ALTERNATIVE METHODS TO APPROACH WALKABILITY

The use of feminist urbanism in Barcelona

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Abstract

Within the current trend of moving back to a city of the past, walkability is presented as one of the possible solutions to ensure a healthier, more sustainable and resilient future. With a very similar objective but with a more critical and holistic vision, feminist urbanism seeks to break with a dichotomy that has left minority groups out of the city. This study looks at the elements that both concepts work with to create a synergy between both elements to ensure future joint work. Currently, the city of Barcelona, among many others, is implementing policies in the field of mobility to improve the livability of the city, but the city council has gone a step further and has opted for an intersectional feminist perspective as a working methodology. The merge of both walkability and feminist urbanism within the city might be an example of the possibility of both together as well as a way of learning what's effective and what is not.

Keywords

Walkability
Feminist urbanism
Active mobility
Inclusive urbanism
Intersectionality

Preface

"Urbanism creates ideology. The physical map influences the mental map. Having the door open or not being able to go out at night influences the way we relate to the world. [...] Building communities outside the common space, gated communities or villas is also part of a mentality, the same as promoting the use of the car, consumption in large shopping centres or the lack of communication between urban spaces. The accumulation of internal borders also creates a concrete mental map in which it is easy to grow walls and alarms. There is a lot of talk about digital bubbles, but the influence of analogue bubbles is hardly mentioned. Urbanism creates community and can dissolve it"
(López, 2021, p. 186)

I have always been interested in how different the cities were, to know how cities are structured is a good way to understand how society works and lives. There are defensive cities with societies hidden behind a wall, in the past, or a community of neighbours nowadays. There are also highly organised cities created from scratch with similar buildings giving the society a sense of order and equality. Moreover, winding cities where all the neighbours meet in the public community space. In addition, some cities are built under a total sense of security so society fearlessly shows their private daily life to everyone who walks down the street. How we build the city says a lot about how we are and how we will live our lives in the city. As human beings, we live in a society, which is why we have to promote urban planning that favours the network of social connections that characterises us.

The choice of this paragraph is not only what, in my opinion, is a very accurate goal of urbanism, I believe it is also one of the keys to elaborate a better society. The objective of spatial planning and urbanism must be to generate mental maps in citizens that encourage community life, based on equity. If we want to create more resilient societies, it is necessary for urban planning to be the union and not the limiting factor. Spatial planning designs the "game board" of our daily life, in an inclusive society the game board should be designed in this way, taking into account the different perspectives of life. After all, this is the aim of the thesis, to look for tools within spatial planning so that, as the paragraph mentions, "urbanism creates community" instead of dissolving it as it has done in many cities recently.

I did not want to end this preface without first thanking my supervisor, Arnoud Lagendijk, for always encouraging this thesis with respect. Second, to my family for allowing me to live this great experience abroad. Finally to my friend Clara, who has patiently listened to all my doubts and has always shown great interest in my thesis.

Madrid, November 2021

Summary

Nowadays cities have to face multiple obstacles, such as climate crisis, health crisis, and social inequality. For many years, urban designers and planners have thought about mobility in terms of commuting, from home to work or to do groceries, leaving aside non-productive movements and creating cities collapsed by private vehicles with poor public urban life. Although there are many ways to approach or define it, all in all, walkability aims to achieve better city life, from a mobility perspective, to give back public space to the citizens. For some years now, some cities have started to implement measures to deal with cars.

Nevertheless, a city is not just its mobility but a network of all urban elements. Therefore, to have better cities, policymakers need holistic strategies. Since the last century, researchers have started to acknowledge the different patterns in the way women and men used the public space. Later on, when non-white-middle class females appeared in the feminist movement, the differences in the use of public space increased when taking into account other identitarian variables like age, race, sexual or gender identities. These different classifications create a system of privilege and oppression that takes place in the city. Therefore, a system of oppression designs the board where life takes place and it perpetuates this unfair situation where you need to fit in otherwise you will be left out.

Feminist urbanism aims to break with a system that only considers one urban experience, therefore it uses a set of different elements of the city within an intersectional, inclusive and equity perspective. This holistic perspective might help to not only achieve a better walkable city but also to prevent inequalities and create fairer cities. The city of Barcelona is an example of a city that has been implementing walkability measures and has been working on feminist urbanism in the past decade. This example might help to understand the work of the concepts together and inspire future decisions.

This study aims to find out how walkability can benefit from a more critical and ambitious concept such as feminist urbanism. To this end, the study works with walkability and feminist urbanism's definitions and elements to create a joint conceptual framework. To know how can feminist urbanism help walkability, a conceptual framework is built after the theoretical framework. Furthermore, the project has used a case study to exemplify the practicalities of the conceptual framework. Barcelona has implemented walkability policies in the city and is currently committed to a feminist perspective in the city council that accompanies the measures. After explaining both the theory and the case study, interviews are conducted with researchers on the concepts and with associations in Barcelona. The results of these interviews are evaluated individually and then general conclusions are drawn on all research methods to answer the two research questions.

This study shows that there is no single way to generate policies that improve city life, each city has different characteristics. The project presents feminist urbanism as a method that values the diversity of experience, equity and intersectionality as a way of doing politics, which is why this concept might help decision-makers to achieve a more inclusive urban life where all modes of transport are ensured in an equitable way, as long as resistance is overcome.

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1. Introduction

1.1. Research problem statement

"There are few things more substantial than the way a city is built because that means how those people will live, with whom they will share space, where, when, what and how they will shop, how they will go to work, where they will take their children to school, how they will get there, where their friends will live, how they will interact with them, how far they will be from health centres, libraries, cinemas, bars - and what kind of bars they will be - what leisure there will be"

(López, 2021, p.19)

Despite not being a recent concept, the term walkability has gained momentum in the past few years, especially in the last months with the advent of the Covid-19 pandemic. Some of the cities have been incorporating sustainable mobility policies for years now and others just recently started to achieve a new city model. These urban areas seek to return to a past city, a city that is livable rather than merely commutable. The future cities aim to put citizens and their needs at the centre of decisions, cities that integrate and leave aside all forms of mobility that push other modes of transport aside (Gutiérrez-Rubí, 2016). The need for change goes further, the pursuit of more livable, socially fair, and resilient urban environments as a whole is noticeable (Fernández Karlsson, 2021).

These cities have started to follow strategies focused on reducing road traffic and improving pedestrian areas in some parts of the city. Although measures such as pedestrianising streets or traffic calming are indeed effective, they only target one aspect of the city, mobility. These very specific actions need to be connected to a more holistic set of strategies, perhaps as a guideline or principle, to change not just one "gear" within the complex system of the city, but to change the system of gears of which the city is made up. This strategy should function as a regulating principle for the structural change that cities are undergoing. Regarding this change, feminist urbanism appears and it will be better described later on..

Likewise, walkability and feminist urbanism have been going on for some years now. The first one has been used by many urban planners but its definition is not yet unified, some authors such as Hutabarat Lo (2009) argue that the variety of fields of study that have worked on urban walkability have generated a wide range of definitions. For Forsyth, "walkability is a more recent term relatively rarely defined in dictionaries but common use" (Forsyth, 2015). Walkability, as will be explained later, tends to be defined by its elements and benefits, the latter of which has generated great interest as they go beyond active mobility. Feminist urbanism, has not, so far, been used as a strategy to increase walkability specifically. The feminist perspective in urban planning has been developing for years, although it has been based more on women's safety than on other urban areas (Gutiérrez Valdivia, 2018)**.** This type of urbanism is based on the idea that the urban space's planning is not neutral and that it is designed for one type of individual only (Hayden, 1980; Gutiérrez Valdivia, 2018). This situation generates an imbalance in the use of public space and the maintenance of the social systems influenced by this city (Kern, 2020). Feminist urbanism is built under the fact that urban space is divided according to different gender roles within a

binary system (male-female). This situation is amplified when other categories such as race, age, gender identity or salary come into play. Hence, feminist urbanism seeks to hear and express the different experiences of the city, based on the interaction of the different identitarian variables of everyone, instead of imposing a neutral individual at the policy-making process. This will give the possibility to obtain a fairer and more representative space for all citizens.

1.1.1. The concepts together

All in all, measures to increase walkability involve pedestrianization of areas, usually historic centres (due to their tourist and economic interest), the creation of parks (due to their relation to leisure activities), and the reduction of the vehicles speed (to ensure security, less polluted air, noise and more space). The relationship between walkability and motor vehicle traffic is inversely proportional, the more cars in space the less walking population. To put it simply, before the explanation given in section 2 of the theoretical framework, within the city public space can be understood as all the space between buildings or houses, if this space is limited, the more space one mode of transport has, the more space it takes away from the rest.

After World War II, many cities began to rebuild and rethink their public spaces to accommodate this emerging advantageous vehicle, the car. Since then the automobile is seen as a sign of economic stability, freedom and status predominantly for men, although in some cultures, women driving is normal nowadays, the reasons tend to be related to the gender assigned roles (CIVITAS, 2020). For example, during the expansion of car use in the twentieth century, and most exemplified in the American sprawl, heterosexual, white and middle-high-income families moved to the suburbs to reside in a single-family home. The desire to group with like-minded people and to escape the noisy, congested and unhealthy city could only be fulfilled by the car, which allowed one to travel from work to home without the need to make contact with other groups and perpetuated the status of the individual. Despite the incorporation of women into the paid jobs, the wage differential and the economic inability to afford two cars to move too far places due to zoning land uses, coupled with the burden of unpaid (household) work assigned to women, resulted in the man, with the higher salary, being the one who had access to the private vehicle to go to the workplace (Kern, 2019). Although progress in gender equality has balanced the situation somewhat, the statistics still reflect higher car use by men than by women who has a greater tendency for women to use sustainable means of transport (CIVITAS, 2020; Bellman, Ypma and Polack, 2020).

Faced with this dominance of the car, during the last century, within the fields of study concerning the city, more specifically planning, but also from the field of health that studies the relationship of obesity in the United States with the rise of the car, the term walkability began to emerge. For some organizations "walkability has reached a turning point" (The Annual Report- ARUP, 2016), others like Gutierrez-Rubí argued that not so long ago the term walkability was unknown beyond urban planning circles and nowadays authors such as Jan Gehl are calling for it daily (Gutiérrez-Rubí, 2016). The benefits associated with walkability are positive for individual and collective health, economy and sustainability. It is for this reason that walkability has been studied from different areas and that it has to be increased through holistic strategies to ensure the success of all areas affected by this

phenomenon. From the perspective of feminist urbanism, walkability stands as a pillar of this strategy and seeks to break with a status quo that goes beyond the car - walkability dichotomy and men - other identity variables space.

1.2. Research aim

This study seeks to expand the methods that can be used in cities to achieve a more liveable urban space. Therefore, the objective is to find out how two concepts that a priori have not been used together, could help each other and be used by institutions. The aim is not only to make cities more walkable but also to make cities fairer. For this reason, this study seeks to tackle the problem of walkability from a more general perspective that allows evaluating not only mobility but also to take into account more aspects of the city that affect the problem presented in the previous section.

When tackling pedestrian goals, several strategies have been implemented with successful results; these strategies are generally based on mobility, i.e. they come from the transportation sector or the urban design sector. They seek to reduce the mobility of certain modes of transport or to redirect them through bans, economic regulations, or infrastructure while promoting active mobility through infrastructure or economic incentives. While these measures are effective in terms of increasing the number of pedestrians, they fail to take into account the consequences of the reduced movement of some transport on people's daily lives or the reasons why people travel by private car. Although their purpose is good, in the social field and in the city where this situation is much more concentrated, it is necessary to evaluate more than just a portion of the problem. This is why this research proposes the use of feminist urbanism as a way to break this way of planning cities from just the aim of increasing their walkability. To know if it is possible, it is necessary to evaluate how feminist urbanism can help walkability by understanding the definitions, benefits and elements. By analyzing these two concepts, it may be possible to create a joint conceptual framework for future walkable feminist cities. Therefore the research will try to know how to achieve more walkable cities and how feminist urbanism can help that as a strategy that not only requires a change in mobility but also in all aspects of urban society and environment.Furthermore, the use of examples that are developing urban projects from a feminist perspective can be used to guide this transition and to find out to what extent walkability has changed with the use of feminist urbanism. This is the case of the city of Barcelona, which since 2015, with the arrival of the new mayor Ada Colau, has called itself the Feminist City Council and since then has been carrying out projects where the feminist perspective is paramount. Moreover, the implementation of the Super Illes project, which is being carried out to return space to pedestrians in the city, is based on these same values, a city that cares for all its citizens.

1.3. Research questions

To address the problem outlined above, this study will seek to answer two research questions.

How can feminist urbanism help cities be more walkable?

The shift towards more sustainable transportation modes and above all the prioritization of active mobility is clear. While many policies have been in use for decades and have been

effective, it is necessary to go a step beyond. Societies are made of a series of mechanisms that work together, and the slightest change can create alterations in other parts of the system, also these connections must be taken into account when understanding the problem. Thus it is necessary to address active mobility, in this case, walkability, from a more general and ambitious perspective that encompasses not only mobility but also all different parts that are connected to mobility. For this reason, it is interesting to value the role of feminist urbanism, as a method to increase the participation of other perspectives in increasing the walkability of cities. According to her theory, feminist urbanism seeks to represent all citizens in public space, regardless of gender identity, race, sexual orientation, or age. It goes beyond simple action on the built environment by trying to meet all the experiences and requirements of those who were not heard in the past.

What can we learn from the urbanism of Barcelona?

There are examples of cities that have developed urban policies with a feminist perspective and have increased the walkability of their streets. This is the case of Barcelona, self-described as a "feminist city" by its mayor, Ada Colau, since 2015 (Ajuntament de Barcelona - Municipality of Barcelona, 2015). The city is also known for its Super Illes -Super Blocks-, a strategy to promote the livability of the streets by limiting traffic among other measures, creating cells in the urban grid where traffic is restricted and the citizens can freely use the public space. This city has been making changes with a feminist perspective since 2015 when the first woman mayor Ada Colau started governing, and it is interesting to know how it is doing it and what results in it is getting by promoting these policies.

1.4. Societal and scientific relevance

The benefits of walkable cities have been pointed out by many researchers. In the field of health, the average resident of a walkable neighbourhood is less at risk for obesity, diabetes, and heart disease (Howell et al 2019). In the context of sustainable development, environmental attributes related to pedestrians' walking behaviour have been taken into consideration by the public health policies to benefit people's health (World Health Organization -WHO-, 2010) as it can reduce the per capita rate of resource use and greenhouse gas emissions (WHO, 2018). The walkable neighbourhoods are known as more liveable places (Appleyard, 1980; Yassin, 2019), this increases the sense of community and therefore decreases the average of loneliness and depression (Mayne et al 2018) and it contributes to social interaction and therefore potentially to community building (Jacobs, 2002; Whyte, 2012; Liao et al, 2020) which is important if we consider that the pandemic has increased the numbers of loneliness and depression (Porras Ferreyra, 2020)**.** Besides, there are also economic benefits of walkability, Litman (2004) points out how improving walkability provides the consumer and public cost savings and supports strategic economic development. The same author reflects in his research how walking is undervalued over all other modes of transport, especially in comparison to cars: "this reflects an undercounting of walking trips, an undervaluation of walking benefits, and undervaluation of motor vehicle costs" (Litman, 2004). Considering these benefits, it is understandable the health, ecological, economic, and social interest in the enhancement of walkability in cities and therefore the implementation of those measures that seek a more walker-friendly urban environment.

In this shift towards greater walkability at the urban level, it is necessary to keep in mind that not changing the way decisions are made by not increasing the heterogeneity of perspectives will end up driving to the same situation of social inequality. Both urban planning and future projects embody political and ethical positions that lead to action and it is, therefore, critical that such projects reflect diversity and not just Western, masculine, heteronormative values (Gunder, 2005; Masini, 2006; Hudson & Ronnblom 2020)**.** Despite the communicative turn in planning whereby planners are increasingly expected to pay attention to citizens' voices, only some can speak and be heard (Listerborn, 2007; Sandercock, 1998, 2003, Young, 2011; Hudson & Ronnblom 2020) limiting the range of visions of the 'good' future city articulated (Gunder, 2005; Hudson & Ronnblom 2020).

Feminist urbanism is more than achieving security for women in the city, and more than closing the gender gap in urbanism also known as "mansplaining the city" (Walker, 2017). It is related to hearing the different experiences of the city population and is about how society uses the public space. The authors who call for a feminist city highlight gender equality within the city space but also refer to other identity variables, such as age, origin, sexual identity, the type of coexistence unit where you live, social class, functional diversity, etc. Moreover, as Ortiz Escalante claims "how these variables intersect and materialize in the form of privileges and oppressions in the city and in the spaces that are used" (Ortiz Escalante, 2018). Regardless of how a person identifies themselves, they have the right, as a citizen, to the full and indiscriminate use of public space. Furthermore, within a climate and health crisis, policies must be made to ensure a healthy future within resilient and sustainable urban areas. These issues could be tackled, in part, through the union of these two concepts.

To this end, this study will first present a theoretical framework that defines each concept separately. To answer the second research question, this study uses the case study of Barcelona, so thirdly it will describe the situation of the case study. Subsequently, a conceptual framework is generated through the elements that have been defined in the previous section. Next, the methods and methodology to be next will be better described in section 5. Once the research design has been explained, the results of the methodology will be presented and then evaluated in section 6, the conclusion of the results. Finally, a discussion chapter will present the interpretations of the study in general as well as any limitations or proposals.

2. Theoretical framework

This section will try to explain the functioning of both concepts separately. It will first explain the definition, benefits and elements of walkability and then define feminist urbanism, its elements and explain the possible tensions that have arisen with this term.

2.1. Walkability

2.1.1. Definition of walkability

"Walkability is both an end and a means, as well as a measure. While the physical and social rewards of walking are many, walkability is perhaps most useful as it contributes to urban vitality and most meaningful as an indicator of that vitality"
(Speck, 2012, p.1)

Walkability has been approached through different fields of study, which have created a wide range of definitions, varying on the background that precedes its author. For example, from the field of transportation walkability is defined as a type of active mobility (non-motorized mobility), as a derived demand, or as a leisure activity; urban planning field establishes walkability as a measurement o the degree of pedestrianized areas while in the health field, walkability is connected with a lower risk of cardiovascular disease, i.e. defines walkability from a physical activity perspective.

The urbanist Ann Forsyth (2015) claimed that all in all, walkability definitions tend to focus on the elements of the urban environment and the benefits of the action. Moreover, she sets up a criterion to divide the definitions of walkability into three different groups. By reviewing previous articles, especially the one written by Ria Hutabarat Lo (2009) that is already a literature review of walkability, Forsyth (2015) analyses the multiple walkability definitions between definitions related to transversable, compact, multi-dimensional and physical enacting environments; lively and sociable, environmental and social equity, also physical activity outcomes; multidimensional and better areas index:

a) Walkability definitions related to community environment especially those that are characterized by the means for creating walkable places:

- First, traversable environments with the basic physical conditions to allow people to get from one place to another without major impediments. Some authors connect the attractiveness of the built environment to walkability through human activities such as Burden (2010) who states walkability as "the extent to which the built environment is friendly to the presence of people walking, living, shopping, visiting, enjoying or spending time in an area" (Burden, 2010). Later on, Knapskog in 2019, linked the effect of building environment with pedestrian behaviour, "how cities, neighbourhoods, routes or streets, are nice to walk in, as well as pleasant and interesting, and hence invite to walking" (Knapskog, 2019).

- Second, compact places provide short distances to destinations. In 2012, Eunyoung Choi acknowledged the relation between higher-density neighbourhoods and pedestrians. Choi (2012) suggested that using earlier

findings from transportation and urban planning research as a basis, earlier walkability studies have determined the main factors to be examined, such as density, connectivity, and land use" (Choi, 2012). ALso, several different dimensions are key to places being safe for walking, both perceived and actual safety from crime and traffic. Southworth (2015) defined a walkable environment as one that "invites the pedestrian to walk with a list of elements that support this aim" (Southworth, 2015).

○ Finally, physically-enticing environments have full pedestrian facilities such as sidewalks or paths, marked pedestrian crossings, appropriate lighting and street furniture, useful signage, and street trees. They may also include interesting architecture, pleasant views, and abundant services attractive to those who have other choices for getting around and getting exercise. It is more related to the first type of walkability definition. The researcher Choi (2012) determined that the multidisciplinary research on walkability started by trying to prove a correlation between the condition of the built environment and the amount of physical activity.

b) Walkability definitions related to perceived outcomes of walking:

○ First, a walkable environment is often attractive because it is lively and sociable. Moreover, in 1980 by studying social connection Donald Appleyard stated that "people living in the least-trafficked street had three times as many neighbours they would classify as friends as people on the busiest street had" (Appleyard, 1980). Before Appleyard's findings, Jane Jacobs in her book 'Life *and Death of Great American Cities"* called attention to the sense of community created in more walkable neighbourhoods. Other authors have called attention to the vitality of a walkable community as it gives a sense of comfort and enhances the sense of community (Singh, 2016; El Messeidy 2019). Walkable communities have a great impact on physical and mental health, both individual and communitarian, as well as the sense of belonging.

