kongens Have* are as well urban rhythms from the City Centre as they interrelate in a polyrhythmic field (Wunderlich, 2008a). Therefore, besides the urban rhythms observed inside the garden, the pedestrians' walks in the city demonstrated urban rhythms associated with Danish cultural aspects, as seen in the Royal Band, accompanied by music and synchronized walk. And the interrelation with other urban rhythms, as of going to Nørreport to take the train on time and encountering diverse cultures in the station. The trajectories and observations of interactions demonstrated that everyday walking in the city is a mode of experiencing city life beyond going from point A to B (Middleton, 2009). Even "necessary walks" of going home after school are an aesthetic and insightful spatial practice (Morris, 2004).

These ordinary walks were emphasized by the *following* perspective that doublelayered the activity in a way that made it reveal itself. In a sense, this is what Baudrillard wrote in *Please follow me* (1988): "To shadow another is to give him, in fact, a double life, a parallel existence. Any commonplace existence can be transfigured (without one's knowledge), any exceptional existence can be made commonplace. It is this effect of doubling that makes the object surreal in its banality and weaves around it the strange (eventually dangerous!) web of seduction" (p. 78, 79).

The perspective of *walking and following* demonstrated the variety of walking forms, where the pedestrian is more than a unit (Certeau, 1984). The little girl had her own time in the street, actively creating space on the sidewalk. Calmly, in a slow rhythm in direct relation to all times she had stopped for interacting with the surroundings. And the mother accompanied, tired of the end of the day, maybe taking the girl from school and letting her keep the curiosity proper of a child learning to walk in the city. Although walking similar streets, the fast man went through space self-focused. Not looking to the sides, wearing headphones, as if he was walking on his thoughts. Their perception and impact *of* and *in* space were very particular. On the other hand, the couple adjusted their pace to each other, harmonizing their walk and sharing the creation of space on the sidewalk. And the man moving with the dog was strolling and fighting for the lead of the walk, experienced the city in yet another way. In all the pursuits, I did not lose sight of the body (Elden, 2004). Both in the sense of the ones observed and of my own body that was constantly used a metronome to describe the walks rhythms in relation to my own (Lefebvre, 2004).

Much of the experience of moving through the city was perceived over the integration of time and space. Time, although simplistically represented in clock hours, and space, represented in trajectory, were combined in the diaries, with the description of the experiences observed and the photographs, overlaying to create a spatial narrative (Calle, 1988). The little girl, the fast man and the slow couple, all the seven pursuits, lasted for approximately 40 minutes in total. However, their expenditure of time and their walk varied. Their movements differed in pace and rhythm, which also depends on the understanding of time in connection to space. In this sense, time was considered as non-calculable, being understood as "lived" (Middleton, 2009). The pursuits demonstrated the multiple forms of temporality and spatiality that emerged out of and shaped urban walking in relation to urban rhythms.



Public life and urban rhythms are interrelated subjects as the movements of people, interactions, and rest in relation to urban spaces, architecture and cycles of the day, seasons and years merge into rhythms that give city spaces temporal distinctiveness (Wunderlich, 2013). As developed by Lefebvre, *Rhythm* is a complex and experimental concept. And while he provided a general conceptual framework, the methods of *rhythmanalysis* presented in his studies are "frustratingly elusive" (Amin &Thrift, 2002, as cited in Elden 2006). Therefore, in this thesis, I attempted to understand how the empirical exploration of public life by ways of *staying and observing* people in *Mariahilferstraße* and *walking and following* pedestrians in *Kongens Have* and nearby streets informs a sense of urban rhythms.

Everyday rhythms, as Lefebvre argued, are the outcome of the interactions between *cyclical repetitions* (natural, seasonal, bodily) and *linear repetitions* (imposed frameworks, social practice) (Lefebvre & Régulier, 2004b). These two are the main categories to which all kinds of rhythms fall into. On top of that, the interaction of rhythms creates complex rhythmic fields that he named *polyrhythmic* relations. To this, "urban" provides a frame that situates the studies of rhythms in the city spaces (Wunderlich, 2008a). And following this understanding, public spaces are *polyrhythmic* fields where public life holds human activities that presuppose the combination of bodily and social rhythms with spatial rhythms (Elden, 2004).

