Are Superblocks the super solution to social problems?

Assessing social sustainability of the Superblock pilot project in Vienna

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AUTHOR'S DECLARATION

No portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

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ABSTRACT OF THESIS

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Cities are being recognized as some of the most important drivers of climate change, therefore they must also make a significant contribution to solutions. Among the many transformative approaches considered, superblocks stand out as relatively recent and innovative. Superblocks are a sustainable urban model that could provide numerous improvements on all dimensions of sustainability. A superblock can be defined as an urban transformation strategy with the purpose of reclaiming public space for residents, reducing motorized traffic, promoting sustainable mobility, providing urban greening and ultimately mitigating effects of climate change. This research focuses on the superblock pilot project currently under way in Vienna (the Supergrätzl), with specific emphasis on its social sustainability aspects. With the use of a customized theoretical framework which includes institutional and political context, physical elements, and social processes, the research identifies the elements of social sustainability relevant for the development of urban sustainability projects and assesses how they have been integrated in the Supergrätzl project. The research used qualitative methods, including interviews with city planning experts and residents, and observations conducted during key events focused on the development of the Supergrätzl. Elements that emerged as significant were the use of public space and public participation with it's barriers and solutions to bring them down.

Key words: superblock, Supergrätzl, social sustainability, urban social sustainability, urban planning, urban sustainability, Vienna

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1 INTRODUCTION

With such a large part of the world's population currently living in urban areas and an even larger part expected to be living there in the near future (United Nations, Department of Economic and Social Affairs, and Population Division 2019), the need to make cities more sustainable and resilient to climate change has become imperative. Urban design and urban planning play a crucial role in shaping what our cities will look like in order to face the new environmental and social challenges ahead (Pickett, Cadenasso, and McGrath 2013; Childers et al. 2015). Governments around the world are putting emphasis on achieving sustainability in its three dimensions: environmental, economic and social (Childers et al. 2015). Governance represents a key element in the achievement of sustainability, with some considering the institutional framework as the fourth dimension of sustainability (Zilans and Abolina 2009).

Different solutions have been conceptualized in order to aid the transformation to more sustainable urban spaces, one being the superblock model. Superblocks are a sustainable urban model that could provide numerous improvements on all dimensions of sustainability (Rueda 2019). The superblock concept, developed by Salvador Rueda, can be defined as an urban transformation strategy with the purpose of reclaiming public space for residents, reducing motorized traffic, promoting sustainable mobility, providing urban greening and ultimately mitigating effects of climate change (Mueller et al. 2020). A superblock is an urban cell usually about 400m by 400m in which motorized traffic is limited to residents, public transport, and emergency and delivery services (López, Ortega, and Pardo 2020). Reducing the area occupied by cars provides the opportunity to foster urban greening and integrate

nature-based solutions into the design of the superblock (Ibid). Within the superblock area a wide array of services are provided, from shops to playgrounds (Ibid). Superblocks create spaces tailored to humans and their social interactions while contributing to a better environment (BCNecologia 2018).

The city of Barcelona is a pioneer in the implementation of the superblock model and has inspired many other cities to follow in its steps (Postaria 2021). The City of Vienna is planning the implementation of its first superblock, Supergrätzel, in the district of Favoriten (DER STANDARD 2021).

Sustainability has become a central focus in the urban context and governments have made efforts to integrate three dimensions – economic, environmental and social – into their urban planning policies (Dempsey et al. 2011). The fact that the superblock in Vienna is still in its early stages of development, provides a good opportunity to observe and identify the important elements that are included in the urban planning process in order to achieve the intended positive outcomes in terms of sustainability.

The literature on urban sustainability has mainly focused on the environmental and economic dimension (Dempsey et al. 2011). The social dimension of sustainability has received significantly less attention than the other two dimensions, and even the literature regarding the outcomes of superblocks has mostly focused on the environment (Eggimann, Lischer, and Bolliger 2021a; Palència et al. 2020). From the Barcelona experience, however, it is clear that the implementation of superblocks has also involved and affected the social dimension not only in a positive way (Zografos et al. 2020). The areas chosen for the projects have in fact experienced some negative social effects such as the phenomenon of gentrification and have faced issues of social resistance by residents (Roberts 2019; Zografos et al. 2020). Analysing the implementation of the superblock concept in Vienna could provide valuable insight into

possible social concerns and contribute to a successful outcome of the project in terms of social sustainability.