○ Second, as a way to achieve both the environmental preservation and social equity components of sustainable urban form, providing sustainable transportation options. In 2019, the research of El Meseidi defined walkability as "a type of sustainable transport that has many benefits on many levels such as health, sustainability, social and economic benefits" (El Messeidi, 2019). In addition, walking is a cheaper mode of transport, as it does not require owning a vehicle (speaking about able-body individuals) and it is also a fairer transportation mode, as it is affordable for almost everyone and allows everyone to move freely and safely in the city (El Meseidy, 2019).

○ Finally, many searches for an exercise-inducing environment with features that lead to higher than average levels of walking either in total or for transportation or exercise. The benefits of walkability have been long studied since the health field called attention to the obesity rates in many western countries. The health field has identified the positive effect that walkability has on individual and community health, both physical and mental. More walking communities register lower levels of blood pressure, heart attacks, and

depression (Singh, 2016; El Messseidy, 2019). Lastly, some studies have also found a relation between walking and the reduction of cancer risk (Ewing, R. Cervero, R., 2010; El Messeidy, 2019).

c) Walkability used as a proxy for better design:

- Multidimensional in terms of means and measurable. This kind of definition creates indicators of the conditions of walkability akin to definitions of livability or development based on indicators. Some authors have treated walkability as a measurable dimension of the public space, by measuring the elements of walkability like Frank, Sallis, Saelens, Learly, Cain, Conway, and Hess in 2010 with the development of walkability index to study the quality of life of a neighbourhood (Frank et al, 2010) or the studies that compare areas (streets, neighbourhoods or cities) to acknowledge the better quality.

- Furthermore, a way of talking about environments that are simply better. Walkability represents a holistic solution to improving urban areas. This encompasses many of the other definitions on an integrated basis.

The definition of walkability might be ambiguous, it seems that to date no one way of defining this concept but the scope has been established mostly to its benefits or elements. From the perspective of mobility, the definition of walkability is focused on the built environment of the city and how it affects the outcomes. In other words, walkability is understood as the effect that the urban built environment has on the behaviour of individuals to use non-motorized modes of transport, especially walking, and how this behaviour enhances the livability of the urban environment.

2.1.2. Elements of walkability

While the definition of walkability can be open to debate due to its multiple approaches, it is the benefits and elements of walkability that define the concept to the greatest extent. Therefore, keeping the focus of the research on mobility and how it can improve cities, it is necessary to explain the elements that make an urban environment conducive to walking. The number of studies on walkability elements points out the complex group of social and urban elements (Mehta, 2008; Choi, 2012). The number of studies that have tried to establish an "A-B-C" list of the elements that influence walkability has been growing for years. Urban planning and urban design research as well as transportation researchers have been focusing on the basics of the urban context and the elements since the beginning of the nineties (El Messeidy, 2019) but recent researches have provided a more holistic conception of the elements of walkability corresponding to a more elaborated and complex group of elements.

The literature review revealed how most of these elements correspond to Jane Jacobs' elements of her book in 1961, the density of land uses, compact and livable cities. Not only Jacobs' work but also Jan Gehl (1971), William Whyte (1980) or Robert Cervero (1997) are continuously mentioned in walkability studies. Cervero is mostly known because of the 3Ds: density, diversity, and design, which were later extended by further studies. These first 3Ds state that walking behaviour is influenced by a higher density of land uses and people, a higher diversity of basic needs, and a design that is attractive to walking. These

characteristics of urban space have had the greatest influence on the studies of walkability elements. From the elements mentioned in Jacobs' book, which are still recognized, and to the latest authors, many have elaborated lists of elements that affect walkability. These can be classified into three groups: geographical elements, individual elements, and urban built environment elements.
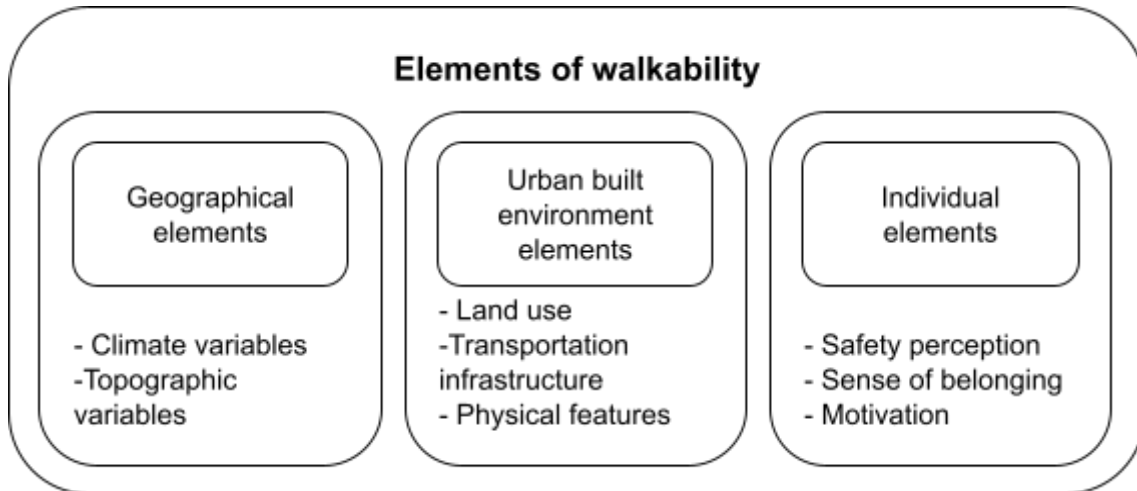
Figure 1. Elements of Walkability

Geographical elements

These elements correspond to natural features beyond human control but their effects can affect the other two elements. Geographical elements can be divided into two groups:

- Climate variables: regarding weather, extremes in temperature are not conducive to walking (Ewing and Handy, 2009) and in this sense, the provision of green areas that create a shadow (Mehta, 2008) or covered areas to shelter from rain or snow can make a difference to walking.

- Topography variables: the relief of each city is different, when talking about walkability it is important to talk about slopes (Frank et al, 2017) especially in the case of people with specific physical needs as dis-able individuals. Another element of relief are rivers and streams, these natural elements can become physical barriers. It is therefore important to design bridges that facilitate the connection between the two banks, bearing in mind that bridges can affect the perception of safety.

Individual elements

Although it is separated from the other two types of characteristics, the individual elements are highly influenced by geographical and built environment elements. It can be divided into:

- Safety perception: it has been largely studied, especially from gender perspective studies but recently, enlarge by other collectives, like transgender people, racialized people, or the elderly (Kern, 2019). Researchers have shown that elements of the land use and urban built environment affect safety perception, for example, if there are empty slots in the grid or if ground-level shops provide vitality to the street. Most of the studies mention Jacob's "eyes on the street" when talking about safety perception. This concept is based on the fact that buildings facing the street or people in the street will always have "eyes" to protect other pedestrians (Jacobs,

1961). Furthermore, traffic infrastructure also impacts walking behaviour, this is increased by the construction of wider sidewalks, safer crossings for pedestrians, and less road traffic (Ewing, 1999; Southorth, 2005; Lo, 2009). The experience of the city is different from one person to another and it is affected by many variables, such as culture, age, ethnicity, sexual orientation and the capabilities of the body, which play a key role in walkability (Col-lectiu Pun 6, 2016).

● Sense of belonging: is expressed in the way an individual identifies with the cultural aspects of an area (in terms of the city). That is, the physical elements of the city and the people and their activities that make an area identifiable and the individual identifies with them. When a city is well-signalised and provides gathering places it creates a human scale. Thus, it promotes street livability and creates an interesting human life (Jacobs, 1960; Gehl, 1971; Appleyard, 1980; Ewing and Handy, 2009; Speck, 2012) that increases the sense of belonging. Moreover, the preservation of the physical aspects of the city that identify it and also differentiate it is important to increase the sense of belonging, such as historic buildings or parks.

● Motivation: The researchers confirm that more access to a diversity of uses and activities increases the reason to walk (Cervero, 1997; Ewing, 1999; Ewin and Cervero, 2001; Alfonzo, 2005; Southwort, 2005; Ewing and Handy, 2009; Lo, 2009; Spack, 2012; Robeyns, 2017; Bozovic, 2021) or access to nature (Lo, 2009).

Urban built environment elements
Since the beginning of the research, the influence of the built environment on walkability has been mentioned, that is why it is the most developed one. As a constraint or enhancer, the built environment plays a role in transportation behaviour. Knowing that walkability takes place in the city's public space, it makes sense that this is one of the main factors that affect human walking behaviour. Health researchers focused on cause-benefit investigations related to walking and the built environment and, although the breakthroughs were satisfactory, the positivism perspective of this field left out the provision of other variables like design guidelines, factors of the built environment, or how these factors can be perceived (Choi, 2012). Nevertheless, as a way to fill the gap from the health's research, the urban planning and design research studies have increased the number of walkability studies and therefore, enlarged the variety of perspectives.

Among all the studies about the elements of the urban built environment, the elements identified by Zhou et al, in 2019 best describe the influence of the human-built environment on walkability. The researcher stated three elements inside the built environment of walkability: land use, transport systems and physical infrastructure. These elements influence the individual perception and can be influenced at the same time by geographical characteristics.

● Land use: it defines the urban purpose and urban grid of the city. Land use is the first factor within the urban built environment that affects walkability as it is the one that establishes the use of the ground and space given to each use. Compact cities are more accessible than sprawl cities because compact and diverse land use cities make everything reachable within walking distance (Cervero, 1997; Southworth, 2005; Mehta, 2008; Lo, 2009; Speck, 2012). The grid given by land use is also key

for walkability by promoting small-scale blocks that shorten distances and also avoiding dead space in between blocks (Ewing, 1999; Ewing and Cervero, 2001).

● Transportation infrastructure groups all the infrastructure created to enhance, secure and divide transport modes (walking, cycling, or motorized). Concerning the transportation elements, some researchers have proved the importance of protection, continuity, multimodality, and size of the lanes. In the case of transport infrastructures that directly affect walkability, sidewalks must meet characteristics such as the quality (Southworth 2005; Lo, 2009; Speck, 2012), the width (Mehta, 2008; Ewing and Handy, 2009; Speck, 2012), and its logical continuity and coherences (Ewing, 1999; Southworth, 2005; Mehta, 2008; Lo, 2009; Ewing and Handy, 2009). On motorized vehicles, the authors suggest characteristics as the width of the road that allows higher speeds (Ewing, 1999), the volume of traffic (Ewing 1999; Ewing and Handy, 2009; Speck, 2012) negatively influence walkability, indirectly causing the number of people on the street to decrease. Contrary, the access of multimodality to combine the different types of mobility (Southworth, 2005) increases it. Related to safety perception, the infrastructure must be well signalled for each mode of transport and secure from the invasion of others, more specifically, a division between active mobility modes and motorized vehicles (Ewing and Cervero, 2001, Speck, 2012).

● Physical features: groups all the elements of the public space that functionally help the development of city life (Bobylev, 2011; Bobylev & Jefferson, 2014) and highly influences the individual elements. All in all, a walkable city might be provided functional and aesthetic street furniture (Ewing, 1999; Mehta, 2008) as well as street nature and parks (Ewing, 1999; Ewing and Handy, 2009; Mehta, 2008; Lo, 2009). Also, fountains, benches, parks, reunions areas and other types of street well-cared furniture might provide space for gathering and increase the sense of belonging. Some authors have mentioned the importance of small-scale buildings (Ewing, 1999; Ewing and Handy, 2009) to not create enclosure in the streets. Other physical features are imageability (the way an urban environment can be easily recognizable for a pedestrian), human scale (height and width of buildings), transparency (being able to see some internal activities), complexity (noticeable differences that a viewer is exposed), legibility (easy understandable by colours or signals) (Edwing & Handy, 2009).

To sum up, walkability is understood normally by its outcomes or its elements. Perhaps the latter is the most common way to define the term, define what is needed to make a street, neighbourhood, or city more walkable. To understand this, three categories of elements that influence walking behaviour have been pointed out. The three of them work as an enhancer or decreasers of mobility and also influence each other at the same time. By providing the public space with the elements of walkability, a more walkable city might be achieved. Thus, built environment elements, although are not the only ones, are the main factors influencing walkability, as most of the authors who study walkability have claimed. For this reason, the largest number of elements are grouped under this category and the majority of the definitions include the influence of the built environment on an individual's behaviour. Consequently, walkability might be determined by the influence of the built environment on pedestrians' behaviour, either for transportation or leisure purposes in the public space.

The next section will define the concept of feminist urbanism the same way this section defined walkability. Moreover, as a less-known concept, it will also clarify the misunderstandings that might arise when using feminist urbanism.

2.2. Feminist urbanism

"Any settlement is an inscription in space of the social relations in the society that built it...our societies are patriarchy written in stone, brick, glass and concrete"
(Darke, 1996, p. 88)

The idea of feminist urbanism is based on the fact that cities are not neutral design. Besides, most cities were built under the experience and needs of one group of citizens, mainly from the experience of one type of human, a white-middle-age-able-body-cis man (Hayden, 1980; Darke, 1998; Sweet & Ortiz Escalante, 2010; Gutierrez Valdivia, 2018; Ortiz Escalante, 2018; Kern, 2020). It is known that the physical structures of our cities influence the social structures of humans. Just as the urban built environment directly influences social structures, social values influence how the urban built environment is designed and constructed, like a snake biting its tail. Feminist urbanism authors claim that these values are linked to a patriarchal set of norms (Gutierrez Valdivia, 2018). Retrieved from the work of Jane Darke in 1998, "patriarchy takes many forms and changes over time, it is so deeply embedded in social relations that many people do not identify it and take male domination for granted" (Darke, 1998), as a consequence, being aware of this influence in the urban design is taught and it might be neglected. In the book *Feminist City* (2020), Leslie Kern gathers multiple sources of information to understand and explain how the patriarchal city influences society, "built environment is a reflection of the societies that construct them" (Kern, 2020, p.14), but most women behaviour, and how a feminist city might be. Similarly to walkability, the urban built environment influences citizens behaviour towards the city and most of the times humans don't realise this influence.

The starting point of feminist urbanism is related to the studies of female authors, mainly geographers, who acknowledge a difference in the use of space of the city between man and woman. This is known as the gender perspective in urbanism. The work of these authors, although it started as a way to acknowledge the risks to which women are exposed, is key to understanding how the city space works and how to develop a feminist city.

2.2.1. The dichotomy of space

The labour of feminist geographers was key to understanding how sexism works on the urban planning ground (Gutierrez Valdivia, 2018; Kern, 2019). Thanks to their studies, they have prompted a reformulation of urban agendas so that gender-based violence started to be considered a central issue in urban planning (Andrew, 1995; Michaud, 2005; Smaoun, 2000; Gutierrez Valdivia, 2018). Later on, also the roles and activities in the city were questioned. These researchers have explained the space division of cities between two different spaces, although they have quite a few names, all correspond two the same dichotomy: public-private, paid-unpaid, man-woman, or productive-reproductive. As Gutiérrez Valdivia (2018) stated, "the development of the modern city is based on this dualism whereby each space is attributed specific functions and activities and where productive activities are prioritized in urban design, making the needs of the reproductive

sphere invisible" (Gutierrez Valdivia, 2018). Moreover, she continued by saying that "the public-private dualism configures space by segregating it according to these two spaces and assigns specific functions (productive-reproductive), to which are also attributed generic categories (masculine-feminine)" (Gutierrez Valdivia, 2018). Therefore is not a mere division of space, each space is related to a type of action (paid-unpaid and productive-reproductive) and a role or individual (man-woman). Also, the actions are hierarchized to those important, paid and productive, and those less important, unpaid and reproductive. Hence, public spaces are mainly used and designed for productive activities and paid work usually done by men while private spaces hold reproductive activities and unpaid jobs usually done by women. Ultimately, the creation or the allocation of different jobs for each gender will enlarge the gender stereotypes (Duran, 1998; Valdivia, 2018) ergo, it will enlarge the use of those spaces only for those who use them, public space for men and private space for women, with all the consequences of this division. This vision of the public space might be too reductionist to some authors, as later on will be explained.

Although the differences and gender roles between men and women have been going on for decades, the dualism in the urban space increased after the second part of the eighteenth century. The division of space was less intense before the Industrial Revolution when inside the private space of the house, productive and reproductive activities were carried out (Carrasco, Borderias and Torns, 2011), "pre-industrial households combined productive and reproductive functions and sexual division of the market, domestic and care work varied considerably according to the economic contexts in which the family lived" (Carrasco, Borderias and Torns, 2011). Later on, after the Industrial Revolution the productive space, predominantly factories, was located in the outskirts of the city while the reproductive activities stuck in the private realm (England, 1991; Valdivia, 2018). The household sphere became a secondary space and lost its capacity to produce subsistence products (which are then acquired on the market) and thus, it lost the value and control over the new concept of work, which becomes inseparable from wages (Murillo, 1996; Valdivia, 2018).

This dichotomy was magnified after the II World War, especially in the USA, with the development of suburbs (Hayden, 1982). Regarding this, McDowell (1996) claimed that "the twentieth-century city model is the urban concretization of the separation of the workplace and the home, the city and the suburbs, public life and private life that the Industrial Revolution brought about the West" (McDowell, 1996). As a result of this spatial segregation, there were two exclusive types of activity, productive and reproductive. The productive sphere was identified with public space and is the space assigned to men and where economic, political, cultural, and other activities took place. Whereas the reproductive sphere was located in the private or domestic space, "to which women were relegated" (McDowell, 1996; Valdivia, 2018). During the twentieth century, "the idea of the woman taking care of the house and the ex-military husband who returns to his previous life in a job far from the suburban home was encouraged by the governments and facilitated through the expansion of car use" (Hayden, 1982). Additionally, Gutierrez Valdivia (2018) stated that these ideal family roles continue the gender dichotomy in the urban space and that all women's aspirations came down to "success for women was to be a happy housewife" (Gutierrez Valdivia, 2018). Furthermore, Jane Darke (1998) claim that the elements of the sprawl urban model, such as the lack of childcare facilities and access to close family networks, the lack of shops in the neighbourhood, and the long and expensive commuting to the workplace, made it practically impossible for women to achieve other activities (Darke, 1998). The capitalist

zoning planning in North America, which later was developed in other countries, increased the distance between the different spaces, made almost impossible the conciliation for women between the paid jobs, when they wanted to work, and the unpaid activities assigned to their gender (Kern, 2020).

Not only women but also to all those who could not manage their life's tasks without relying on caregivers, usually the women of the household helping the elderly and children or after gentrification processes in the city, lower-class women hired by those middle and upper-class families who could afford them (Kern, 2020). Very similar is the city that developed under communist regimes. Under the 16 urban principles of the known "Anti-Charter of Athens" of 1949, the city does not pay attention to the needs of the reproductive sphere and only focuses on the productive space, primarily held by the industry (where men work) that is established as the core of urban activities (Gutierrez Valdivia, 2018). Nowadays, women still take care of unpaid household labours while most of them also work in the public space. This situation is reflected in the way women move in the city, while men tend to use linear movements (from home to work), women movements are described by the authors as polygonal because they tend to make more stops for daily care activities (Gutierrez Valdivia, 2018; Kern, 2020). Also, women usually use more public transportation while men tend to use private motorized vehicles (Gutierrez Valdivia, 2018).

However, the conception of space as a dichotomy between public and private is criticized by some authors. The author Agenjo in 2013 pointed out that this view is reductionist, it only takes into account the segregation of the middle classes of the global north, "this vision, responds to the social patterns of a historical moment, from the Industrial Revolution onwards, of specific social classes and a specific geographical context, Europe and the USA" (Agenjo, 2013; Gutierrez Valdivia, 2018). The situation in countries of the global south was different, although with globalization it tended to standardize more and more. Also, the different economic classes and ethnicities have lived a more complex situation than the simple public-private dichotomy of space that this economic point of view has. When other identity variables like class and racial values came into play, the private-public dichotomy is not enough to explain the system of privileges and constraints within society. As a consequence, there's a privilege for white-middle class women over black or indigenous-poor women, although both of them are oppressed by men and on top white-middle class men.

Under this economical point of view of productive-reproductive dichotomy that Agenjo (2013) criticized, some authors like Blanca Gutierrez Valdivia (2018) claimed for a "nurturing city", as a city that values the reproductive activities that all women have been forced to do so, not as a way to prevail but to make it easier for all citizens to do so regardless of gender, race or social class. This label would also alleviate some of the rejection of the adjective feminist by certain parts of society, as some authors mention Moreover, feminism has evolved in the same way as this kind of urbanism, towards a much more intersectional consciousness. Today, it is not only white, middle-class women who are fighting for rights, but this has extended to different identity variables. Regarding this, Kern (2020) explains how this is not the only way of understanding the systems of oppression and privilege of the city. Leslie Kern uses the examples of indigenous and black women to illustrate other types of oppression that are held in a city aside from gender. The author explains how gentrification processes only benefit white middle-class people and keep out lower classes, usually black

or indigenous groups that become the ones in charge of the reproductive tasks for those middle-class families (Kern, 2020).