Both *Mariahilferstraße* in Vienna and *Kongens Have* and nearby streets of Copenhagen City Centre were observed as polyrhythmic public spaces, however, by different methodologies. To assist the integrated discussion of what the findings by *staying and observing, walking and following* informed about urban rhythms, I am using the subdivision of urban rhythms into spatial, social and bodily rhythms.

SPATIAL RHYTHMS

Spatial rhythms are composed of static and dynamic rhythms (Wunderlich, 2008a) in which static are the physical elements and architecture, and dynamic are the objects moving in space. They are also influenced by social and body rhythms that compose everyday life and happen in public spaces (Elden, 2004; Lefebvre, 2004).

In *staying and observing* methodology, in three spots of *Mariahilferstraße*, this public space was a constant in the analysis. It was possible to observe the static rhythms of the trees, facades' subdivisions with shops on the ground floor and the urban furniture in relation to the dynamic rhythms of people, bicycles and cars moving. These elements combined composed the variations of spatial rhythms along the street. In Spot 1, all elements were strongly present, while in Spot 2, the variation of subtracting cars as a dynamic element made people more present in space. In Spot 3, trees, facades, furniture, people, bikes, and cars were once again present, but with a less intense rhythm of people moving. In this methodology, by accounting for pedestrians moving and staying as a numeric crowd, people were most observed as a dynamic spatial rhythm that gives *Mariahilferstraße* much of its atmosphere and temporality, especially during the summer season.

In *walking and following*, public space was a variable and passing with the continuation of the pursuits. However, to start every day from *Kongens Have* made it possible to observe some of the spatial rhythms there. Among the static, the architectural renaissance style is the most prominent. The garden is subdivided into simple geometric forms that give the space a harmonic and calm atmosphere (Rasmussen, 1962). The dynamic rhythms were marked by the people (and dogs) moving since only pedestrians are allowed inside the garden. They were not accounted as a mass moving in space; instead, walking was investigated as a "spatial practice", happening in a dynamic space (Certeau, 1984). Also, in the calm atmosphere of *Kongens Have*, the wind on the tree leaves and their falling on the ground gave a dynamic rhythm to the space marked by autumn cyclical rhythm. Nevertheless, through *walking and following* space was investigated in a more abstract form, not attached to one specific and static locality in the city, but one that was seen through the perspective of sequentially moving through the garden, then streets, or the station, and other spaces inside Copenhagen Centre.

SOCIAL RHYTHMS

Social rhythms are very much integrated into linear rhythms, as *linear rhythms* originate from human and social practice, imposed structures and particularly from movements of work (Lefebvre, 2004). They are repetitive series of almost identical events separated by long or short periods (Lefebvre & Régulier, 2004a). Besides, social rhythms are structured according to mechanical time and clock hours, where contemporary routine life experiences are the outcome of modernisation processes (Highmore, 2004).

In staying and observing in Mariahilferstraße, the most outstanding social rhythm of the street was one of the shops opening and closing hours. One that integrates with cyclical natural rhythms of the day and marks the everyday repetition in the street. This social and linear rhythm also demonstrated that Vienna's urban life and working culture are mostly concentrated in middle-day hours (with lunch hour around 1 p.m.), and people (Viennese, but also tourists) staying in Mariahilferstraße mostly during the hottest hours of the day. The shops remained closing relatively early in the evening (at about 7 p.m.), even in summer when the days are naturally longer. Also, the observation of people staying in the street revealed some of the social rhythms in Mariahilferstraße, by the diversity of users and the sounds of crowds intercepted by the "tinkling" from bike bells. These social rhythms were very much displayed in the space of the street, merging with the dynamic spatial rhythms of people using Mariahilferstraße, which demonstrate that, besides spatial quality, linear rhythms of work and rest movements also influence how long and when people use public spaces (Wunderlich, 2008a).