1.1 Aims and objectives

This research will explore and address the concerns related to social sustainability through a qualitative approach. The aim is to identify and map existing or emerging social concerns related to the implementation of the superblock in Vienna and how the project has, or has not, integrated social sustainability so far in its design. Therefore, my research questions are:

1. What are the elements of social sustainability relevant for the development of urban sustainability projects?
2. How is social sustainability being integrated in the Supergrätzl project?

The data were collected through observations and semi-structured interviews with people involved in the project, experts in city planning, and residents of the area in Vienna. Through the analysis of the results of the interviews and observation I will draw some conclusions on the main social elements to be considered in the development of the project and the importance of addressing them in the planning and early implementation stage.

1.2 Outline

The second chapter of this research is dedicated to the literature review. I will first review the literature on the concept of social sustainability in the urban context and

how this framework is applied to my research. The second part of the literature review is dedicated to explaining the Superblock model in detail from its conception to the practical implementation and outcomes of it in Barcelona, the city where the superblock idea was first put to use.

The third chapter describes the methods used to conduct the research. It defines and explains the reasons for choosing the qualitative approach, the sampling technique, the limitations of the study, and ethical considerations.

The fourth chapter introduces the Vienna superblock project in detail and describes the stage of its development so far, as resulted from the interviews. The second part of this chapter is dedicated to the analysis of the results obtained through the interviews and observations.

The fifth chapter is dedicated to the discussion and further research prospects.

The final chapter is dedicated to conclusions.

2 LITERATURE REVIEW AND THEORETICAL FRAMEWORK

This chapter establishes the literary background of my research as well as identifies the gaps in the literature that the research aims at filling. The chapter is divided into three sections. In the first section, I describe the concept of social sustainability in the urban context that I used as a framework to evaluate the process of the superblock in Vienna. The second section contains an explanation of the theoretical framework adopted for this thesis. The third section of the chapter is dedicated to explaining the superblock model as conceptualized by Salvador Rueda. It then describes the practical implementation of this model in the city of Barcelona as well as its outcomes.

2.1 Urban social sustainability

2.1.1 Sustainability and urban areas

Since the publication of the Brundtland Report in 1987, the concept of sustainability has gained relevance in the discourse of many fields related to the environment (Philipp Aust and du Plessis 2018). With a constantly growing urban population, cities have become central for the achievement of sustainable development in its three dimensions: environmental, economic and social (Childers et al. 2015; United Nations, Department of Economic and Social Affairs, and Population Division 2019).

Cities are being recognized as both drivers of environmental problems, but also as focal in order to foster solutions (Philipp Aust and du Plessis 2018). The importance of cities in the battle against climate change is further confirmed by the inclusion of SDG 11 in the Sustainable Development Goals, “make cities inclusive, safe, resilient, and sustainable” (United Nations 2015). This is a unique goal that “introduces another

level of governance which is situated below the level of the nation-state" (Philipp Aust and du Plessis 2018). Despite their central role, Olazabal (2017) highlights the challenges cities face in contributing to the global transition to sustainability, which derives from the lack of competencies of cities in many policy areas which are still assigned to the national or regional level. Philipp Aust and du Plessis (2018) also note how the international level still mostly depends on the national framework, and how the regulatory freedom some cities have in contributing to the achievement of sustainability goals on a global level still depends on the infrastructure provided by the state. Governance, at all levels, is therefore a key element in the achievement and maintenance of sustainability (Olazabal 2017). The institutional framework, in which governance is immersed is, in fact, so relevant that it has been defined by some as the fourth dimension of sustainability (Zilans and Abolina 2009).