It is undeniable that the urban structures and design influence the way the city is experienced. If the cities were built for just one type of human as feminist authors have established, gaining and promoting privileges from one group to others, there's a majority of individuals oppressed by this urban environment. Not only women, but also dis-able, racialized, young, and elderly people. The cities that we live in, are the result of an unfair distribution of the space, excluding groups of people based on the social, economic situation, gender, race, sexual identity, functional diversity, or age, creating a system of oppression and privileges that favour only the individuals that fit in the patriarchy standards.

2.2.2. Feminist urbanism and gender perspective

The definition of feminist urbanism might be misunderstood as the word feminism can be rejected or understood as urbanism that takes into account the gender dimension only. Yet, the type of urbanism regarding the different use of the public space between man and woman is known as urbanism with a gender perspective. Feminist urbanism goes beyond this and takes into account all those experiences of the city, those related to gender, and any other identity variable because it takes into account more than the white, middle-class and middle-aged woman. This type of urbanism seeks to acknowledge how "the different identity variables materialize in the urban space in the form of privileges and oppressions and generate different experiences" (Col-lectiu Punt 6, 2016). The aim is to be able to build an urban space that does not reproduce these interrelations and includes all individuals in the public space equitably. The objective of feminist urbanism is, therefore, to improve people's lives by valuing everyday needs in public space, moving away from an economic logic that has prioritized the use of private vehicles, zoning, and hegemony of uses, leaving aside care, exchange of experiences, community, and help among citizens (Col-lectiu Punt 6, 2019.).

Urbanism with a gender perspective and feminist urbanism are intimately related since, thanks to the first, many authors have highlighted the differences in the use of public space. The second is derived from this distinction and from studies that have highlighted the existence of a plurality of needs and the problems that this diversity of spaces entails. Feminist urbanism is based on reversing the invisibilization of needs related to reproductive tasks, those that go beyond money production (Moser y Levy, 1986; Moser, 1989; Campos, 1996; Levy, 1996, 2003; Walker et al., 2013; Gutierrez Valdivia, 2018). Some authors have pointed out the interrelations that take place in the city, for example, Beal (2010) argued that the interest and necessities go beyond gender, even within this identitarian variable the needs might be different. Moreover, "cities are a spatial expression of social relations, they are based on power and conflict but also cooperation and consensus, if the former is prioritised, understandably, women's needs have been ignored" (Beal, 2010). Although in the urbanism with gender perspective other minorities may be favoured indirectly, the intersectionality that the feminist urbanism is built on guarantees the equal representation of each minority in the space.

Finally, there is a multitude of names that relate to this type of urbanism, nurturing urbanism that highlights the role of care in society, inclusive urbanism to avoid introducing the word

feminist and to stress the importance of inclusivity, communitarian urbanism that stresses the importance of community within the society. Another related types of urbanism are children's urbanism, which is based on the ideas of the Italian psycho-pedagogist Francesco Tonucci. This type of urbanism is based on cities designed from children's perspective rather than adults'. Overall, these types of urbanism share the same root, deal with a type of planning based on capitalism (productivity) and systems of oppression. Meanwhile, the adjective feminist, according to the authors involved, tries to reflect the importance of women geographers who began to investigate gendered urbanism because of the oppression they suffered in public space.

2.2.3. Feminist urbanism aim

When talking about feminist urban planning, it seems to refer only to issues such as safety or the visibility of women. However, the "feminist critique of the gender bias of citizenship and the separation of public and private space, also points out how urbanism can contribute to removing the obstacles that prevent women from having equal access to public space and to the city as its spatial as its spatial embodiment" (Innerarity and Sancho, 2015; Sancho, 2020; Innerarty Grau, Acha Ugarte and Sancho Martinez, 2020). Regarding this, feminist urbanism aims to highlight the quantitative and qualitative impact that the reproductive tasks have in society, show that these tasks are held by women but without encouraging or naturalizing the gender division of jobs. Also, point out that not all human situations are the same and other identity variables must be taken into consideration. As Campos (1996) stated "attending to reproductive needs does not translate into sexed sectoring of spaces, but rather into preparing the space for a fairer and more equitable society in which the obligations that today continue to be assumed by the majority of women are shared by all the population" (Campos, 1996).

Ultimately, feminist urbanism aims to change the social parameters that currently value-productive activities more than reproductive ones so that each person can choose which activities to develop without these being defined by their gender. Also, urban planning should respond to the needs derived from the reproductive and care sphere through the urban configuration (Gutierrez Valdivia, 2018). Besides, Segovia and Rico (2017) explained that "approaching the management of daily life and care from the perspective of urban planning allows for a more holistic perspective of the processes and dynamics of the city, considering the daily life needs of the majority of women about urban planning at different scales: from large interventions at the central level to neighbourhoods or housing estates located on the periphery" (Segovia and Rico, 2017). The feminist demand seeks inclusion in citizenship to guarantee real equity in the public space despite gender or other variables. In contrast, many authors and urbanists claim that the cities have been built from a gender-neutral point of view. Yet, "any gender-neutral abstraction ends up being suspiciously masculine so that the "individual" turns out to be male (Phillips, 2002). This situation is preceded by the fact that "liberal individualism does not take into consideration relevant aspects for people that have to do with their identities, such as gender, and that condition their access to the public sphere" (Innerarty Grau, Acha Ugarte and Sancho Martinez, 2020).

To sum up, feminist urbanism demands the involvement of all the experiences of the city into the system of the city, the return to a city where the dichotomies are broken down and the cities became a space for all. The urban areas that we inhabit and design are based on a

socially and economically unfair set of values, changing the scene where all these inequalities happen is necessary to also change the social and economical inequalities. In other words, a structural change in the paradigm (Gutierrez Valdivia, 2018). For Leslie Kern (2020), a feminist city is a city that breaks the status quo by decentering the nuclear family and letting women and girls take up space and make relations on their terms. For that, the author claims the necessity of giving more value to the care jobs and social reproduction tasks, organizing the city without relying only on men as sources of economic and physical protection, and recognizing women's autonomy by their connectivity to friends, communities, and movements (Kern, 2020). A feminist city, claims Kern, "invites solidarity from everyone who wants to feel safe in the house and street and recognize the interrelations of gendered and with multiple other systems of privilege and oppression, refusing feminism was raising the status of the privilege of a white woman only as a marker of success" (Kern, 2020). Furthermore, some authors claim that this idealized city "may include broadening binary gender categories, recognising the intersections of gender with other social dimensions of power and the development of participatory methodologies in line with these broader conceptualisations" (Rachel Tolhurst et al, 2012; Gutierrez Valdivia 2020).

2.2.4. Feminist urbanism elements

As with the theory of walkability, some elements influence the city to be more equitable, these elements are the ones that are evaluated and taken into account when making policies that favour the development of feminist urbanism. Achieve a feminist city is not a matter of tearing everything apart and starting again, but questioning how the city has been designed, and how it continues a privilege and oppression system to reach new possibilities that can be set up (Kern, 2020). All in all, feminist urban authors agree on cities that put people at the centre of decisions, as well as daily reproductive activities through a holistic and intersectional perspective as Gutierrez Valdivia (2020) claimed to "rethinking the past and present to change the future, the prioritisation and valorisation of caring cities and development of activist streets" (Gutierrez Valdivia, 2020). Although there's not the only way to achieve a feminist city as every city is different and holds multiple realities, as Jane Jacobs claimed "cities have the capability of providing something for everybody, only because, and when, they are created by everybody' (Jacobs, 1961). Not only this but other feminist authors also pointed out that an intersectional perspective should be present to highlight how "different structural sources of inequality such as gender, ethnicity, class, and sexual identity are socially constructed and interrelated" (Platero Méndez 2014; Ortiz Escalante & Gutierrez Valdivia, 2015). As researchers acknowledged, "women's identities intersect with other social identities" (Molyneux 1985; Ortiz Escalante & Gutierrez Valdivia, 2015) and the way everything is connected is also part of urban life.

Later in 2019, the collective of architects, sociologists and urban planners of Barcelona Col-lectiu Punt 6 published a book in which, in addition to explaining feminist urbanism, they also wrote the basics to achieve a feminist city through urban variables. Understanding that cities are "complex networks of variables that interact with each other" (Col-lectiu Punt 6, 2019), it is necessary to know what they are and how they are interconnected. Thus, the collective establishes four physical variables (public and relational space, facilities and services, mobility and housing) and two that are transversal (participation and security) to build a feminist city as is shown in figure 2.

Feminist urbanism elements

Public and relational space	Facilities and services	Mobility	Governance

-Proximity
-Vitality
-Diversity
-Autonomy
-Representativeness
-Accesibility
-Safety infrastructure
-Furnitune
-Pedestrian connection

-Accessible
-Visible
-Useful intermediate areas
-well-designed interiors

-Accessible and diverse
-Daily and caring
-Safe and free
-Night-time and flexible

-Communication channels between all spheres of society
-Group work between those affected

Participation **Housing** **Equality education**

Security perception

-Visible
-Watched over
-Signposted
-Equipped
-Vital
-Communal

-Promotion of neighbourhood associations
-Daily schedules
-Channels of communication
-Social dynamics
-Type of groups
-Interests

-Flexible in typology
-Accessible for vulnerables
-Common intermediate areas
-Inside distribution of the house

Social media

Figure 2. Elements of feminist urbanism

<u>Public and relational space</u>
Although this may contradict the interest in breaking with the public-private dichotomy of urban space, the collective stresses that the term is used for a better understanding of the discourse. The use we make of public space will depend on the variables that identify us, i.e. women's use of public space is different from men's, just as a child does not use public space in the same way as an elderly person does. It is important, says the collective, to rethink how we are using and designing public space. Besides, focus on the importance of measuring and evaluating accessibility, safety, street furniture and transportation infrastructures for the use of public space. They establish 5 criteria of public space that need to be addressed to achieve a feminist city:

- The proximity between spaces of priority daily use;
- Vitality through the continuous presence of people to favour socialisation;
- Social diversity of people, activities and uses;
- Autonomy of people within the physical space;
- Representativeness through recognition and the real and symbolic visibility of the community to value memory.

Facilities and services

These are everyday infrastructures that are indispensable for the support and improvement of people's lives in all stages of their lives. Moreover, "they are reference spaces in the neighbourhood, generating coexistence, socialisation and help among neighbours" (Col-lectiu Punt 6, 2019). These services and facilities are citizen services for administrative procedures, care spaces for the elderly, educational centres for children from 0 to the minimum compulsory education age, health centres, cultural centres, sports centres, etc. The group establishes some basic criteria that these facilities and services should include:

- The location should promote autonomy and accessibility, by favouring sustainable modes of transport and safe paths.;
- The intermediate access spaces should cater for the diversity of the population and care tasks;
- The interior spaces should help the needs of the diversity of working and non-working people, well signposted and taking into account the needs and schedules of the daily life of the neighbours.

Mobility

The way humans move within the city relies on the options of transport and many other variables such as race, social status, race or having dependants. This is why the geographer Carma Miralles-Guasch pointed out the democratising character of mobility, considering that to get more people on the streets it would be necessary to adapt the policies that organise mobility to the individual characteristics of citizens as well as to their daily rhythms (Miralles-Guasch, 2010 retrieved from Col-lectiu Punt 6, 2019). The design of transport infrastructures, as well as the city of which it is a part, have been designed based on a functionalist territorial logic that has prioritised mobility to jobs, which are generally far from where the house is located. In this way, the Col-lectiu Punt 6 mentions that in Barcelona, as in many other cities, low-income women who tend to work in care for wealthy families, are obliged to run "marathons" on a public transport network that does not favour intermodality to get to their jobs, as most of them do not have access to a car (Col-lectiu Punt 6, 2019).

Also, the collective has analysed the mobility patterns of women, detecting several aspects that affect mobility: Firstly, the feminisation of poverty, i.e. women are poorer than men and therefore commuting to jobs, having access to leisure areas or escorting dependants will be limited by access to cheap means of transport. Moreover, this situation is aggravated when it is crossed with variables of class, migrant status or sexuality; Secondly, transport networks do not allow for efficient intermodality, there's an inefficiency to generate an accessible and easy connection between different modes of transport limits the movement of people, mainly those who have no other way of getting around or who carry out movements related to care, particularly women, and especially those from the middle and lower classes; Finally, the perception of safety is a key aspect of people's mobility. Although for women it is sexist violence, racist or homophobic attacks and the time of the day are important handicaps when it comes to deciding which mode of transport to use. Therefore, the criteria that mobility needs to achieve to become a feminist city is:

- Accessible and diverse: mobility must respond to the variety of needs (physical accessibility barriers), rhythms (overcrowding at peak hours), bodies (children, elderly, disabled people, etc.), health conditions (claustrophobic or covid situation)

and economic levels. In general, the streets should be functionally diverse, with different uses, types of shops, facilities, housing, etc. (Col-lectiu Punt 6, 2019)

- Day-to-day and caring: mobility should be thought of in terms of functionally useful and intermodal routes, not just productive ones. The different companies that manage different levels of transport together with institutions (Spanish's case) are rarely coordinated in terms of timetables, connections or waiting places. It is necessary to ensure safe, physically and economically accessible access to workplaces, as well as to transport facilities and services.

- Safe and free: the perception of safety is very important for the choice of transport modes. The collective points out the principles of women's safety when thinking about mobility infrastructures. These must be vital, well maintained and cared for formally and informally, equipped, signposted, visible and communal so that no one has to restrict their movements. In addition, mobility must guarantee road safety and autonomy for all, especially those who are dependent.

- Night-time and flexibility: in mobility planning, nighttime is forgotten, it is important to bear in mind that mobility does not disappear when the sun goes down. It must respond to the needs not only of leisure, as is often understood but also of the population that works night shifts and makes it possible for the world to function 24 hours a day. In this sense, many women working in cleaning or hospital jobs are faced with unsafe journeys home or to work and few public transport options.

Housing

Even though the house is considered a resting place for most women it is a workplace. As part of the system of oppression due to the roles assigned to each role and the current family situation. For example, in Barcelona, just 30% of the households correspond to traditional family households (couples with kids) (Col-lectiu Punt 6, 2019). Hence, it is key to consider housing as part of feminist urbanism. However, in favour of this research, the distribution of the interior of the houses will be mentioned as a problem in the preservation of gender roles and ineffectiveness in the face of different family realities but it will not be fully explained. Regarding the U.S.A. and Europe owning a house have become a natural thing while other types of housing have received less support (Col-lectiu Punt 6, 2019). Moreover, from the Col-lectiu Punt 6, some ideas are suggested, taking into account that there is no single and valid solution for typology, ownership and urban conformation. Hence, there should be flexibility in the typology to be able to adapt to different moments in life so that access to housing is guaranteed. It is necessary to insist on the difficult access to housing for certain groups, in the case of women, due to the feminisation of poverty, which is aggravated when they belong to racialized groups, migrants or are part of single-parent households.

Participation

The only way of ensuring all the experiences are heard is through active participation of citizens as they are the ones living there and that will take advantage of the changes. Participation might take many forms, it is important to give attention to community movements already existent and to have an intention to make a binding and quality participation. Participation processes in urbanism are known to be more efficient in the long run as it is the result of a bigger political legitimation and the common knowledge of

institutions, technicians and neighbours (Col-lectiu Punt 6, 2019). Taking into account other experiences can lead to giving attention to problems not seen before such as the importance of the reproductive sphere, how people socialize, how it is to be sexualized, what implications have the gender roles, how we use the space and why some people don't. To do so, if there is an aim to incorporate a diversity of perspectives and realities it is important to take into account how the participation is communicated, what are the mechanisms and strategies, how is the process carried out, if how the groups are constructed (by mixed or equal identitarian variables) so there's no hierarchy, when in the process schedule, etc. The procedure that the collective uses is creating different identity groups first and after the first diagnosis, common group work is done to share the analysis and to create an intersectional analysis.

<u>Security perception</u>
Security and insecurity might change from one person to another and these differences also affect moving freely inside the city. Researchers have shown that insecurity is linked to a lower sense of belonging and less participation of these collectives in the city, therefore people might think they don't belong to the city. By including other perspectives into security perception might help to ensure security from the effect of the urbanistic perspective on free mobility and not only through the restrictive strategies that have been used. Without using insecurity as a way of politicizing speeches to stigmatize other collectives, the role of this element is to study what is creating insecurity and how to solve it. During the 80s the Canadian feminist movement started conducting women's safety audits, through exploratory walks around neighbourhoods that generated a qualitative database on what elements of the city promoted insecurity. In Spain, these exploratory walks have resulted in "maps of the forbidden city" (Basque Country). Based on the Canadian feminist work, the Col-lectiu Punt 6 considers that an environment is safe if it is:

- Visible: it is possible to visualise all the elements and locate possible exits, as well as providing symbolic and social visibility of women as active subjects in society;
- Watched over: informally and without authoritarianism as Jane Jacobs pointed out with the "eyes on the street" and the meaning of "taking care";
- Signposted: that is, it has legible signs that help to understand the city and orientate oneself in it;
- Equipped: with activities and infrastructures that are necessary for daily life, tasks, mobility, needs and socialisation;
- Vital: by guaranteeing people and activities;
- Communal: it favours the feeling of belonging, reinforcing social cohesion and participation.

Among these elements of Col-lectiu Punt 6, the research provided by Innerarity, Acha and Sancho Martinez (2020) used elements to evaluate cities on gender and equality based on the New Urban Agenda of 2016 from Habitat III Conference. Although some elements coincide with the previous ones, they added governance, an increase of education for equality and the implication of social media.

<u>Governance</u>
Establishment of communication channels between areas in charge of Urban Planning, Equality, Housing, Transport, Security, etc. together with partner institutions and

neighbourhood associations as well as neighbours. Also the "introduction of elements of analysis and measurement of the equality impact of actions with gender-disaggregated indicators or gender budgeting" (UN, 2017: 92, 151; Innerarity, Acha, Sancho Martinez, 2020).

Education for equality
The emphasis is placed on the importance of equality training for policy actors (Charter, 1995, principles 9 and 10; Innerarity, Acha, Sancho Martinez, 2020). Quality training of the people who will carry out urban planning and design processes, together with those who develop participatory processes, is necessary to ensure an intersectional gender perspective in public policies. This will make it more difficult to fall back on the same principles of "neutral" urbanism. Also, education for equality from an early stage will help in developing a fairer society.

Social media
The published image of women and other vulnerable groups can be decisive in generating stigma and losing a sense of belonging or, on the contrary, in fostering social cohesion. A neutral image is required where certain bodies are not sexualised and where political discourse is not used to stigmatise population groups, which is why it is necessary to act on the media and public opinion to combat gender stereotypes (Carta, 1995:11; Innerarity, Acha, Sancho Martinez, 2020). This element, although it plays an important role in the public image of both urban planning itself and the image of vulnerable groups, is the least related to spatial planning or mobility and therefore, this study will not focus on it although it will be mentioned.

Together, they create the elements of a feminist city. These elements create synergies between each other, the optimal approach would be to evaluate and work on all elements as changes in one will affect the others. As an example of this connection, medical facilities that are built without taking into account the location and without a channel of participation or communication with transport areas can lead to a disconnection with the citizens who have to move around to get to their medical appointments. In general, these journeys, if they are not provided with public transport or pedestrian access routes, will be made by private car, which will leave out all those who do not have access to a private vehicle.

In conclusion, feminist urbanism started many decades ago but not until recently has become a strong urbanistic paradigm. The definition of feminist urbanism might be misunderstood by the gender aspect but far from that, this urbanistic paradigm seeks to include all the identitarian variables of the society to achieve a fairer city where everyone can be represented and feel welcome in the city. Moreover, feminist urbanism seeks to break down the gender stereotypes and the status quo of the public space by giving value to reproductive tasks. Although it doesn't exist a one-way to achieve a feminist city, some elements must be taken into consideration, starting with a change in "the lenses" through which we see the city (Kern, 2020) to be aware of this system of privileges and oppressions to finally and through citizen participation be able to have a fairer city.

After this section of the theoretical framework where the concepts were defined, there's an explanation of the case study of Barcelona where there will be a description of the city, its urbanism, mobility and feminist policies.

3. Case study: Barcelona

"In the Mediterranean city, the meeting and gathering place is the public space. It is the symbolic place where city, democracy and politics meet. Public space marks the limits of the idea of the city, without it, one can speak of urbanisation, but hardly of a city"
(Rueda, 2013)

This section will try to explain the case study of Barcelona to better understand its choice. First of all, an explanation of some key aspects of Barcelona, such as the geographical and political aspects. After that, a description of the urban planning history and the current urban plan. Finally, there will be a description of the superblocks and the pedestrian pacification areas, the new low emission area of Barcelona and the latest policies with a feminist perspective.

Although the term case study is used, due to problems unrelated to the study, it has not been possible to carry out a proper case study with direct observation and in-person interviews.The case study is therefore used to give a practical example of a city that is putting both concepts into practice and what the reality of these concepts is through interviews with neighbourhood associations. However, during the research, we also take into account the testimonies of researchers from outside the city and even at an international level.