Social rhythms were also observed through *walking and following* pedestrians in Copenhagen. Their particular walks demonstrated some of their routines in relation to the use of the city's spaces. Seen in the mother walking with the little girl, close to the time of school pick-ups, and go home in a calm/tired walk at the end of the week, also, in the limping man stopping for a cigarette break while he waits for the arrival time of his train in Nørreport Station. And the teenagers using the *Kongens Have* during the school break, despite weather

conditions. Yet more, the man having the time to walk with the dog after work. In a repetition that marks the Danish socio-cultural rhythm, the Royal Guard was marching and playing on a specific day and time. These particular routines grasped in *following*, suggest some of the social rhythms of people that live in the city centre and use *Kongens Have* in relation to their routines. Another important social rhythm was noticed in the opening and closing hours of the garden. When observations were made, the garden closed at 7 p.m., but this changes depending on the seasons and the cyclical rhythms of daylight duration. This demonstrates the city's decision to connect linear social rhythms with cyclical natural ones.

BODY RHYTHMS

In consideration of rhythms, the body holds the most important function as it is where we are closest to rhythms (our biological ones); and it is the *point of contact* to linear social rhythms coexisting with these natural cyclical ones (Lefebvre, 2004). In this sense, the body is constantly under the stress of imposed rhythms over natural ones, seeking a harmonic relation

(Eurhythmia). Modernity (understood as the development of linear social structures) impacts every level of everyday life, but also it constantly bumps into the finite limits of human bodies, which traverse everyday life with natural and cyclical rhythms (Highmore, 2004; Lefebvre, 2004). In public spaces, external body rhythms can be seen in people's movement and straying activities.

When *staying and observing* in *Mariahilferstraße*, much of the body rhythms were seen from a behavioural perspective in people's staying activities. Pedestrians stopping to rest represent the stress of linear rhythms over the body. Eating, drinking and breastfeeding are natural bodily rhythms that overlap with the linear and clock rhythms. It is the feeling of hunger, thirst and desire (for ice cream or cigarettes) outside of social times of lunch hour or dinner time. The baby needed to eat in a much more natural cycle than the one we later learn through imposed social schedules to adapt our bodies to feel hungry during a break in work. The groups' sitting patterns were also much connected to social and bodily rhythms by sitting close to the familiar people and keeping a distance from the strangers, which created clusters in space. However, although they are also bodily, in this methodology, the masses of people moving and clusters of the ones staying were more explored as dynamic spatial rhythms. This limited the deeper exploration of particular body rhythms.

On the other hand, the methodology of *walking and following* kept the body rhythms more evident in the exploration of public life. Spaces were seen and passed by the pedestrian's moving point of view while their body was constantly in the picture. Walking demonstrated its importance as a body rhythm and spatial rhythm, one that each pedestrian has particularly related to their natural physiology (Gros, 2014). The variations of pace that sometimes were influenced by a red light forcing the fast man to stop were also influenced by his own body rhythm of moving at a fast pace. *Walking and following* demonstrated the multiplicity of walking

experience closely related to the bodily experience in space, thus, to the walker's body rhythms. The little girl, the man walking with the dog (which also had its body rhythms and necessity to stop and "mark territories" in the city), the very slow couple, and the fast man, all pedestrians moving on similar streets, had their experience closely related to their bodily rhythms and pace of walking. If the body is the point of encounter of linear and cyclical rhythms, walking is the most connecting activity to both the body and the urban (Certeau, 1984; Middleton, 2009; Solnit, 2000; Wunderlich, 2008b)r. The *following* perspective allowed me to observe the multiplicity of walking in Copenhagen Centre, and from a rhythmic viewpoint, it also allowed me to use my body as a metronome (Lefebvre, 2004). In accordance with Lefebvre's suggestion that "a rhythm is only slow or fast in relation to other rhythms" (Lefebvre & Régulier, 2004a, p. 89), the pedestrians' body rhythms of moving in space were continually described in the diaries in relation to my body rhythm. To use the body as the tool for subsequent investigation of others rhythms in the city (Lefebvre, 2004).