3.1. Barcelona in short

Barcelona is the capital of the Autonomous Community of Catalonia, also known as Generalitat de Catalunya, in the northwest of the Iberian Peninsula. Barcelona is the second most populated city in Spain and one of the most populated cities in the European Union with a total of 1.664.162 inhabitants in 2020 (Padron Municipal Continuo - Municipal Continuous Register Statistics as of 1 January 2020, Instituto Nacional de Estadistica - National Institute of Statistics). Given its influence, it forms part of a metropolitan area of 3,339,279 km² in 2020 (Àrea Metropolitana de Barcelona - Metropolitan Area of Barcelona, 2020) with a total of 4,895,876 inhabitants in 2019 (Padron Municipal Continuo as of 1 January 2020, Instituto Nacional de Estadistica). Today Barcelona is a big city, with international ambition, facing the same problems as other cities in the world: climate change, social justice, secondary effects of tourism, economic and health crises, etc.

3.1.1. Political structure

As the capital of the Autonomous Community of Catalonia, Barcelona has numerous public administrations at different levels:

- the General State Administration deals with issues such as security, justice, port and airport management, among others;
- The 'Generalitat de Catalunya' (Catalonia's Government) is the regional government of Catalonia, it has broad powers ranging from education, social affairs, economic policies, etc.;

- The Diputació de Barcelona (the Province government) is the public body with the least powers in the city;
- Barcelona Metropolitan Area, its work focuses on social cohesion, territorial and urban planning, mobility, transport, waste management, water supply, environment, social housing, infrastructure and economic promotion of the metropolitan area.
- Barcelona City Council is the body with the most powers and civil servants in the city, as it regulates the daily life of the citizens, and important matters such as urban planning, transport, municipal tax collection, emergency bodies such as the Urban Guard and the Barcelona Fire Brigade, maintenance of public roads (asphalting, cleaning...) and gardens.

Currently and since 2015, the Mayor of Barcelona is Ada Colau, from the political party Barcelona en Comú (BComú), although she governs in coalition with the Socialist Party of Catalonia (PSC) and with the political support of other political parties.

3.1.2. Urban planning, Cerdá´s Plan and the Eixample

The urban history of Barcelona is quite long, from the Roman city to the present day the layers of history are overlapped in its grid. During the mid-19th century the city was behind the city walls before it experienced a big growth due to industrialisation, especially the textile industry, which led to a need for expansion. The development outside the walls of Barcelona was planned by Ildefonso Cerdá's Eixample (Extension) plan. Among other urbanistic projects, Barcelona's Eixample is the most famous and outstanding, since it started a new way of urbanisation in Spain which, although with differences, is still being used in the country.

Figure 3: Picture of Eixample of Barcelona (Source: Ajuntament de Barcelona)

The Eixample was built under the Cerdá Plan at the end of the 19th century and the beginning of the 20th century as part of a growing process of new urban development projects. The citizens of Barcelona and their government initially rejected the proposal as it was an imposition from the Central Government of Spain and wasted space in too many green areas (Ajuntament de Barcelona, 2020). Eventually, Cerdá's Plan was accepted and

built but from the initial idea, much has changed. Cerdà's plan was based on a large, uniform network of perpendicular streets and cross streets except for two superimposed cross streets. At the point where these axes met, a large square was to be built. The architect envisaged the uniform distribution of service areas, such as markets, social centres and churches, as well as large parks so that all citizens, regardless of social class, could live there.

Inside each block, the structure was only allowed to be built on one or two edges of the block, and the rest of the space was left for the neighbours' gardens. The houses were not to be more than a certain height to allow all floors to have daylight. Cerdà conceived it this way because he considered that the health of the citizens depended on whether they lived in well-lit houses through which the clean air from the gardens circulated. This followed the hygienist trend in urban planning that prevailed at the time. Outside of the block, the streets were designed for the passage of horse-drawn carriages and trams. To facilitate visibility, the corners were cut off at the corners to form chamfers. In addition, the Cerdá's plan also included large parks in each neighbourhood and other activities such as hippodromes and hospital facilities. The engineer understood that in human life there were two fundamental behaviours, movement and rest, so he planned a city where these two behaviours could be performed, streets for movement and places for rest within each block (Muñoz Álvarez, 2009). In short, Cerdà wanted to create a city that would avoid the crowding of houses in the old city.

3.1.3. Current Urban Mobility Plan

Before the current plan, the Barcelona Urban Mobility Plan 2013-2018 was already intended to provide guidelines for mobility, with a clear focus on sustainability (Ajuntament de Barcelona, 2013). Together with the urban planning area, it attempted to introduce the concept of superblocks. It was not until the introduction of the new mobility plan under the BComú and PSC government that the superblocks were implemented in 2016.

With the first superblock actions already in place, the Barcelona Urban Mobility Plan 2024 sets the goal that by 2024 81.52% of journeys will be made by public transport or active mobility (Ajuntament de Barcelona, 2015). The plan is organised into 5 areas: safe, sustainable, healthy, equitable and intelligent mobility. These actions include measures to reduce parking and increase the number of pedestrianised streets, remove obstacles to pedestrians and reduce road traffic near schools (Ajuntament de Barcelona, 2015).

3.2. Super Blocks, Low Emission Zone and pedestrian-friendly areas

The Superblock concept was described by Salvador Rueda, the director of the Urban Ecology Agency of Barcelona (García, 2016). This agency is a municipal entity in charge of developing projects to reorient the management of cities towards a more sustainable model by providing solutions in various urban areas and they have designed some of the Superblocks. The superblocks are considered urban cells that group 9 of the blocks of the Eixample (3x3 grid) where the passage of motor vehicles is restricted inside the grid and public space dedicated to active mobility and rest is prioritised (Agència d'Ecologia Urbana

de Barcelona- Urban Ecology Agency of Barcelona, 2013.). In theory, this superblock idea was born with the purpose of a city that offers a better quality of life for visitors and residents, increases space for cyclists and pedestrians, reduces pollution and encourages life on the street and in the community, without the need for car use (Agència d'Ecologia Urbana de Barcelona, 2013).
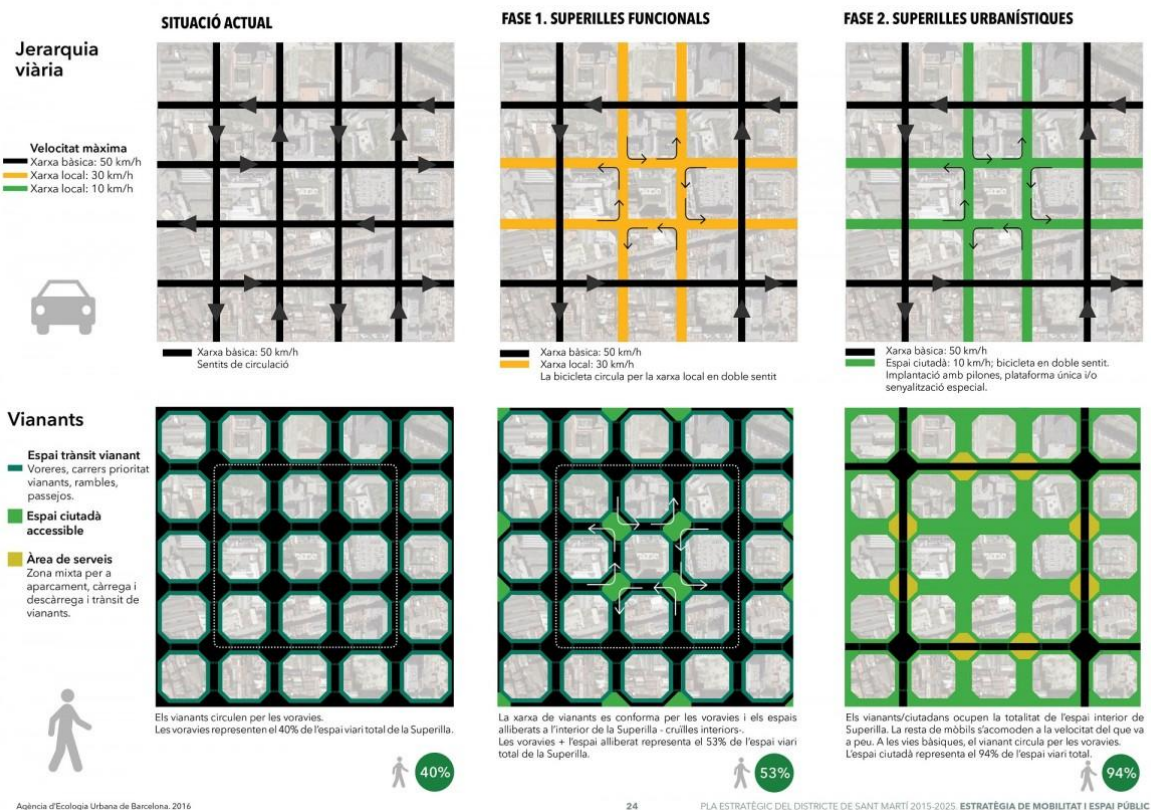

Figure 4: development of a SuperBlock (Source: Ajuntament de Barcelona)

In Barcelona, a pilot test started in the Poblenou neighbourhood in 2016 and there are currently 5 superblocks working but the intention of the city council is for Barcelona to become a superblock itself. At the end of 2020, Mayor Ada Colau announced the introduction of three new superblocks to join the five existing ones in Poblenou, Horta, Les Corts, Hostafrancs and Sant Antoni (Benavides, 2019-2020). Although they have been criticised at first, the positive results appear in the statistics: less traffic, less noise, lower temperature, increased physical activity, etc. (Riba, 2021). However, gentrification processes are also appearing, which we are trying to avoid through social housing projects and rent regulation to prevent the overcrowding of tourist flats.

Superblocks are approved or designed in several Spanish cities of different typologies, such as Vitoria-Gasteiz (winner of the European Green Capital Award 2012 and whose Mobility and Public Space Plan, based on Superblocks, is known as Best Practice by UN-Habitat).The municipalities of A Coruña, Ferrol, Viladecans, and the neighbourhoods of Gràcia and El Prat in Barcelona already have superblocks that have won the First Prize BMW Initiative 2011 and have been recognised as Good Practice by Un-Habitat in 2010 (Agència d'Ecologia Urbana de Barcelona, n. d.).

Moreover, in its intention to reduce air pollution in the city, the municipality decided to create a Low Emission Zone (LEZ) known as the Rondas Low Emission Zone (in-between ring roads). This LEZ started on 1 January 2020 with an area of 95 square kilometres. Vehicles that do not have the environmental sticker of the Dirección General de Tráfico (Spanish Directorate General of Traffic) are not allowed to circulate inside the LEZ, with the penalty of economic sanctions from 9 months after the implementation. There are some exceptions with the cars allowed inside the LEZ, such as emergency vehicles, delivery vehicles, vehicles for disabled people, etc. The environmental badge means that the most polluting cars will not be allowed to enter the LEZ, especially older cars. Not only at the municipal level, but the Metropolitan Area of Barcelona has also created a metropolitan LEZwhich includes the LEZ of Rondas de Barcelona. This LEZ is much less restrictive than that of the city.

Figure 5: picture of Sant Antoni Superblock (Source: El periodico)

In terms of pedestrian-friendly streets, an important movement called Revolta Escolar (School Revolt) in Barcelona has had an important impact on the pedestrianization of schools' surroundings. Although it was part of the Mobility Plan of the city, the pressure of the school's demonstration on the streets claiming for safe and healthy streets around schools has accelerated the process. Following the pedestrian-friendly streets aim, the project Obrim Carrers (Open Streets) started in 2020 although the pandemic situation stopped it. The idea was to open some streets in all neighbourhoods for pedestrians so they can walk, play or rest. The covid-19 situation had accelerated the process of pedestrianization of some streets that started as Open Streets and now are "pacified" with tactical urbanism. The need for equal distribution of public space after the lockdown in March 2020 was a turning point to change the city model in favour of active mobility.

3.3. Feminist urbanism in Barcelona

In 2017 the area of Ecology, Urbanism and Mobility of the city of Barcelona published a package of measures framed within feminist urbanism, *Urbanism with a gender perspective,*

the urbanism of everyday life (Blanchar, 2020). Starting with the definition and the justification of the new measure, the document tries to explain what objectives and which methodology to follow to work with this type of urbanism. The municipality aims to solve the inequalities so all needs of the population are achieved equitably without discrimination because of gender, economy, origin, age, abilities, etc. (Ajuntament de Barcelona, 2017). Therefore, the Ecology, Urbanism and Mobility area and the Equity area have created a feminist urbanism guide to applying in new projects or re-urbanisation of the city (Blanchar, 2020).

The projects are held at intro levels, from the city as a whole with the Urban Mobility Plan of Barcelona 2019-2024, to some districts with mobility plans and a few neighbourhoods. The idea is to have a gender perspective input in all mobility and urbanism plans so different perspectives are taken into account through different methods. Also, at the neighbourhood level, some collectives, associations and municipalities are doing some explorative walks as a participation methodology (Ajuntament Barcelona, n.d.).

Figure 6: picture of one of the exploratory walks of Equal Saree (Source:Equal Saree)

Before all that happened, in 2004 the Spanish Neighbourhood Law was approved within unseen social and urban measures. Out of 8 basic points to be developed, point 6 was gender equity in the use of urban space and facilities. It was this sixth point that gave the name to the worker cooperative made up of female architects, sociologists and urban planners, Col-lectiu Punt 6. This collective has worked since then to achieve fair cities through training, creation of guides, research, urban consultancy, audits and different projects. Also, they have organized some of the explorative walks in the neighbourhoods to detect problems and necessities to improve women mobility. As a consequence, the city of Barcelona intends to use the gender perspective of feminist urbanism in new plans, projects and measures like new Superblocks or pedestrianization so new city developments might be fairer.

4. Conceptual Framework

*The aim of urban planning should be to be able to enjoy inclusive cities that take into
account the real diversity that characterises urban spaces and thus make it possible for
the right to the city to be a human right for all people"*
(Muxi Martínez et al, p. 105).

The theoretical framework has shown some benefits, objectives and elements of walkability
and feminist urbanism respectively. After section 2, it is possible to establish many
similarities and differences between the two concepts. The conceptual framework aims to
work on the elements as some of the benefits and objectives are already similar. This
connection is necesary to understand how each concept works to help solve the question on
how can feminist urbanism help walkability? To do so, the conceptual framework defines the
connections inside walkability elements in section 4.1. After that, the conceptual framework
explains how these elements are connected to the ones of feminist urbanism, in section 4.2.
Finally, it explains how these concepts can help each other at the end of section 4.2.

4.1. Inside walkability elements

The elements of walkability are developed by creating a system of connections between
them. Within this system, several connections need to be explained. Figure 7 illustrates the
different linkages that take place in the walkability concept. As it is shown, most of the
influences take place from the built environment to the individual experience of the city. The
perception of each individual is therefore conditioned by a certain number of urban built
factors that the individual cannot control. Thus, this built environment will affect his or her
behaviour, in this case on their mobility behaviour. Moreover, within the built environment, a
series of internal dynamics are established where land use is the main influencer since it is
where the rest of the city's structures will be located. As mentioned in the theoretical
framework, geographical elements also play a role in walkability and although it is mentioned
and depicted in the figures, this research will only focus on the influence of the urban built
environment in mobility. The elements of walkability create a system of influences inside the
public space, therefore a change in one of them generates a "domino effect" that affects the
others like gears. Hence, all of them must be taken into account when developing urban
mobility policies.

Firstly, within the urban built environment element, land use is largely referred to in
walkability literature because it groups the purpose of the land (for housing, for commercial,
for leisure), the size (how big it is) and the actual use of the land (if it is built or not).
Therefore, land use integrates those components referring to the size of the blocks, since if
they are considerably big the walking distance is greater; to the type of land use, as the
variety promotes accessibility to basic needs; the perception of safety, avoiding empty land
uses; and the perception of the enclosure, avoiding excessively narrow streets or the
opposite, if the street is to big it might be perceived as a barrier. As it establishes the basis of
the city's land, this element is the one that influences all the other elements (figure 7).
Moreover, land use determines what type of infrastructure, both physical and transportation,
is going to be built. For example, defining a low-density city, by grouping similar services
away from residential use, facilitates longer distances that will be solved by constructing a
transportation system. Examples in the USA cities show that this type of situation benefits

private motorised vehicles more than public transportation networks, as Handy (2005) explained. Contrary to that, compact and mixed land uses tend to be more practical and accessible for active mobility commuters (Speck, 2012). Land use also affects the grid of the city, as Jane Jacobs in 1961 claimed that bigger blocks would influence the walking behaviour, making it more difficult as distances were bigger. Also, low density and bigger blocks created by land use raise the number of linear movements that tend to be by car because of the lack of accessibility in public transport or active mobility. Moreover, low-density cities and bigger blocks increase the dependency of vulnerable groups and isolate them when there are not enough modes of transport available. In the same way, empty blocks, due to lack of a purpose in the land use planning, will create an insecure feeling for pedestrians. Although it has only been explained the negative influence of the land use on the rest of the elements, the opposite way will positively benefit the rest of the elements.

Walkability elements
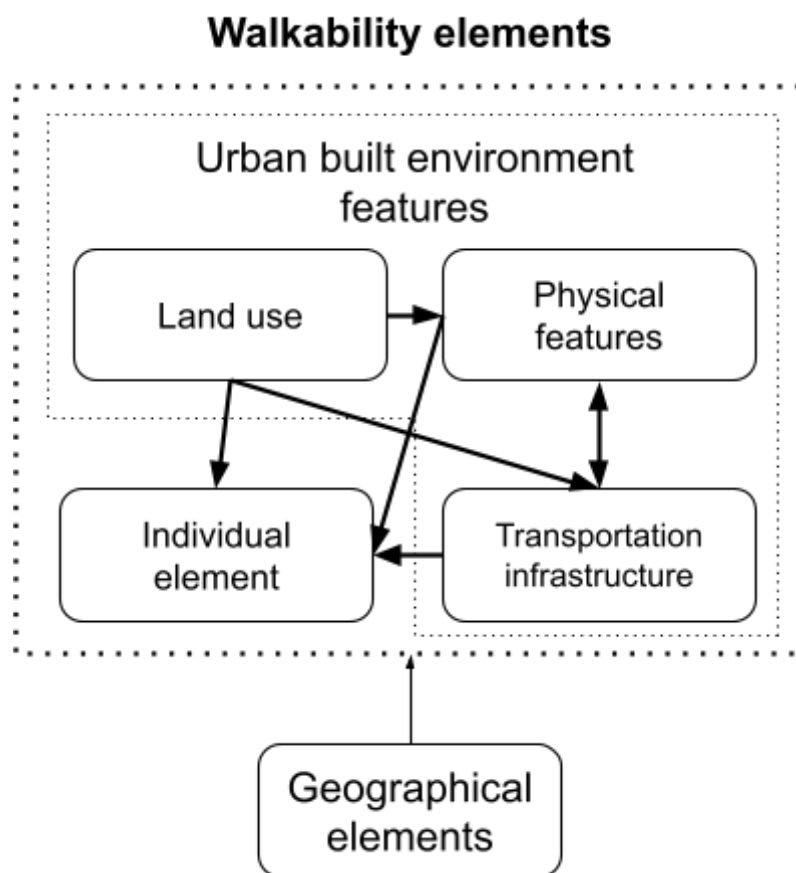
Figure 7: connections between walkability elements

Secondly, the physical features, as part of urban design, define "the set of artificial structures, interconnected physically or functionally" (Bobylev, 2011; Bobylev & Jefferson, 2014). This element can be misunderstood with the transportation system, but this last one is in charge of all the types of transport and its infrastructure to create a connected system. Physical features, on the other hand, provide light, water and sanitation services but also urban furniture. It can be distinguished by signalizing city elements and quality lighting, which helps pedestrian orientation and safety perception. Besides, the construction of gathering places through urban furniture enhances sociability in the street and also safety

perception. In addition, physical features also include trees or urban nature, especially for creating natural canopies to protect from atmospheric conditions.

Thirdly, transportation infrastructure includes all the city mobility design, from roads and sidewalks to parking lots, subway tunnels or elements to control traffic movement. Walkability's transportation infrastructure tries to break with the current structure of transport modes. That is, reducing the space taken up by cars and other motorised vehicles, reducing parking spaces, reducing the width of roads, structuring street types or traffic calming measures. At the same time, increasing and securing the spaces in the street for active mobility, in this case, walking but also for socialising, resting, or simply being in the street. Regarding the connections, physical features and transportation infrastructure establishes a particular relationship. Both are city infrastructure that has been intentionally divided in this research. The prioritization of only one mode of transport, named motorised vehicles, has led to less space available for active mobility transportation and therefore less space for infrastructure for non-transportation purposes, like gathering places or green areas. Hence, the street furniture is built up to prevent active and collective modes of transport safe from cars instead of enhancing other activities. Coordination between those two types of infrastructure, physical and transportation, is needed to construct a fairer and equitable social city space that both encourages mobility and livability. In a city where infrastructures are put together around car mobility, is lacking on citizenship infrastructure, the street furniture tries to assure safety for pedestrians from cars with fences, street lights facing the road instead of pavements and signals for cars instead of gathering places for inhabitants, street light for pedestrians or barriers for cars to pedestrianized streets (traffic calming measures). Moreover, the transportation system needs physical features like benches for leisure hikes or bins next to the road as well as the signalization of different city elements.

Finally, the social element of walkability groups the behavioural actions resulting from the influence of the previous elements. This individual perception, previously divided into security perception, sense of belonging and motivation for walking, is key to achieving a walkable city. All urban built environment and geographical elements directly affect the individual element, as explained above with the previous elements. On one hand, linear movements that cars normally do, are known for their disadvantages to both physical and mental health, as is illustrated in section 2.1. On the other hand, active mobility is known for its benefits, especially through pedestrianization, as Gehl (2011) and Yassin (2019) claimed, by enabling relationships with neighbours or by reducing noise. Moreover, it also improves physical and mental health and decreases pollution as shown in section 2.1.1. Safe and comfortable places to wait for public transport also induce their use because it creates a sense of safety for humans. Besides, physical features, like lighting and signalization are important for citizens' safety perception. Apart from this, some studies have claimed the importance of urban furniture that allows citizens to stay in the public space, like benches that can be used for waiting or stopping in case of need, street bins, bathrooms, or children parks and water fountains. If designers take into account the changes in society like technology, charging points in the city will be included more often. All these infrastructures will have benefits on people's beliefs of the public space and therefore increase walkability.

4.2. Walkability inside feminist urbanism

Through the theoretical framework, the first connections can be established between walkability and feminist urbanism. Although, walkability does not fall within the feminist urbanism's theory, on a practical level there are several similarities. By studying the elements of both concepts it is possible to highlight common elements, especially those referring to land use, the physical elements of the street, the transport infrastructure and the social or individual element.

What it is undeniable after the theoretical research on both terms is that the built environment influences individual perspective and that culture or societal norms influence how the built environment is built (Southworth, 2005; Rafi Manzelat, 2017; Gutierrez Valdivia, 2018; Knapskog, 2019; Kern, 2020). Culture or social structures might vary depending on the hemisphere, country or size, making it difficult to establish a list of all the norms that influence but it is unquestionable the influences that they have on the city as it is a human construction (Gutiérrez Valdivia, 2018). However, some global societal norms influence the majority of societies, are sexism, racism, homophobia or others as feminist urbanism has claimed (Kern, 2020). This type of values have created the cities and continues to steer some designs nowadays, creating a vicious loop. As an example, the sprawl urbanization (either in residential houses like in the states or in big blocks in some parts of Europe) was not created on purpose for isolation of minorities but was created under productive values (associated with men) were the only movements that mattered or were take into account were those from home to work, completely ignoring any other type of movements such as shopping, picking up children or going out with friends. As jobs tend to be far from the residential areas, it creates a necessity for car use (land use and transportation system) especially when the new are not well connected by public transportation. Many were devised to bring together similar social groups inside an area to increase security within that community and tend to enhance the private leisure areas inside their community, therefore the socialization and security are lower outside (individual's safety perception) (Ciocoletto, Gutierrez Valdivia & Ortiz Escalante, 2014; Lopez, 2020).

This type of new urban eareas result is a neighbourhood where children depend on their parents to move everywhere, they lose their independence by "forcing" adults to take care of them, a task normally done by women, as it was shown in section 2.2 of feminist urbanism. In addition, the rest of the tasks related to households, also done by women, (polygonal movements) will take place inside a car because of the long-distance and the lack of good public transportation network that tend to appear in these areas. This situation creates a loop where the urban built environment is created under a set of values of a social structure that affects the individual perception of the city and therefore its behaviour, not only in mobility terms. As individuals' behaviour is influenced by the urban built environment, among other factors, it perpetuates this set of values and social structures (Lopez, 2020).

In the case of feminist urbanism, active mobility, especially mobility on foot (for people without physical disabilities) is understood as accessible to all, democratising the city (Speck, 2012; El Messeidy, 2019). This is why concepts such as walkability could be within this urban planning paradigm. Of course, the mobility of the feminist city is not only about walkability, the feminist city of the fuutre values active modes of transport as well as public transport, private vehicles and motorbikes inside a multymodal system of transportation.

Both concepts call for compact cities of varied land use, as explained in sections 2.1 of walkability and 2.2. of feminist urbanism. Mixed land use increases the proximity of basic services for day-to-day life and therefore the possibility of walking and fostering the independence of vulnerable ones. In addition, this raises the chances of meeting people in the street, which increases the sense of safety, the feeling of belonging and the vitality of the streets (Jacobs, 1961). In both concepts, they claim for meeting places produced by land uses such as parks, squares, playgrounds, etc. that favour the diversity of the population in the street (Speck, 2012). In line with socialisation zones, benches in squares or accessible playgrounds in urban furnishings also fulfil these social objectives. Also within physical elements, signs and lighting help pedestrians, especially at night, to be visible and to be able to see and locate themselves in the city.

In the case of transport infrastructure, it plays a fundamental role in balancing the division of transport space in the city as a reduction of road transport in favour of sustainable modes of transport generates safer environments, lower noise and pollution levels as well as increased street life. In general, it is not only the reduction of motorised vehicles that contributes to a more walkable and fairer city but also the development of a connected transport network, public or private, motorised or not (Speck, 2012; Col-lectiu Punt 6, 2019).

In addition to the common elements found within the theory, it is interesting how the latter establishes criteria for the development of fair mobility. These criteria include accessibility and diversity since not all people are equal and in the case of walkability, the "neutral" pedestrian is used, which does not represent the whole of society (Ortiz Escalante & Gutierrrez Valdivia, 2015). Feminist mobility must be based on principles of everyday life and care and not only for productivity and it must be safe and free, something it has in common with walkability already. Finally, mobility has to be flexible, it has to be adapted to people and their rhythms and it has to be night-time, i.e. not only festive and leisure, but also has to serve those people who work at night (Col-lectiu Punt 6, 2019). These objectives, similarities in objectives, elements and roots might be a reason that walkability could be an element of feminist urbanism and that the elements and values provided by the latter favour fairer walkability. Moreover, feminist urbanism might be a guide for urban procedures as it values everyday elements within an intersectional, equity and inclusive perspective.
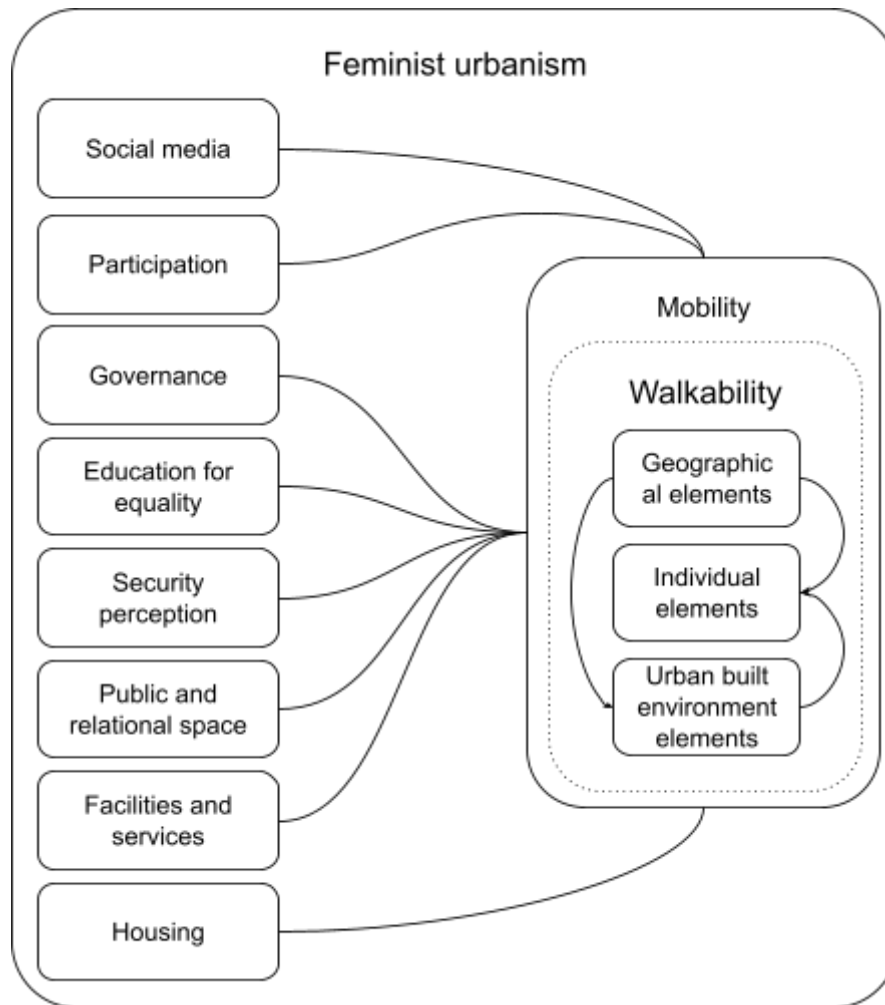
Figure 8: walkability elements inside feminist urbanism elements

The elements of feminist urbanism, like those of walkability, establish a system of connections where changes in one of them affect the rest directly or indirectly. This leads to a holistic approach to policymaking in any of these elements. Although connections are important in understanding this type of urbanism, the scope of this conceptual framework is limited to addressing how the elements of feminist urbanism interact with mobility, of which walkability belongs. Within these connections, those between services and facilities, perceptions of safety, security, public and relational space and mobility are related to walkability elements, the connections of these elements are related to land use and infrastructures mostly so they have already been mentioned. Whereas, housing affects mobility differently, firstly because of land use as the location of housing in residential areas tends to increase distances to work. Secondly, the difficulty of access to housing for single-parent, racialised or young families does not improve this situation. Another existing connection is the lack of education for equality by society and especially by the authorities who carry out plans related to the city. This is important for successful governance and participation, i.e. communication between the different actors involved is important as well as participatory processes, but it is of no use if they are still organised to give voice to one social group. Therefore, education plays a crucial role in society. Governance, especially communication between different areas of government with society, through binding participatory processes, is key for all experiences of the city to be used in spatial planning.

Finally, social networks and the media play an important role, as they are the loudspeakers that society listens to. The media influence how we view certain modes of transport, for better or for worse.

Nevertheless, those areas that implemented walkability, can influence elements that are evaluated in feminist urbanism. This is the case of walkable areas, where it increases the space for neighbourhood relationships and the feeling of belonging and safety perception. Also, when pedestrianization policies are developed, it increases the standard of living and the price of housing, this starts processes of gentrification. Also, due to the greater connection between neighbours in a street or neighbourhood, participatory processes through neighbourhood associations are more effective.

As feminist urbanism points out, the prioritization of one element over another could lead to policies that continue a system of oppression. Feminist urbanism is interesting because it proposes a holistic approach to policymaking as well as a system that ensures that it is maintained in the long term and also bet on systems that evaluate these processes. In this way, walkability should be understood as, from a feminist point of view, a concept that goes beyond just pedestrian policies. Walkability can be understood as an enhancer of active mobility in the public space. In the case of people with physical mobility problems, it is understood as accessibility and independence. The vertical and transversal intersectionality and inclusive perspective brought by feminist urbanism could bring to walkability a broader and fairer approach.

This conceptual framework reflects a connection within the elements of walkability as well as feminist urbanism. Both concepts reflect complex systems of influences that affect several elements at once. Similarly, the city is composed of a network of elements that relate to each other. It is this connection between elements that could answer the research question. The holistic perspective that feminist urbanism brings seems to fit better with the complex urban network and, given that, as explained above, mobility is part of urbanism, an inclusive and intersectional approach to walkability could be the future of this concept. The conceptual framework, however, is the theoretical application of the data presented above, and in order to know this premise in practice it is necessary to know the situation of the city that is applying both policies.

5. Research Design

*"Thus, feminist qualitative research came to be associated with an approach in which
the investigator eschewed a value-neutral approach and engaged with the people being
studied as people and not simply as respondents to research instruments"*
(Bryman, 2012, p.40)

This section aims to explain the research design, what is the objective, what is the methodology and what are the research methods. It is divided into several sections, 5.1. the research strategy, 5.2. the data collection, 5.3. the research design, 5.4. the research methods and 5.5. the research methods, 5.3. Data analysis and finally 5.4. Validity and reliability.

5.1. Research strategy

This research aims to acknowledge how can walkability become better in a city city through feminist urbanism, therefore is looking for a theoretical framework between these two terms to reach a collaborative approach. This will be done through data collection methods that will attempt to answer the research questions through a qualitative analysis. This study addresses walkability, a concept that has been evaluated previously both qualitatively and quantitatively as seen in the literature review. This research is not looking to evaluate what level of walkability a certain case study has but to find out how this can be improved through a more general concept, feminist urbanism. Therefore, this study has tried to collect the theory of both and find a point where they converge to use the feminist approach in walkability policies. In other words, this study uses an inductive approach where the theory is the basis, conducting interviews and using a case study, that is the city of Barcelona, to obtain more information to confirm or disprove this alternative approach. The choice of topic is not arbitrary and for this reason, it must be recognised that this study, although not free of bias, will try to ensure that there is no incursion of personal values. Values such as greater interest in the development of policies that favour walkability, inclusive urban planning or prejudices such as the acceptance of the word feminist in the eyes of others, this is explained in section 5.4 of validity and reliability.

Before starting with the description of the qualitative methods used in this study, it seems interesting to start by discussing the relationship between qualitative methods and feminist research. The influence that appears between feminism and qualitative methods emerged in the last century as a result of a hyper-masculinisation of quantitative methods, which proposed a vision that was too hierarchical and where the interviewee could not feel listened to. Whereas qualitative studies were more in line with feminist values and could be adapted to them. So through qualitative methods "women's voices can be heard; exploitation can be reduced by giving as well as receiving in the course of fieldwork; women will not be treated as objects to be controlled by the researcher's technical procedures" (Bryman, 2012). It seems a reasonable association that this qualitative method should be applied to this research that will try to find out the possible influence of feminist urbanism on walkability.

5.2. Data collection

This section explains how the data has been collected. In this research, the data was collected through literature review and then interviews. For both methods, there are three different areas, one for walkability, one for feminist urbanism and one for the case study.

5.2.1. Literature review

This research begins with a review of the literature. First of all, it was important to gather information about what was known about each of the concepts, from the most recent to the oldest literature. Within the literature review, the information was screened to look for patterns of the most repeated authors, definitions, studies, methods, benefits and elements in the case of walkability and on the other hand, definitions, backgrounds, objectives and authors within feminist urbanism. In both cases, electronic databases have predominated, for which scientific articles as well as newspaper articles, books (online or physical) and social platforms like Youtube and Twitter. Regarding this, inside social media platforms, it is easy to find content only related to what the researcher is looking for as in a bubble of similar content. Taking this into account, the diversity of methods of theory collection can help to solve this problem. In addition, the literature search took into account the case study, which is one of the Spanish cities that is developing the concept of walkability and feminist urbanism the most, and which had a large amount of literature and content on the subject.

Literature was first searched by keywords to gather the first group of literature which was reviewed from the latest to the oldest, therefore looking for the main concepts and the most repeated authors was easy. Later, a second search of this literature was grouped, looking at the most repeated authors and papers which were also reviewed from the newest to the oldest. Lastly, through the entire research process papers, articles, and social media content were searched to continue this data gathering. After reading and critically reviewing the literature, which at no time during the entire research has ceased to occur, an outline has been drawn up with the data, by way of labelling, to repetitively be able to create the theoretical framework. After this categorisation of what was found in the theory of both terms, and thanks to this simplification of the theory, it was possible to assign a series of variables that justify this relationship (explained in the conceptual framework in section 4.2).

5.2.2. Interviews

"The interview is probably the most widely employed method in qualitative research" (Brymann, 2012). Moreover, this research is framed were under a qualitative-feminist value-driven methodology, which allows the interviewee to be heard. Therefore, once the theoretical and conceptual framework was developed, there were some authors and content creators that appeared repetitively so it was decided that it might be a good idea to conduct interviews with them. Thus the interviews, in an open and semi-structured format, were intended to generate a dialogue where the interviewees had the opportunity to give their opinion within a series of blocks of information that would help to generate more data and answer the research questions. The main idea of the interviews was to hear the different opinions of the people involved in the topic and inside the case study, Barcelona. Also, to receive ideas and more contacts that will help the research.

The total number of interviews conducted was 8 participants in total, including 2 scholars, 3 walkability associations, and 3 neighbourhood associations. The interviews lasted from 30 min to 1 hour and were conducted online due to the current health situation and the location of different cities and countries of both interviewees and interviewers. The criteria for choosing the interviewees was varied, firstly, as mentioned above, those authors who stood out in both concepts for their knowledge on the subject were contacted. Although not all of them work in both concepts, it was interesting to have all three profiles: knowledge in walkability, knowledge in feminist urbanism and knowledge in both concepts. In this way, variety and different perspectives appeared. On the other hand, after a search on the internet, more specifically, on social media, many associations of neighbours and specialists on the subject were contacted to provide another, less academic view on the subject and thus add the civil perspective (in the case of neighbourhood associations) of the city of Barcelona, since it is not possible to conduct interviews in person with the civil population. Finally, an attempt was made to contact the Municipality of Barcelona to obtain an interview with those responsible for urban planning, but to date (June 2021) there has been no response. These interviews aim to provide more knowledge from those figures working in the field of study and provide answers to the research questions from the research perspective and civil society's perspective. In the case of getting the municipal perspective, it would be a plus point but the choice of interviews contains this risk of sometimes not finding answers to the interview requests.

Interviews		
Participants	Type	City or region
Eixample Respira	Neighbours association	Barcelona, Cataluña
Barcelona Camina	Collectives for walkability	Barcelona, Cataluña
Sant Boi Camina	Collectives for walkability	Sant Boi, Cataluña
Prou Transit	Neighbours association	Barcelona, Cataluña
Ciudades Cuidadas	Collective of urbanists	Logroño, La Rioja
Plataforma Andando	Collectives for walkability	Palma, Mallorca
Leslie Kern	Researcher	Sackville, New Brunswick
Ana Sancho	Researcher	Bilbao, País Vasco

Figure 9: table of interviews

To conduct the interviews it was necessary to prepare for the first, make an interview guide (Interview script can be found in appendix 10.1) that allowed the flow of the questions, by creating areas of similar topics and ordering them allowing flexibility. The questions of the interviews were made so it can help to answer the research questions although these questions were not specifically made on such interviews. Following the suggestions of Charmaz 2002 through Bryman 2012 inside the interviews there can be distinguished three types of questions, initial open-ended questions, Intermediate questions and ending questions where the blocks, although given the freedom of the semi-structured guide, the

order was changed in some interviews. It was tried to follow Bell (1996) and Bryman (2012) suggestions for the correct development of interviews in qualitative methods. As the interviewees had different backgrounds, some changes were made to the interview structure depending on the interviewee. The interviews were recorded to fill the gaps that the researcher's memory could have. After the interviews were conducted, the transcription part started. It was decided to transcribe the interviews to bring the researcher closer to the data, to start identifying the key themes and concepts and also to be aware of the similarities and differences between the interviewees.

5.2.3. Case study: Barcelona

To exemplify the study concepts, it was decided to use as a case study the city of Barcelona, which since 2015, after the municipal elections, its mayor, Ada Colau, named the city a feminist city (Johnston-Zimmerman, 2017). Since then, the Spanish city has developed an urban planning policy that, although it began in 2004 with the national Law of Neighbourhoods of improvement of neighbourhoods, urban areas and villages in need of special attention (Ley 2/2004 de Mejora de barrios, areas urbanas y villas que requieren una atención especial) where the gender perspective in public space is included for the first time in urban planning law, it has mostly been focused on reducing the environmental problems that threaten the population. These strategies have been developed in an interdisciplinary framework where spatial planning has played an important role, and social and environmental policies have brought to the table their work to improve the city.

As a result, the Superillas (Superblocks) have been set up in some areas of the city since 2016 as a pilot test for a possible urban planning organisation known as the Superblock of Poble Nou (a Superblock in between two neighbourhoods), since then 7 more superblocks have been developed. This project is not new in the country but the way it has been carried out is thanks to the orthogonal grid of Barcelona's Eixample (a district of the city that was planned in the 19th century by the architect Ildefonso Cerdá) which has made it possible to create 3x3 block squares creating an interior space dedicated to neighbourhood public space and active mobility while the limits of the SuperIlla prioritise the rest of mobility types. This project is known in the rest of the world due to its success. In addition, the city council and its interest in gender policies have contributed an extra point to this new project and that is the development of feminist urbanism that has tried to de-hierarchise the spaces to make them equitable, together with other measures in different areas. For these reasons, it has been decided to use the city of Barcelona as an example of this research.

The use of the case study is not close to it, meaning that there are no boundaries to the use of the city of Barcelona but an example of the development of both concepts in a real situation and how it can be executed or improved in case it is not successful. Therefore, the case study research will be mainly used in the interviews as most of the interviewees are from the city of Barcelona, lived in one of the superblocks or worked on the project itself.

5.3. Data analysis

Following the interviews, these were transcribed without software using the voice recordings of the interviews. The interviews were conducted by video call and recorded with a device separate from the computer to guarantee the quality of the sound. The

transcriptions were carried out individually by the researcher and no software was used for this task as the number of interviews carried out made it possible to do it personally. In addition, transcribing the interviews shortly after they were conducted was beneficial in terms of learning from them for future interviews. In the transcriptions, the information necessary for the research was written down, i.e. non-verbal elements such as pauses or gestures were not transcribed. Moreover, in this way, interpretations of the researcher based on personal criteria, which may not correspond to those of the interviewee, can be left out.