Some of Gehl's and Whyte's studies of how people use public spaces and behavioural tendencies were supported by the observations in Mariahilferstraße, and the division of necessary and optional activities suggested by Gehl offered an observation of social rhythms in space (Gehl, 2011; Whyte, 1980). By staying and observing, the stationary perspective made one public space constant in analysing urban rhythms, and the objective view worked to produce tangible data on people's moving and staying activities. However, some findings were conflicting with Gehl and Whyte view on public life studies, in the sense that the researcher of public spaces is already immersed and participates in the urban context before any analytical reflection (Heidegger, 1996). Also, the methodology presented limitations to dealing with intangible data that cannot be quantified or seen through behaviour watching, namely the experience of moving in public spaces.

By *walking and following*, the moving perspective allowed the body to be constant in the analysis while space and time were passing. In this way, it accounted for the experience of walking in the city in its multi-layer quality, showing particular ways of walking by diverse pedestrians. It provided an insightful representation of the experience through the spatialized diaries. Besides, this perspective allowed the researcher to not only be in the context but to use all the senses as a metronome in the analysis of public life. Space became more fluid, closer to what is experienced in reality, where people move from the garden to streets and other public spaces in Copenhagen. In this way, the analysis agreed with de Certeau's perspective over space, and extended on his dualistic view of the city being seen either by the planner or by the ordinary pedestrian (Certeau, 1984) to a perspective that stays in between the researcher and user of public spaces. However, this method also presented limitations to the generalisability of results from the contextualized and intangible data it provided. Nonetheless, the exploration gave new insights into the relationship of public life, moving in the city and urban rhythms. As observed in *Mariahilferstraße* and *Kongens Have* and nearby streets, the linear social rhythms and the cyclical, natural, bodily rhythms are the main components of everyday life, and together with spatial rhythms, they compose urban rhythms that give to cities much of its temporality in space (Lefebvre & Régulier, 2004a; Wunderlich, 2013). The people walking and staying in *Kongens Have* and *Mariahilferstraße* are part of the perception and memory of that spaces as much as architectural rhythms are. As for location-specific, urban rhythms characterise spaces that are perceived by physical elements and also by dynamic rhythms associated with social practices and the body. These together are part of building the image of public spaces in the city (Lynch, 1960, 1972; Wunderlich, 2008a). In this way, urban rhythms both describe and impact how we engage with and live in urban spaces.

CONCLUSION

The process of this thesis was also a process of discovery, exploration and experience to engage with two points of view - *staying and observing, walking and following* - in how they look at public life and what it informed about urban rhythms in *Mariahilferstraße* in Vienna and *Kongens Have* and nearby streets of Copenhagen City Centre. The first perspective offered an objective view over public life, a type of data that is more tangible and easier to operationalise, but reinforced the question of how to account for people in public spaces? How to account for the experience of the ones moving through space? Then, the second point of view offered the experience as a way of studying public life, which was, indeed, closer to the one of living in public spaces.

For further research, this work suggests an investigation on the relationship between the use of public spaces and social rhythms in different cities; for example, by comparing working or school routines with observations on the use of public life. That could be done in small and ordinary streets of cities. Besides, it suggests further investigation on the experience of walking by following specific user's groups; for example, by only observing children walking in the city, or by an attempt to make a gender comparative of following men and women of similar age groups. Regarding planning and policies, the findings of this research suggest engagement with the pedestrian experience of walking to beyond accounting it as numbers of pedestrians. And the use of urban rhythms in the understanding of public spaces as "temporalized spaces". Both to research and policies, the investigation of public spaces by observing routes and sequences of movement in many public spaces could provide a better understanding of moving in the city to plan accordingly.

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