Subsequently, an analysis of the transcripts was conducted. During the interviews, some patterns emerged which facilitated further analysis. In addition, when the interviews were scripted, they were divided into sections that were consistent with those used in the later data analysis. With this execution, the interviewees' answers were separated into groups corresponding to the sections of interest for answering the research question. After this first reading and first sifting, the second reading and division of elements that could be left out of the first division were conducted. Finally, the results of the interviews are described objectively in the section 6 of this research.

5.4. Validity and reliability

For the research to be trustworthy and meaningful, it is necessary to explain, evaluate and justify the decisions made in the process. Starting with the choice of topic, in a situation where cities are overcrowded with cars, where a climate crisis is looming and life in cities is hostile, it is necessary to invest in alternative ways of living. Strategies such as walkability can bring the necessary change to have more liveable and healthy cities. Nowadays, in a pandemic situation, concepts like walkability have gained popularity as a way to achieve more livable spaces. On the other hand, within a social structure based on opressive values that affect all aspects of life, the concept of feminist urbanism appears to contribute to the vulnerable groups' problems, important for its intention to de-hierarchise society and make it fairer. The choice of Barcelona, as explained above, is due to the development of both urban and social measures within the city and the author's knowledge of the city.

In the context of the literature, an attempt has been made to use a method that avoids continually falling back on the same opinions. Thus, by first using keywords such as "walkability" or "feminist urbanism", the first group of scientific articles was accessed, examining them from the most recent to the oldest, authors and new concepts (keywords) were selected for a second and even a third search for the two concepts to write the theoretical framework. Then, through the social networks, an important source of information in this century, searches were carried out in the same way on the Youtube and Twitter platforms. In this way, a network of contacts is created that guides new content creators. To avoid the creation of content similar to that thought, a search for social media channels within the neighbourhood associations against these new policies was carried out, but the search was very limited, as only 2 accounts were found that were not very active. This may help the study's reliability or may explain the lack of media action on the part of the opponents. In the case of feminist urbanism, the number of detractors is much higher due to the use of the term feminist, which can generate some tension and denial in society.

Afterwards, a simplification of the theory was made for its elements and goals by both concepts from which 4 elements that both share are extracted. That is to say, from all the

literature, we use those elements in common that would justify a common theory for both concepts and with which we will work in the research. By having a critical element when searching the literature and subsequently evaluating it, the choice of these elements is ensured.

In the case of the interviews, the choice of interviewees is carried out along the same lines, choosing the most prominent authors and the most prominent associations. The contribution of neighbourhood associations can be helpful given the lack of direct input from face-to-face observation and interviews due to the current health situation. Such a perspective can be more veracious than the researchers' and perhaps too formal and segregated pro-concept perspective.

6. Interview findings

*Cities have the capability of providing something for everybody, only because, and
when, they are created by everybody*
(Jacobs, 1961)

This section will objectively present the results of the interviews. As explained in the
research desing section, the interviewees belong to urban planning specialities (mobility and
feminist urbanism) and neighbourhood associations within Barcelona, especially those
affected inside and outside the superblocks. The open interviews created a dialogue
between interviewer and interviewee where the aim was to continue gathering data, confirm
the data acquired from theory, and broaden the vision of the realities studied.

A total of 8 participants were interviewed, divided into 7 interviews. The variety of profiles in
the interviews provided different perspectives that were very enriching for the study. The
interviews are listed in figure 10 along with other important information. Although the plan
was to carry out more interviews, the time of the year in which it was carried out did not allow
the agendas to fit in. Even so, the contribution of different points of view has enriched the
research by confirming or refuting contributions of the theory as well as adding new
concepts.

Interviews				
Participants	Type	City or region	Date	Duration
Eixample Respira	Neighbours association	Barcelona, Cataluña	June 22nd, 2021	60 minutes
Barcelona Camina	Association for walkability	Barcelona, Cataluña	June 23rd, 2021	75 minutes
Sant Boi Camina	Association for walkability	Sant Boi, Cataluña	June 23rd, 2021	75 minutes
Ciudades Cuidadas	Collective of urbanists	Logroño, La Rioja	June, 25th, 2021	60 minutes
Prou Transit	Neighbours association	Barcelona, Cataluña	July 2nd, 2021	75 minutes
Plataforma Andando	Collectives for walkability	Palma, Mallorca	July 12th, 2021	30 minutes
Leslie Kern	Researcher	Sackville, New Brunswick	July 15th, 2021	30 minutes
Ana Sancho	Researcher	Bilbao, País Vasco	July 27th, 2021	60 minutes

Figure 10: interviews information table

This analysis will consist of 6 sections: 6.1. Elements of walkability and feminist urbanism, where the questions were oriented to find out how the interviewees worked on the terms (both together or individually) and what was the approach or evaluation of the interviewees within the topic; 6.2. Resistance or challenges to these paradigms, urbanistic or societal challenges; 6.3. Problems of the concepts, which explained the problems that the concepts face when already implemented; 6.4. Integration of the paradigms, how they can work together, what benefits they bring to each other or problems; 6.5. Barcelona as a case study, what is the situation in the city; 6.6. Future of walkability and feminist urbanism.

6.1. Elements of walkability and feminist urbanism

Through the theoretical framework, it was possible to find converging elements on both sides. While it is true that the nuances differentiate them, the conceptual framework reflects the elements through which feminist urbanism could help walkability, as they are present in both (see figure 8). The elements illustrated in figure 11 show the elements of both concepts. This section aims to acknowledge how the interviewees evaluate and work the concepts individually or together and to see if the elements that they use or the methodology that they work with is similar to the one in this research. To better understand the interview dynamic, each section will show the questions done in the interviews.
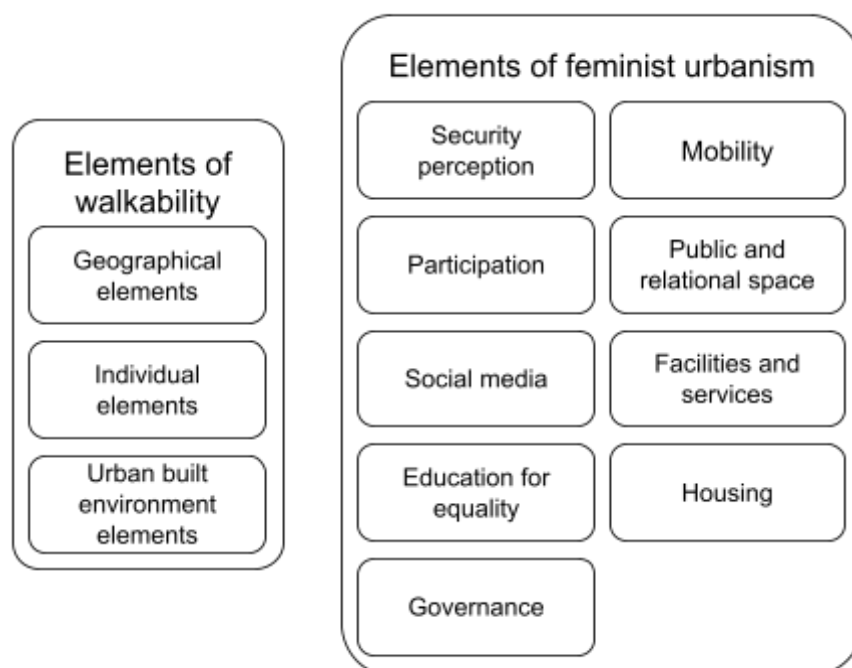
Figure 11: elements of walkability and feminist urbanism

A variety of answers appeared in the interviews due to the different backgrounds. All in all, they mentioned the importance of the transportation infrastructure, in the case of walkability and the perception of security in the case of feminist urbanism. The majority of the researchers evaluate both concepts with a closed set of elements, some of them match with the ones that are used in this research. For example, Ciudades Cuidadas association work with Col-lectiu Punt 6's feminist city's elements, which are in part the same ones in this

research together with those provided by other studies like governance, social networks and equality education (see section 2.2.4). By and large, walkability elements tend to focus on more physical elements than social elements, as a great number of answers were related to transportation infrastructure and land use, for example, the Prou Transit association acknowledged the importance of the street noise from the cars that prevent people walking (transcription of Prou Transit can be found in section 10.5 of the appendix).

6.1.1. Elements of walkability

Before going into the analysis of the elements of walkability it is important to remember that these are grouped into three categories, the geographic element, the element of the urban built environment and the individual element (see section 2.1.2). To acknowledge how researchers and associations work with walkability, the interviewer asked some questions oriented to provide this information: "how do you or your group work on walkability?" and "how do you or your group organize and evaluate walkability?"

The transcriptions' analysis confirmed that the urban built environment element is the most influential element within the terms, being mentioned by all of the interviewees. In general, the associations confirmed the great accessibility of a city with mixed land use as opposed to zonal land use planning and how this favoured shorter and therefore more walkable journeys. About other urban built environment elements , it is the neighbourhood associations that most emphasise the importance of transportation infrastructure in the development of walkability. According to the Eixample Respira Association, "we need to invest in new, well-connected, safe infrastructures to favour conciliation so that the networks do not only go along the main streets because they are still linear" (transcription of Eixample Respira Association can be found in section 10.2 of the appendix), claiming for a well-connected network and also criticizing the current situation of the transportation network. Similarly, the Prou Transit Association talked about how in the Eixample area (where the superblocks are located nowadays) "every corner has a chamfer, to cross pedestrians can't go in a straight line so people shorten the crossing where there is no zebra crossing, while the car can always go in a straight line", claiming to have continuous sidewalks. It is interesting how both emphasise the importance of a well-connected and continuous transport network, especially for those active modes of transport. Also, the associations highlighted the importance of the transport infrastructure element of active mobility.

Among the individual element of walkability, the number of mentions is lower and it is also the associations that emphasise this element the most. Within this element of walkability, the relationship between neighbours is the one that is most emphasised in the interviews. In the case of Prou Transit Association, they talk about neighbours who cannot talk in the street because of the noise, children who are not allowed to go down certain streets for fear of being run over. Furthermore, the perception of insecurity is high in areas where walkability is low according to interviewees. Not only insecurity towards bigger and most harmful modes of transport but also they stressed the distrust generated by not knowing the neighbours or the lack of relationship spaces that allow vitality in the streets. All in all, neighbours are more and more aware these days of the benefits of walkable cities, as they are experiencing the cons of car-dependent urbanism, and in some cities, the benefits of more walkable streets. Citizens are asking the associations, as it is mentioned in the interviews, for governmental

involvement, through social media and other platforms to fight for health, the environment, equality and active mobility.

As for the geographic elements, there is hardly any mention of them in the interviews. From Ciudades Cuidadas they mentioned a relationship, taken from their perception, which dictates that in smaller population centres the use of cars is greater, but they say that this could be related to topography, although they believe that it is more to do with the facilities offered by private motor vehicles and the scarce development of other types of infrastructure (transcription of Ciudades Cuidadas can be found in section 10.4 of the appendix).

Without going into too many interpretations, it is very relevant that although it has a certain importance, the absence of mentions of the geographical element reveals the secondary role it plays in walkability. In other words, by assessing how much each element is mentioned in the interviews, it is clear that a mixed land use together with a connected and safe infrastructure is paramount to favour walkability. Hence, in order to have a walkable city, the elements of the urban built environment (land use, transportation infrastructure and individual infrastructure) are key to influence individual perception and behaviour.

6.1.2. Elements of feminist urbanism

As with the elements of walkability, during the interviews, it was asked with similar questions which elements the interviewees work with and how they evaluate feminist urbanism: "how do you or your group work on feminist urbanism?" and "how do you or your group organize and evaluate feminist urbanism?"

Among the nine elements of feminist urbanism, governance is the most repeated one in the interviews. Governance is also important on walkability but it is with the feminist perspective where it gains importance thanks to the aim of this theory to hear all the voices. This is highly claimed by Barcelona's associations, but it will be further explained later on in section 6.5.1. However, other interviewees also mentioned governance, especially government actions, as an important element of feminist urbanism. This is the case of Ciudades Cuidadas collective that remarked success of the city of Logroño (Spain) "due to the interest of the town planning councillor in making a better city by taking into account different spheres perspectives", not only attributing the success in changing the mobility of the city to the governance but also to the political will to implement it.

In 2020, Ana Sancho together with two other authors published an article on gender and urban planning evaluating urban planning and equality policies in two cities of the Navarra Region (Spain), Pamplona, the capital, and Tudela, the second most important city of the region. In the article, they reflect how, although governance bodies appear, they are not useful or do not work together. This article was part of the subject of an interview with one of the co-authors, Ana Sancho, who argued that, according to her assessment, governance channels existed to ensure such communication but that they were not successful. As Ana Sancho argued "they don't talk, they should talk to the mayor's office, they should have a budget, town planning should talk to equality, economics, citizen security, citizen participation, know the area, etc" (transcription of Ana Sancho can be found in section 10.8 of the appendix). These two contributions may be a reflection of the fact that even if there is a bottom-up movement or society's concern for a better urban life, without the input of the

government, who ultimately decides the laws, these measures will not be implemented. Furthermore, the same author, ended by saying " it is important that the plans come out and that those who plan actively meet, that it is transversal in all areas". Therefore, in line with feminist urban theory, effective governance is an important element in the development of a just city.

The Ciudades Cuidadas Collective, an architects' collective, uses a similar methodology to the one of Col-lectiu Punt 6, which are therefore closely similar to those of this study. The collective mentioned that both mobility and public space are highly linked to security perception as these infrastructures are key for women not to feel vulnerable. Therefore, the Ciudades Cuidadas Collective is giving importance, throught theur work, to three elements of feminist urbanism the relational and public space, mobility and security perception, and also is key the influence that they have between each other. Moreover, the beginning of the collective's work was the relation between these elements in the `Jane Jacobs walks´. During these walks, they created a participative proposal where citizens, especially women of different identity variables, took walks to let the collective know which areas of the city made them feel the most insecure. Combining planning support systems with a type of participatory process. Thus, Ciudades Cuidadas Collective also works with participation as an element of feminist cities but this element will be further explained latter. As a group of architects, they value the importance of housing in the development of fairer cities, although it is not their main element there's a clear relationship between how houses are built and what is the accessibility to them to the inclusivity of a city.

As an academic, Leslie Kern's studies of feminist urbanism tend to focus on spreading the ideas of this unknown concept. For the researcher, inclusivity and equity in cities are the main keys to feminist cities. As she said she starts working thinking on "the fact is that some groups have been a disadvantage for a long time in urban space, we have to think how do we start to address this to build inclusivity and equity as a core principle of city planning policy-making" (transcription of Leslie Kern can be found in section 10.7 of the appendix). Inclusivity and equity are not elements on their own but for Leslie kern are key principles on all the elements of a feminist city and they should be guiding new policies. In her latest book, *The feminist city (*2019) she has also worked with some municipalities to assist in the development of urban planning with a feminist perspective, proving the importance of a strong government role.

Regarding participation, many sources attach great importance to this element, as it is the only way to give voice to all the experiences of the city and therefore the only possible way to create an urban design capable of accommodating all the identity variables of a society. This is why this element was dealt with individually in the interviews. To learn more about the participation process during the interviews, the question "how are the participation processes working at the moment?" was asked.

This urge for participation is reflected in a greater number of mentions from those interviewed who are more dedicated to feminist urbanism, not only participation but participation process with an inclusive perspective. This is the case of the author of the book The Feminist City, Leslie Kern, who states that participatory processes are surrounded by a lot of obstacles. The author wanted to point out the importance of evaluating participatory processes from an intersectional perspective "there are so many barriers such as time, child

care, planning where's the meeting, who's running it, what you need to know, have your voice heard, whose voice is legitimate, knowledgeable in those situations". She argued that the participation process is seen as something to be checked on the planning to-do list, not as an important element in policy-making, planning or urban development. As she argued, that participation is seen as a very superficial layer, "deep participation is more time consuming and more expensive and you need to get people involved, actually care about their input and reflect about them, incorporate and have a very diverse group that they don't get to participate much, disable and vulnerable".

From a very similar perspective the Ciudades Cuidadas Collective claimed that "to participate it is necessary to inform citizens before the meeting to make constructive criticism" and as a consequence of not doing this "people respond from individual interests without thinking about the general population", so reaching agreements is a difficult task. As a solution, this group of female architects proposed to first hold "training and information workshops to favour collective work". By doing this, she continued, "we will give opinions based on knowledge and develop empathy, we favour the diversity of people's needs and realities". For Ciudades Cuidadas Collective, participation, training and information are fundamental. Some of these participation processes are not only interviews, but also dialogue groups between neighbours and stakeholders. As mentioned above, through mapping of unsafe spots or through gender audits, which have been carried out for years in several cities around the world as pointed out by Ciudades Cuidadas Collective, the researcher Ana Sancho and the Andando Collective.

Effective participatory processes involve a lot of work, including the need to consider meeting times so that everyone can attend, locations and connections, channels through which information will be communicated, and professionals prepared to actively listen to proposals, among others.

6.2. Resistances before the implementation of the concepts

Changes that directly affect people's lives tend to generate resistance even before implementation; walkability and feminist urbanism are examples of such resistance. Changing the way preferences have been established for decades in urban space means that those who lose priority reject the idea. Moreover, the prejudice caused by a misunderstanding of a term can provoke rejection before the policy is even implemented. This section seeks to explain what resistances each concept encounters when being elaborated in the city and why through the question: "what are the challenges or resistance that walkability/ feminist urbanism has to overcome (types of approach, business or civil society resistance, lobby, gentrification, rejection of the word feminist, unfamiliarity with the concept)?"

Besides the resistance, not expected situations such as the Covid-19 pandemic affects how we live in the city. Social policies that affect more than one area of study, in this case, urban framework, politics, transport or equality are bound to generate complex situations and side effects. In other words, since everything is connected, developing policies that change one aspect of the city's reality means that changes will appear as a result of these new measures. Therefore, the following question was asked: "how are the different situations in

daily live affect walkability/ feminist urbanism (Covid-19, different families or individuals, climate change, etc)?"

To better work on the resistances and influences that situations outside urban planning have on them, they have been separated by concepts, in such a way that the resistances and the situations that influence walkability are analysed first, and then the same with feminist urbanism.

6.2.1. Resistances of walkability

Knowing the concept is important when it comes to dispelling resistance and gaining followers. Firstly, walkability and pedestrianisation are two very undervalued terms. The Sant Boi Camina Association commented that "it was not sufficiently well positioned on the governmental agenda because it is innate" (transcription of Sant Boi Camina Association can be found in section 10.3 of the appendix), moving around alone is something that most people are born with, making it unattractive for the creation of new policies. Moreover, when it is finally implemented or planned, the pedestrianisation of streets is often initially rejected by street traders. In general, those who reject it argue that a decrease in motorised vehicles will lead to a decrease in sales, as they mentioned in some interviews, something that has been shown in "numerous studies to be untrue, the opposite is true" claimed from the Barcelona Camina Association (transcription of Barcelona Camina Association can be found section 10.3 of the appendix), the studies reflect that more walkable areas are more accessible on foot will increase the number of customers. Moreover, from an intersectional feminist critique, Kern explained "the word walkability can generate rejection if it is only understood from the perspective of a person without a physical disability". Taking into account the language, the word walkability is related to the verb `to walk´, this can lead to an enabling approach to the concept, leaving aside all those people who, due to physical conditions, cannot move only by walking. From a feminist perspective, they point to inclusive walkability or a different terminology.

Within the resistance, there is also a big pushback caused by strong lobbies and weak governance. About the latter, the Andando Collective, which is the coordination of pedestrian associations within the Iberian Peninsula working to defend the rights of pedestrians as well as promoting this type of mobility in the territory. They said that from the Spanish Legislation a minimum width of pavement for pedestrian mobility need to be guaranteed (which is part of the urban built environment element) except in `mature´ areas, but as they argued "this is not being done because they are consolidated streets, it is an exception they say but we see that the exception is becoming the generality" (transcription of Andando Collective can be found in section 10.6 of the appendix). This example shows that there is a lack of compliance by the institutions with their own legislation. The reason for this is not going to be clarified in this study, due to the scope of the research. It is possible that the pressure exerted by lobbies is one of the reasons or a weakness of the government to take more risky measures.

Related to the lobbies, the Andando Collective commented "it is not being done (more walkable policies) because there are private interests and lobbies behind it that are preventing it and manipulating it at a legislative level" to which the Prou Transit Association added "the car lobby and the industry have a lot of control. We have found that everything is

geared towards favouring car use", verifying the argument of lobby influence. What's more, the Prou Transit Association commented with disappointment how "several demagogic answers always come out: 'go live in the countryside, it makes no sense because we have the right to breathe but there is no right to use private transport, we are talking about a public health issue", this could represent how the lobbies constrain the legislative power for their benefit against the good of society and how both the government and the economic sphere reject citizens' demands for health. It is this public health issue that the Sant Boi Camina Association believes is triggering the change in cities. However, as they said, this is mainly possible through the joint action of associations that work not solely for pedestrian mobility, but also for physical and mental health through programmes to improve the air, reduce noise or to be able to do sport freely. As the Sant Boi Camina Association claimed "we are facing a process of political and public resistance to the progress of the last decade" and, as mentioned above, it is the associations and social movements that are having the greatest impact on this issue. Although, they continued the critique "we (as a society) have not done our homework on modal splitting, if you tell a citizen to use the car less, they are not going to change. If there is no regulation, the problems continue. It is so obvious". However, from the Sant Boi Camina Association there's hope "progress is very slow. These are basic things but it is the path".

As mentioned in this section, problems arise beyond those generated by resistance from other spheres, namely the current health emergency and how this has influenced the development of walkability in cities. There is agreement among the interviewees on how the pandemic has brought into the public spotlight the deficiencies of cities, how they have been built under a set of values that have forgotten the public space for citizenship. In this sense, walkability measures have come to fruition much earlier than expected thanks to the pandemic, for example expanding pavement minimum width in some streets to favour interpersonal distance. In addition, with the increase in online working, several commuters disappeared, increasing the space that can be devoted to other uses, such as pedestrianisation or gathering. Many of these measures have been implemented through temporary measures like tactical urbanism.

6.2.2. Resistances of feminist urbanism

Perhaps the greatest resistance is towards feminist urbanism, especially the adjective that defines the concept. In general, feminist urbanism is understood as city planning that favours women over the rest or as urbanism of women security, leading to a "rejection of certain political ideologies" as the Andando Collective said. It also generates controversy as Kern explains "sometimes the people hear the word feminism and they associate it with a particular kind of politics and they don't see how it connects to city planning or they think that it is against men, is not the point". This rejection might be a problem if we want to have fairer cities by implementing the concept. Although many authors have indeed decided to use other terminology to avoid rejection or to be able to reach more people. Ana Sancho explains in her interview how during her PhD thesis this debate appeared and how she managed it, she said that "there were pioneers who did not speak of feminist urbanism, I adopted the term gender perspective, which seemed broader to me because I wanted to combine what had been done since Dolores Hayden, but I did not call it feminist urbanism".

Related to this, this research has explained the differences between feminist urbanism, which seeks through intersectionality to achieve a fairer city, and gendered urbanism, which takes into account the gender perspective only although the goal is the same. It is true that within gender, other variables intersect that encompass many different groups of people. In short, this research considers, as discussed in section 2.2.2, that feminist urbanism and gendered urbanism are not the same. However, it is interesting to mention that the researcher decided to work with a different focus within her thesis, as there are many dimensions within urban planning, as she explained. Further to this, she explained that in the United Nations conferences with which she worked with they do not speak of this type of urban planning as such but they do work with an integral and transversal approach to urbanism. Thus, even within feminist urbanism itself, there is a debate over the name of this concept, although the objective is the same. At the same time, feminist urbanism related interviewees workers agreed that the name is in recognition of all women geographers who began to study this type of terminology. Ana Sancho reflects this as an integrative approach, which is what we should be looking for. In this terminological resistance, some interviewees reflect how social media often do not help, as the Ciudades Cuidadas Collective commented, "there is a change in the society of those who do want this to evolve, the problem comes when a voice is given to those who make the most noise" referring to those who are against the change. Overall, there is unanimity that what is urgent is to develop urbanism that is inclusive, sustainable and pedestrian-centred as well as intersectional no matter the name.

Furthermore, the concept of feminist urbanism, although is not new, is little known nowadays increasing its rejection, as some interviewees reflected "it's been going on for a long time, Jane Jacobs is the only woman that feminist urbanism ever heard of and she was not exclusively feminist" said Kern on the maturity of the term. She continued to talk about the lack of awareness of the term "this is completely new to many people in the urban sphere and we have a lot of work to do to put gender issues on the table". Besides, the prejudice generated by lack of knowledge leads in some cases to the interpretation of feminist urbanism to preserve imposed gender roles by favouring reproductive activities.

Just as in the section on walkability, apart from the resistance that the concept may generate, there are problems that feminist urbanism has to overcome to be successful. As in the previous section, the health situation plays an important role in feminist urbanism. The pandemic situation has reflected the vulnerability of many groups, such as insufficient housing space, neighbourhoods that suffer more from the lockdowns, or even the heat waves, also the need for pavements of sufficient size to maintain a safe distance have marked the differences between some neighbourhoods and others. Apart from how the pandemic has aggravated social and economic differences in the urban structure, exposing its weaknesses, it has also meant a delay in the development of other plans under the guise of economic recovery. Regarding this, Kern expressed "I think equity issues get a push back when there's an economic crisis to address, so that might be a resistance". This also generates an unnecessary competition of priorities, many of the problems that affect cities such as the climate crisis, vulnerability or equity and justice concern have the same root cause. For Kern it is unnecessary "if we only focus on climate issues, greening, the greening projects lead to gentrification so we faster be an economic equity issue and the root of these problems is the same process, like capitalism, patriarchal system. They are the base of the

problems that we face so we cannot see them as interconnected, so we make some things better in one area and others much worse".

6.3. Problems after the implementation of the concepts

Once the measures are developed, the problems of these two concepts, according to the interviews, are the same or very similar. This is why they have been studied together in this analysis. Due to the aim of this research, a joint work of both concepts, the interviews included a question to understand what problems can arise from the implementation of such measures: "what kind of problems does the implementation of walkability measures or feminist urbanism address?"

When implementing policies that affect social areas, such as walkability and feminist urbanism, the level of connection with other areas of the city is so high that, if it is not done jointly, it can lead to secondary problems that negatively affect society. Gentrification processes have been claimed as the main problem by many authors, it is also an important area of research in urban planning and even in feminist urbanism. With measures that favour neighbourhood living, housing prices rise to generate a displacement of the population towards more affordable areas while high-income neighbours or companies that can afford the price move in. When we apply the intersectional feminist perspective to gentrification processes like Leslie Kern suggested, "which groups are likely to have lower incomes and therefore be more vulnerable?" as she reflected in the interview and continued, "at the end of the day powerful men are getting wealthier by this process while women are not benefiting". Gentrification was also mentioned by the Sant Boi Camina Association as a problem that is currently happening in the superblocks of Barcelona.

Moreover, despite de gentrification processes, the productivist point of view is conquering the streets as some pedestrianised streets inside the street pacification plan show that "the use of that new public space has been filled with terraces and the neighbours are demanding silence and no more bars open". The extension of the terraces that the municipal government has promoted as a result of the pacification policies and to favour outdoor consumption by covid has increased the noise from the street which is particularly harmful to the neighbours living on the lower floors of the buildings. This has led to a loss of quality of life, with only those who can afford it moving out of these flats. The issue is complex because pedestrianisation is important to increase the quality of life, but without regulation, it can lead to a prioritisation of the productive capacity of public space in bars and restaurants over the quality of life of residents.

Finally, and related to walkability theory is livability. This term has come to be relied upon as a necessity within cities, a goal to be achieved. Author Leslie Kern argues that it is a term that can mean many things and "a kind of dominant discourse that there are lots of fun urban amenities and access to nature" but in reality, it is often thought of from a single perspective also known as neutral. By applying an intersectional feminist perspective to analyse it, it is easy to realise that as with urbanism, this perspective does not always represent the majority of the population therefore the author wondered "livable for who? Who is really in consideration? are we looking from a feminist urbanism perspective then I guess I would say we can look at people who are marginalised? If it's livable for them, it's probably livable for all of us, but instead, we look at the more privileged and what's enjoyable for them". The

example that the author gave was Toronto in Canada, considered one of the most livable places to live but it is also one of the most expensive cities leading to multiple people being homeless.

6.4. Walkability and feminist urbanism

6.4.1. Connection

This research aims to understand how feminist urbanism can help eqach other to make cities more walkable and just. Through the interviews, the intention was to find out to what extent these two terms are connected, and how the integration of both could lead to an improvement in making better walkability policies. This section follows the question "are walkability and feminist urbanism related/connected?"

The interviewees revealed that although these two variables have not been crossed yet, walkability and feminist urbanism are implicit in each other. The Barcelona Camina Association explained that "the word walkability is not in the theory (of feminist urbanism) but it is implicit on the term, they are related. Cities have been planned for none of them, they are planned for consumption or production movements, other non-productive movements are not taken into account. This is changing, thanks to the help of certain theories such as feminist urbanism, a package of actions that are giving a lot of strength" as the Barcelona Camina association said. Moreover, the Ciudades Cuidadas Collective established a connection above all with the polygonal movements carried out usually by women, the majority of who are responsible for housework and care, and how this is also a reflection of how the city is configured, under what values. Likewise from the Eixample Respira Association, who argued that walking is something intrinsic to the human being "we are all pedestrians at some point in the day and in life but not all of us drive in our lives" to which also added "feminist urbanism goes further but walkability is transversal to all cities, to all collectives and population sectors but is perhaps more related to feminist urbanism because of the polygonal movements that women make when carrying out the 'basic' household tasks that have been assigned".

However, as a counterpoint to this reflection of the association, Leslie Kern argued that, from an outsider perspective, "we need to recognise that the way that people move in the city is very different in each city and group of people. So, even the term walkability can be seen as an exclusion to people who use wheelchairs or as a priority for pedestrianization without an intersectional approach can mean that sometimes we blame the wrong people for problems". In other words, by applying an intersectional feminist perspective, that not everyone walks innately or cannot all walk in the same way, therefore not taking into account people with disabilities or the mere fact of talking about walking could be discriminatory. We also need to think about single parents who need a car to work or elderly people who need to move around by car. They are not the problem, as Kern said "it is a complex problem and we need more intersectional, holistic and multi-scale feminist analysis". For that reason, there's a need to understand the work of both concepts together, as in section 4.2 of this research described and survey revealed, and not just the similarities.

6.4.2. From walkability to feminist urbanism

Part of the relationship that can be established between the terms can be established through a symbiotic relationship where both can benefit. That is, it has already been pointed out that the terms could be related and that walkability could be part of feminist urbanism, i.e. we could talk about feminist or intersectional or inclusive walkability. Likewise, to what extent can walkability help feminist urbanism. What is more, the relationship is bidirectional, so it is necessary to express how walkability can help feminist urbanism and vice versa, the latter of which will be discussed in section 6.5.4 below. It is important to understand how both teams can work together and therefore the interviews tried to acknowledge this through the question: "is it possible to achieve fairer cities through walkability measures?"

Some of the interviewees belonged to cities outside the case study and provided examples of Spanish cities that have worked on walkability policies or feminist urbanism. In certain cases, unintentionally sometimes, walkability measures have led to feminist urbanism. At the forefront, the city of Pontevedra, a city in the northwest of the country with 84,830 inhabitants in 2021 (Concello de Pontevedra - Pontevedra's Municipality, 2021), has been integrating pedestrianisation as an urban planning principle for more than 14 years and is now the reference for many cities for walkability policies. In the city, most people move around on foot, and vulnerable people have gained independence thanks to greater accessibility as most of the interviewees said. Like Pontevedra, Vitoria, a city in the north of Spain with 253,996 inhabitants in 2020 (Vitoria-Gasteizko Udala - Vitoria's Municipality, 2021), has also been mentioned in interviews due to its recent mobility policies. From Ciudades Cuidadas Collective they talked about Logroño, a city in the northern half of the country with 151.021 inhabitants at the beginning of 2021 (Ayuntamiento de Logroño - Logroño's Municipality, 2021), which is undergoing a transition to active mobility through tactical urban planning, thanks to the city councillor for urban planning. Ana Sancho explained Bilbao's case, a city in the north of the country with a population of 350,184 in 2020 (Bilboko Udaletxea - Bilbao Municipality), a 30 km/h limit has been set and although it has not been crossed with the gender perspective, the pacified school zones have generated more independence for pupils who can safely walk to school.

Although these cases do not pertain to the case study, they do reflect the connection between the two terms through existing examples. Although the intention of these municipalities to realise feminist urbanism is not certain, they do contemplate a pacifying character of the city in terms of walkability measures. In the interview with Ana Sancho, she reflected a lack of knowledge about the intention to realise feminist urbanism in the pacification of school environments in Bilbao as "I am not aware that these terms have crossed" but that similar benefits appear is a fact, the children have gained independence and health. These cities can serve as an example, apart from the case of Barcelona, a much larger and denser city, to show the result of the connection of both terms of how through walkability feminist urbanism also appears, although perhaps not with all the benefits associated with the latter.

6.4.3. Society's perception

Both concepts are closely connected to social variables, although both have elements referring to the social sphere, it is important to know if society can perceive the changes in

cities. For that reason, the question "does society perceive changes in the city related to walkability? perhaps fairer?" was asked.

In addition to the associations, the studies carried out by the Ciudades Cuidadas Collective report a high number of citizens who have benefited, even if only minimally, from changes made through tactical urbanism to favour walkability. Through a participatory study in their city, Logroño, they revealed that "teenagers have gained in quality of life, they perceive the changes enormously as well as people who have carers because they have become more independent". Other examples of the effect of social variable of walkability and feminist urbanism are the statements of the Eixample Respira Association "I do believe that citizens appreciate them, the tactical urbanism of the superblocks is noticeable because the superblocks have filled up. They have created spaces for people, different people, not only white middle-class people who live there but also people from other neighbourhoods" showing the relation between two concepts. The association continued, "it is a way of reclaiming and valuing public space for activities that were perceived as private. The recovery of public space is one of the most interesting things that the pandemic has left us with. What is clear is that these interventions, unless you do them very badly, go very well. It increases local commerce, people use the public space, they are grateful in that sense" from walkability to feminist urbanism.

This social process of awareness and acclaim for active mobility measures is reflected in Barcelona's participatory budgets, the results of which came out in June 2020. As the Eixample Respira Association explained, "the results of the participatory budgets have recently come out and although I don't remember the exact numbers, a large number of the projects (40% of the total) that have been chosen have to do with road modifications to favour active mobility". This reflects an improvement from the previous one as we acknowledge during the interview. However, the interviewee added, "The people who voted indeed belong to collectives, associations or people who are individually more active or are looking for this". As will be explained below, the superblocks, when implemented individually, have generated a series of problems that harm certain sectors while benefiting others. Therefore, although certain social aspects appear, mostly individual elements of security or perceptions of security as well as greater connection with neighbours in the areas where policies are established, an intersectional and holistic perspective are needed when elaborating policies.

6.5. Walkability and feminist urbanism in Barcelona

The city of Barcelona has established itself internationally as a mobility attraction thanks to the superblocks, the school routes, the street pacifications and other urbanistic landmarks. In addition, some collectives and the city council are working hard on the feminist perspective. From the associations that live it closely, they have tried to function as eyes for research. Although it is a section in itself, this section of the case study will investigate the same questions as the rest of the data analysis. First, "what is the current situation in Barcelona regarding walkability / feminist urbanism?".

The neighbourhood associations talked about how the superblocks have been an effective way of reclaiming public space. Through tactical, cheap and simple urban planning, many areas have been pacified and now allow neighbours to use public space. Especially for the

Eixample Respira Association, the association that is located in one of the Superblocks. For others like Sant Boi Camina Association, it is "part of the solution", a step on the way, but there is still a lot to do. Prou Transit made an unexpected point of view "today, it is a grain of sand in a desert, very good for those inside and bad for those next door, it concentrates traffic on the edges, raises the standard of living of those who live inside and revalues properties while lowering the value of those around and their properties go down in value because they go from living in a street on an urban motorway". This argument was a counterpoint in the development of the interviews because, from the point of view of this association, which is outside one of the superblocks, although the measures are well-intentioned, the implementation and planning lack an overall vision that has caused more problems than those that already existed. This will be better explained below.

6.5.1. Elements of the conceptual framework in Barcelona

As with the previous sections of the results, a breakdown by section will be made in the case of Barcelona. For this section, the same question as in section 6.1.1. was used :"what elements of walkability / feminist urbanism have changed in the city?".

In terms of walkability, the Barcelona Camina Association talked about the tactical urbanism that is being carried out in the pacification of streets and superblocks. In particular, they talked about the use of elements such as urban furniture like benches or playgrounds within environments that have been pacified thanks to cheap transport infrastructure, that is, through elements that limit the passage of cars but allow the passage of bicycles and people. In addition, some bike lanes and bike racks have also been developed so that motorbikes do not park on the pavements. Even so, both Barcelona and Sant Boi's associations are calling for more measures, the argued that the plans that were in place before the pandemic has come to a standstill, "it seems that there are no medium or long-term plans" with the problems that can come with reacting to immediate things without thinking about future effects as they alleged. Thus, they call for more medium and long term actions, which do not seek an immediate result to a long term problem.

In terms of participation and governance seem to be the major elements of the city. About participation processes, the Prou Transit Association speaks of frustration when they manage to communicate with the mobility areas of the City Council and the Metropolitan Area of Barcelona who "are not interested in improving the situation". They managed to meet with these institutions to work out a way to reduce the noise produced by the three lanes of Independencia Street. After several proposals from the association (bicycle lane, bus lane, pedestrianisation) the only thing they got was a car park for motorbikes. The neighbourhood association said "they came with a preconceived idea, they knew what they wanted and didn't want from the beginning" and claimed frustration for not being listened to. Contrarily, the Eixample Respira Association reported that after the participatory budgets people demand many more actions to promote the recovery of public space and active mobility infrastructures, the population is aware of the improvement in the quality of life and wants it to be for more people.

Another element, governance, is highly commented also with some good practices and others that could be improved that the associations have mentioned in the interviews. This governance approach is demanded by the Sant Boi Camina Association "the administration

lacks a combined approach, interrelation, and teamwork. It's something basic because you can't change the city from a single perspective. It is necessary to incorporate all perspectives, governance". On the other hand, the Eixample Respira Association talked about the San Antonio Superblock, where the citizens "are very happy with the consensus of participation between citizens, government and businesses", which reveals an effective governance process.

About less mentioned elements of feminist urbanism, the Eixample Respira Association remarked that in Barcelona and its metropolitan area, access to housing and mobility are closely related. People cannot afford to live in certain areas, mainly in the city centre or the Eixample, the famous neighbourhood with too close to their jobs, and have to live far away, increasing their commuting. Thus, perfectly exemplifying the connection between the different elements of feminist urbanism and as an element that needs to be addressed to improve life in the city.

6.5.2. Resistances before implementation in Barcelona

Similarly to section 6.2. the interviewer asked about the problems before the implementation in Barcelona with the question: "what resistance has Barcelona encountered when it comes to implementing this type of policy?".

The Prou Transit Association claimed that with the arrival of the Low Emission Zone, the pandemic and the closure of the Nissan car plant, the city council got many complaints. A decision was taken from the presidency of Nissan in Europe due to the low profitability of the plant, which disassociated itself from the policies of the city council as a reason, claiming that it is the result of the manufacture of failed models in recent years that forced to cut workers and therefore investment along with a decision of the automotive group of its plan for the coming years (La Vanguardia, 2020). The closure of a total of which directly affected the workers of the plant itself, as well as the entire industrial fabric of Catalonia that is nourished by this factory, the second most important in Catalonia (El Pais, 2020). The Prou Transit Association said that "the city council was attacked by lobbies and citizens and from the associations, we saw how it backed down and stopped responding even to requests for bike lanes or pavements that we had. The only thing we know is that now there are constant photos with car companies, electric motorbikes, electric scooters, and sustainable talks at Seat. The car lobby lobbied and the politicians saw their votes in danger". Furthermore, the Low Emission Zone that was so much criticised, for many has become a "plan to sell cars" as Prou Transit Association claimed, the rule of prioritising low emission cars only makes people buy new cars for old ones, this does not favour the modal shift that the Barcelona Camina Association demands and means leaving out those who can't buy another car and need it to move around.

Another resistance appeared by the society, during 2020, before the lockdown, Barcelona's Municipality started to forbid traffic in some streets on the weekends. After some of these temporal pacifications, the municipality stopped. Since then, it is the associations that carry out monthly street blockades to reclaim public space for a day and that largely carry the weight of mobilisation at the neighbourhood level. The Barcelona Camina Association states that "the social movements that demand healthier environments such as the neighbourhood revolt or scholar revolt are doing a lot and as there are synergies between all these

movements this is what is working". To which the Sant Boi Camina Association, within the same regional platform, continues "the neighbourhood revolt implies that the major axes have less weight, that they are more habitable. In this sense, it is accompanied by the school revolt for safer, less noisy and healthier spaces around schools. These are bottom-up movements. They are going in the right direction and they are for health", as a way of generating a common ethic around neighbourhood urbanism. But at the same time, this situation generates problems for those who need to move around the city, like delivery vans or other workers, same as those who are not well connected to the public transportation network and need a car. The Barcelona Camina Association argued that "in general, it is the neighbours who are demanding these improvements on urbanism, but those who work and travel by private transport are the ones who suffer the most, decreasing car space without a modal shift", this is creating a clash of interests. This resistance may be related to the resistances brought by demanding lobbies and weak governments.

6.5.3. Problems after the implementation of the concepts in Barcelona

For this section, the question was similar to the one in section 6.2. about the problems that the concepts have to overcome once the measures are implemented. The city of Barcelona seems to present certain problems of gentrification since the superblocks, being so few, are something unique that everyone wants to take advantage of. Moreover, the block edges, where most of the road traffic is concentrated, have become urban highways. The Prou Transit Association, who claimed that there are groups of neighbours who benefitted from the scheme as opposed to others who were harmed, "for the neighbours who live there it is an oasis, but for those around it, it is like a child looking into a shop window and no money. Everything that is eliminated from superblocks is suffered by those around it" claimed the Prou Transit Association. The reason is the existence of a limited number of superblocks that are not connected so that traffic is concentrated in the outer streets, which, as the Prou Transit Association says, have increased lanes, "especially those facing Aragon Street", an urban motorway as the associations claimed.

Moreover, as mentioned before in the general analysis, Barcelona seems to be suffering from gentrification in the areas of the superblocks and as they explained in the Prou Transit Association, a process contrary to gentrification, where due to the decreasing quality of life in the streets bordering the superblock, those who can abandon the dwellings. This is important because, although the plans must go ahead, there are many things to take into account, variables that are related such as the appearance of the superblocks and the rise in the price of rent and therefore processes of gentrification. These processes of gentrification, of pros and cons in the superblocks, are what Prou Transit Association calls for. They claimed those who suffer the side effects of being on the edge of the SuperBlock are the ones who suffer the deviant transit and therefore claim that "individual operations work yes, but you have to take into account the whole", claiming for holistic policies.

6.5.4. Walkability and feminist urbanism together in Barcelona

All in all, the work between both terms in Barcelona seems to have been successful. As the Eixample Respira Association claimed, "the superblocks are getting full of different types of people, who are aware of the improvement in quality of life. The work done by the municipality in terms of children, pedestrianizing the school areas that the citizens of

Barcelona fought for is also successful". However, this seems to be not enough apparently as the associations demand a real modal shift within a more efficient and demanding Low Emission Zone, not only with environmental pollution but also with noise pollution, as Prou Transit Association claimed. The same group also demands more space for pedestrians, within a superblock at the city level and not as an oasis in the chaos, as they argued "traffic is still in Barcelona, they have removed lanes on some sides but have increased them on others. We have to ask ourselves, where has this traffic gone?" and proposing a solution to it, "the superblock is part of the solution, spaces where pedestrianisation is a priority, streets where the car is the guest and the pedestrian the host, not only to go to places but to be, to play". The citizens' associations want more than just one or two superblocks disconnected; they are calling for a network of superblocks.

6.6. Future of the concepts

To conclude the interview, a question was asked to find out the opinion of the researchers, groups or associations on the future of cities in terms of walkability or feminist urbanism. Knowing the elements and the resistances, it is necessary to know the objectives to be able to carry out the measures. To do so, the interviewees answered the question: "what are the next steps for these terms?".

The future towards more walkable and just cities is complex, there is no magic formula to follow and that makes it confusing. The interviewees provided different ways of looking at the future depending on their background. Those working on feminist urbanism stressed that this term is still largely unknown even within the urbanism sphere. It is necessary to continue to raise awareness of this terminology, perhaps by joining forces with other social movements as Kern pointed out. According to that, the Ciudades Cuidadas Collective insisted that much remains to be done if the word feminism creates rejection. Adding that "it is necessary to value the reproductive as something more than reproducing and to put it on a par with the productive". Also the Barcelona Camina Association claimed how important it is to give light to this type of dissemination, "perhaps it is a mainstreaming concept but it brings a great conceptual value that should be incorporated into educational processes beyond courses to fill in the curriculum".

On the other hand, some interviewees contributed a more urbanistic vision, from the Ciudades Cuidadas Collective they stipulated that citizens are demanding a "quality urbanism, especially in those areas where tactical urbanism has begun to give benefits, people need not more walkable cities but more accessible ones". The Eixample Respira Association contributed by saying that neighbours are putting pressure on associations to achieve new measures. The Sant Boi Camina Association added their view that "the key is health, it is dynamiting the hegemony of the car".

Finally, several interviewees pointed out that the appearance of social networks is doing a lot, both to exert pressure as in the case of the Prou Transit Association or Eixample Respira Association, but also as a way of disseminating information as in the case of Leslie Kern or Andando Collective, which coordinates nationally the associations for pedestrian rights.

7. Conclusions of the research

"Where we live ultimately defines who we are"
(López, 2021, p. 19)

This study has focused on responding to two research questions: how can feminist urbanism help walkability, and, what can we learn from Barcelona's example?. To do so, the methodology that I follow was qualitatively guided by a strong critical theory component of the research topic. Also, the intersectional theory of feminist urbanism was present during the methods. The methods used were aligned with the methodology as will be explained hereafter. Firstly, a study of the theory of both walkability and feminist urbanism to obtain a definition and a series of elements of each. Secondly, after the theoretical section, I created a conceptual framework to unify walkability and feminist urbanism, since a justified connection between the two was observed. As a result, a set of elements appeared, some of which are common to both walkability and feminist urbanism. Thirdly, a case study was used to show the practicalities of walkability and feminist urbanism working together, due to the implementation of these policies in the city of Barcelona. Finally, this research carried out a survey with several researchers, collectives and associations inside and outside Barcelona to provide a practical point of view of the theory. In the following lines, I will try to answer the two research questions through the results that have been presented previously, theoretically and practically.

How can feminist urbanism help walkability in cities?

The theory explained in sections 2.1 and 2.2 showed how both walkability and feminist urbanism share a connection, the intention to end the same problem. Both of them focus on reclaiming urban public space, the current and unfair distribution of public space that favours some activities and people over others. For walkability is the preference cars have in the public space over other types and for feminist urbanism it is the favour to productive tasks over reproductive tasks. Inside the productive tasks, there are productive movements that are usually done by private vehicles and mostly by a group of people. Thus, the role of decision-makers to lean toward only one type of activity and the aim to balance this situation is what brings walkability and feminist urbanism together. This has led to the conclusion that both walkability and feminist urbanism can be beneficial to each other as they coincide in many areas. However, this connection was not sufficient to answer the research questions.

Although the theory is somehow revealing, the interviews have provided the most clarity on this issue. The objective of the interviews was to give a real experience of the situation in Barcelona, in other words, to show how different can be walkability and feminist urbanism in practice than in theory. Moreover, the findings of the survey might help other cities in future projects. In section 6 of this research, the findings of the interviews were described and grouped in different argumental lines. This first line of argument corresponds to walkability and feminist urbanism separately and together. The interviewees confirmed the use of the same elements that were described in both walkability and feminist urbanism's theory. Also, about the possible relation between walkability and feminist urbanism, it is clear that feminist urbanism does not include walkability in its theory but there are commonalities between the objectives and root problems that might be the linkage that explains the help.

However, walkability and feminist urbanism are not the same, on one hand, walkability is a type of urban design to promote active mobility over the rest of mobilities. On the other hand, feminist urbanism is a way of operationalizing the urban space, a methodology that involves several values under an umbrella term. The values that guide feminist urbanism are intersectionality, inclusivity, equity and holism. Therefore, the key to the main research question is this difference in the definitions.

To give a practical example, walkability itself can be understood only in terms of the verb "to walk". From an able-body perspective, if everyone walks during their lifetime, walkability would be an equitable terminology in the face of the argument that "not everyone can drive a car". But through an inclusivity perspective, this argument falls apart when walkability is left apart with different types of disabilities because they are not taken into account. From the equity perspective, walkability can't deny the use of private vehicles to society, as the breakthrough that it is, it is necessary for the daily life of many people for reasons of work or mobility. This is why the holism perspective is needed, mobility is more than just a connection between two places but an element inside of the urban system. Therefore, it needs to be considered under a general plan. These three perspectives can be gathered under the most important perspective of feminist urbanism, the intersectional perspective. This perspective aims to consider all the different experiences of the city based on the variety of identitarian variables, thus walkability in its "to walk" meaning might be exclusionary. The inclusivity, intersectionality, equity and holistic vision that characterise feminist urbanism are the basis of the differences and therefore the contribution that feminist urbanism can make to walkability. In other words, the answer to the research question is that these key principles of feminist urbanism, which are the backbone of the term, are the greatest contribution that can be made to walkability for more just and walkable cities.

In section 2.2.4, mobility within feminist urbanism is understood inside social expectations of how it should be. In section 2.1.1, walkability is defined more technically and it shows which elements within the transport infrastructure most affect individual perceptions and therefore human behaviour. This technical and social difference is why walkability as an element of feminist mobility might suitable. This is reflected in the interviews in two ways, on one hand, walkability is understood as the infrastructure that steer walking behaviour. On the other hand, mobility in feminist urbanism is understood to be related to women's safety perception, an individual-social element. In particular, how this perception is lower for the so-called vulnerable groups at night. This is because the street activity is reduced during these hours and the light is reduced. Therefore the sense of exposure and vulnerability is greater. Although feminist urbanism is more than safety perception at night, in this case, the technical aspect of walkability might help feminist urbanism. The perception of safety perception as the goal of feminist urbanism is not correct, it might be one of the causes of the initiation of feminist urbanism due to the impact of assaults and attacks on women at night on society. However, mobility from an intersectional feminist perspective encompasses many more types of movements than just women walking down the street at night.

An important storyline of this research is the obstacles and resistances that walkability and feminist urbanism have to face to be successful. In section 6, is mentioned the usual appearance of resistance to the measures that always take place. Resistance, both from the industry and from the population, responds to a fear of losing a privilege acquired over the years, and the private car industry sees in this type of measure a loss of money. Following

this, one of the main resistances is the debate that takes place around the terminology. The adjective feminist refers to feminist geographers who began to talk about how the city was not designed for women. Although over the years it has become clear that it does not only affect women but all minorities that do not fit within the neutrality of the individual, the adjective feminist has been retained. Misinformation causes this term to be understood as urbanism that favours women or that prolongs gender roles when this is not the objective. Both the associations in Barcelona and the researchers outside of the city confirmed during the interviews the existence of this resistance as commonplace. Some of those interviewed do use or have used different terminology to refer to this urbanism, most of them mentioning the word inclusivity, as the term feminist is very politicised nowadays.

What is more, the problems that walkability and feminist urbanism have to face also appear after the implementation is already done. Problems such as gentrification processes after the resistances stop. After the implementation, sometimes even before, the housing prices and rental prices start to increase, indirectly pushing out those who can't afford the new prices. Additionally, the city areas out of walkability plans experience the opposite, a decrease in quality of life that reduces the price of housing and therefore, in case you want to move to a better area, it does not pay off economically when buying and selling. This example will be further discussed in Barcelona's storyline.

What can we learn from the Barcelona case?

Several storylines have been mentioned above in the interviews and their results. As one of the research questions is related to the practical case of Barcelona, the following lines of argument related to this city will be presented. As explained in section 3.2, Barcelona has been implementing first walkability policies since 2016, and later on, Barcelona has included the feminist perspective in some areas of the government. The particular case of Barcelona exposes the especially great influence of the car industry and how it exerts pressure on society through publicity and on the government, even managing to prevent some measures from being carried out. Some interviewees argued this as the main resistance in the city, together with initial resistance from businesses that later disappeared when sales increased. From this resistance in Barcelona, it is clear how important it is for a strong government that does not give in to pressure from the car lobby and has a plan that does not harm the economy. In addition to that, an educated society that values the quality of life that the implementation of these walkability related paradigms brings, although as reflected in the interviews, a large part of society is asking for these improvements more and more.

It has been very valuable to know the problems that are being generated in the city of Barcelona after the implementation of these policies. Walkability takes into account a limited number of elements as we have seen in section 2.1.2, when a measure is developed it directly affects those elements while unintentionally generating many adverse effects on other elements that are linked to the measures but not taken into account in the walkability. This is the case of gentrification. During the interviews, many respondents confirmed that gentrification is one of the main problems associated with these walkability measures. In the case of Barcelona, especially mobility-focused related to the superblock where the quality of life is increasing, the price of housing and the demand for it increases as well. Moreover, within the problem of gentrification, where the improvement of the area pushes out those groups with less money, there is also an opposite variant. The superblocks are being built

separately in different parts of the city of Barcelona, in an unconnected way, as some of the city's associations explain that this is an oasis in chaos. The presence of the superblocks is positive within the city, while the area that remains at the limit of the measure or directly outside of it not only does not improve the quality of life but also worsens it. This is because the traffic that is removed from the superblock is still in the city but, as they say in the interviews, it is displaced to the outer limits of the superblocks. This situation means that the quality of life of those households outside the superblock worsens and only one sector of the population can afford to move to areas with a better quality of life while another sector sees the quality of life worsen. Housing is a key element when it comes to mobility policies as all citizens move to meet their needs, which is why feminist urbanism (that takes into account housing and mobility, among other elements) can help walkability and the Barcelona case study is a good example to reflect this.

Both Catalan associations and collectives working on walkability argue that politicians are weak when it comes to implementing urban policies that break the hegemony of the car. This is the next line of argument in the analysis, why these situations of problems and resistance arise. Several interviewees call for a strong government to implement policies for active mobility, some of them mention the documents at the state level that establish minimum infrastructure measures for active mobility but the municipalities, who have this competence, often fail to do so. They also state the weakness of certain governments that give in to lobbies or reduce the implementation of measures in the second half of the mandate to stay in government. Without getting too much into polemics, since this study does not attempt to study the role of government in mobility policies, it is clear that in the face of the resistance and problems that appear in urban policies, a strong government is necessary to fight for a better future for the city. To ensure success, feminist urbanism uses a strong emphasis on citizen participation, understood as more than a formality and carried out in different ways to ensure that all citizens' experiences are heard. Through participation, it is possible to open channels of communication between the different spheres of society, i.e. the development of productive governance to meet interests, develop common plans and strategies. The interviews reflect weak governance where participatory processes are not binding and a weak government that yields to lobbies. However, there are some successes in certain participatory practices as mentioned by neighbourhood associations and in some cases outside Barcelona.

The last line of argument corresponds to the future of walkability and feminist urbanism. The interviewees reflect that measures that seek to reorganise the city to achieve fairer and healthier cities represent the future of urban planning and design, especially health which has gained importance through the pandemic. While they are not the same, walkability and feminist urbanism shares the same root, an urban reorganisation to break with the way the city has been made that implies an end to the hegemony of the car and the neutral individual. Moreover, the benefits associated with walkability and feminist urbanism are many. The interviewees argue that both terms, especially feminist urbanism, are too little known sometimes even within urban planning, so they must appear in studies, talks, congresses, etc. so that they become more and more known. The future of walkability and feminist urbanism is through greater equality's education, inclusivity and equity to reduce the resistance and problems associated with both. The case of Barcelona, as a city that is openly working to turn Barcelona into an inclusive and walkable city, as well as other cities

such as Paris or Vienna, can serve as an example of cities that prioritise dwellers and visitors.

To sum up, the research findings revealed a theoretical connection between walkability and feminist urbanism. Moreover, the interviews showed how feminist urbanism might act as a methodology to ensure a better function of walkability. In other words, those needs that walkability is not meeting or assessing can be met if they are elaborated from the perspective of feminist urbanism. Moreover, the interviewees from the case study showed, firstly, effective walkability measures in terms of mobility-focused on an area but debatable in terms of urban territory. Secondly, how feminist urbanism is covering and could continue to cover these gaps between theory and practice. Thirdly, it confirmed the presence of resistance within the feminist understanding. This will be further elaborated in the final discussion.

8. Final discussion

"I don't want a feminist planner to tear everything down and start again, but once we begin to see how the city is set up to sustain a particular way of organizing society - across gender, race, sexuality and more- we can start to look for new possibilities. There are different ways of using the urban spaces we have. There are endless options for creating alternative spaces. There are little feminist cities sprouting up in neighbourhoods all over the place if we can only learn to recognize and nurture them. The feminist city is an aspirational project, one without a master plan that in fact resists the lure of mastery. The feminist city is an ongoing experiment in living differently, living better and living more justly in an urban world"
(Kern, 2019, p. 176)

This research aimed to understand how two urbanistic paradigms can work together to achieve a better and fairer city. To do so, walkability and feminist urbanism were divided on their definition, benefits and elements and later merged by their similarities. By doing this it was possible to understand how each of them works. Thus, walkability is understood as a concept related to mobility while feminist urbanism is understood as a much more general urban planning methodology. The research showed that the perspective of feminist urbanism can help to better develop walkability and ultimately guide cities to achieve more humane goals. Among the theoretical help that one can provide to the other, the research also sought to understand what lessons can we learn about a city that already implemented these policies and what conclusions can be drawn from the practical application of this theory for future developments. The research confirmed that the implementation of walkability measures on its own creates some problems because it only covers mobility issues. Whilst feminist urbanism works with a variety of elements under a general perspective of the urban system.

The use of existing definitions and theories is used in this study to better understand the theoretical behaviour of walkability and feminist urbanism, it also serves to generate a common conceptual framework for both. The theoretical work was not enough to explain how feminist urbanism might help walkability. Therefore, the development of interviews is a great contribution to represent the practical and actual part of the implementation of walkability and feminist urbanism in a city, in this case, Barcelona. Regarding the case study, the interviewees related to the city have been particularly relevant to get first-hand knowledge of the current situation in the areas where these measures have been implemented and the areas that are currently outside of them. All in all, the case study of Barcelona shows how different the theory and actual practice of concepts are. In section 6.5.4 of the findings, it is clear that the walkability policies are successful in terms of quality of life inside the superblocks, not only for those neighbours living inside of them but for businesses that benefit from increased accessibility for citizens. The situation itself has not been an easy one, because of the resistance that appeared in the city, such as the rejection of new policies, or the influence on social media. However, once the benefits are clear it is visible that society is claiming for this type of policies and more and more bottom-up movements are appearing.

Nevertheless, the process of implementing walkability, especially in the case of superblocks, has resulted in some problems that could perhaps have been foreseen if an intersectional, inclusive, equitable and holistic perspective had been used. As reflected in section 6.5.3

there are some obstacles in the city of Barcelona related to the new mobility measures. Problems related to congestion, accessibility, gentrification or noise could perhaps have been foreseen through a more general perspective, beyond urban mobility alone. It is possible that through the elements that feminist urbanism evaluates, such as citizen participation, the study of housing and the places where people move to, these problems could be reduced today. The case study of Barcelona can become an example for next-generation spatial planners to understand cities as a complex and connected system where a change in one element of the city will affect others, as well as exemplify how there can be a difference between theoretical concepts and their implementation in reality. The case study is a practical example of how feminist urbanism can help walkability, so it is also a way of answering the two main questions.

Even though there are multiple ways of achieving better cities, feminist urbanism could perhaps have been foreseen through a more general perspective, beyond urban mobility alone. It is possible that through the elements that feminist urbanism evaluates, such as citizen participation, the study of housing and the places where people move to, these problems could be reduced today. The case study of Barcelona can become an example for next-generation spatial planners to understand cities as a complex and connected system where a change in one element of the city will affect others, as well as exemplify how there can be a difference between theoretical concepts and their implementation in reality.

First, as said before, prejudice towards feminist urbanism exists. This can lead to the fact that feminist urbanism may never be realised because society, at present, is possibly not informed and prepared to tackle this word. From my point of view, this has meant a reordering of the structures of my knowledge. Feminist urbanism was until this year something unknown and it has been a learning process in which there have been prejudices. To me, it is necessary to reclaim the public space of all and for all and it is important to secure a better future for society. However, I have realised during the research process that not everyone can deconstruct the prejudice towards the term, either because of the belief that the concept can be misunderstood or the adjective feminist can be misinterpreted. A process of education regarding this ideology is necessary so that we can establish this term in society without fear or prejudice. This is why I am perhaps more in favour, for the moment, of using the term inclusive urbanism or nursing city to refer to this methodology.

Second, there are some important roles in the development of walkability and feminist urbanism that have been left out of this research for length and time purposes, land use, participation, governance, lobbies or housing. How the changes in each of the elements mentioned in the research might be interesting research for the future, especially the evaluation of them in a case study. The connections between the elements are considerable, especially those linked to mobility. Also, other cities like the aforementioned Vienna, at the international level, or Pontevedra in Spain, could be used for comparison as both have more experience in the development of feminist urbanism and walkability measures respectively.

Third, despite the success of the study methods, a much more detailed case study would have been a very good contribution to the research. Providing a direct view of the researcher on the areas where walkability and feminist urbanism are realised can bring veracity to the study, also a wider range of interviewees with different backgrounds. Perhaps after the development of evaluation methods, this could be done in the future. Based on the

limitations and the research discussed, future studies could evaluate these elements in concrete case studies or generate a good practice guide for walkable and just cities to be applied to cities.

This research has focused on evaluating alternative approaches to solutions that have long been implemented, like walkability, and therefore, finding tools that can improve the lives of citizens and make cities more sustainable, fair and equal through mobility. The research problem reflected how we have turned cities into places not designed for citizens. Moreover, the feminist perspective in the study of the city reveals that this situation worsens when other identitarian variables are taken into account. The future of cities depends on the development of policies that guarantee sustainability and social equity. With the completion of this research, it is clear how important it is to make known paradigms such as feminist urbanism, given its rejection among some social groups, it is clear that society has prejudices and that it is necessary to continue giving voice to terminologies such as this.

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