Managing cities is a complex task since governance spans across multiple levels with actors operating on different scales (Philipp Aust and du Plessis 2018). Olazabal (2017) qualifies cities as complex adaptive systems and says that, to navigate their complexity, systems thinking is necessary. Systems thinking recognizes the dynamic between the different components of a complex system and tries to identify the relationships between them keeping in mind two factors: scale and timeframe (Tengberg and Valencia 2017). Small scale problems are always embedded in a larger scale framework that needs to be considered in order to understand the smaller scale (Ibid). Systems thinking also considers how interactions happen in the short, medium, and long-term dimension, adding to the complexity of environmental issues (Ibid). In the context of city management, addressing problems in the short-term is simpler, however the long-term dimension must be considered which makes city management

a complex task (Bettencourt 2015). Considering long-term dimensions also ensures that uncertainties can be accounted for (Tengberg and Valencia 2017).

As complex systems, cities are not reduced to the mere spatial element but are complex units each made of their own unique social fabric (Netto 2017). Cities include the material structures they are made of but also the organization and relationship between the social, economic, political, and legal spheres (Tonkiss 2014).

2.1.2 Sustainability in urban design and urban planning

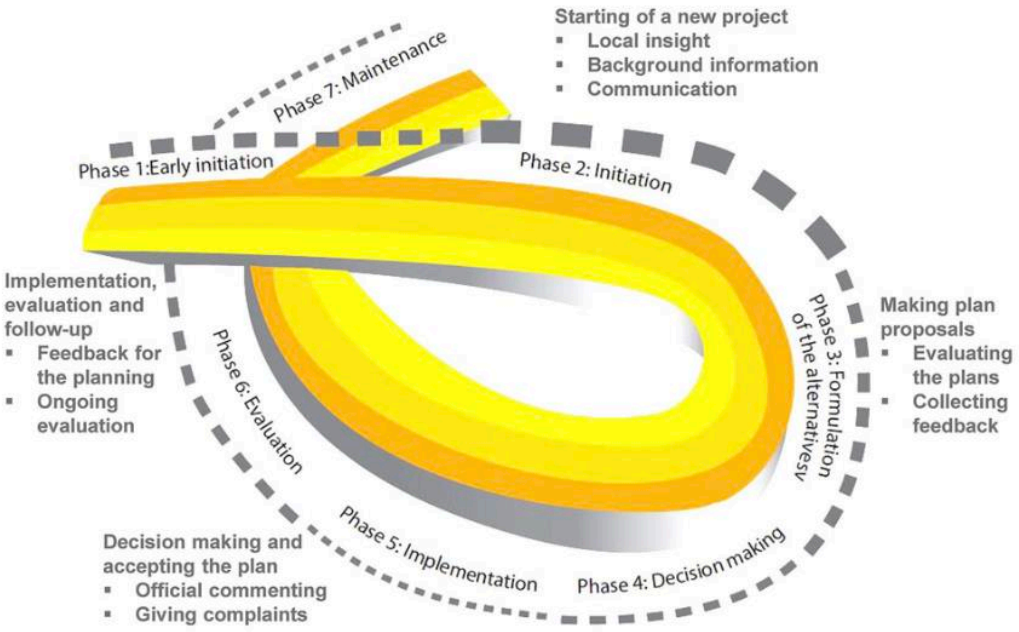
Childers et al. (2015) point out that, since most of the environmental impacts that derive from projects are intrinsic to their design, urban development is a key element to improve environmental outcomes. With climate change manifesting its negative impact more and more in urban areas, urban design has to integrate teachings from ecology in order to face these and other new challenges (Childers et al. 2015). Urban design has evolved to include aspects that relate not only to the aesthetic realm, but rather to environmental and social issues that include many actors beyond architects and planning professionals (Dias, Curwell, and Bichard 2014; Childers et al. 2015), and include policy makers, engineers and residents (Tonkiss 2014). This plurality of actors contributes to understanding the city through a multidisciplinary lens (Tonkiss 2014). A multidisciplinary approach is essential to adequately address the new challenges that arise in the urban space.

From a social perspective, Boyko et al. (2006) view urban design as a process that leads to the achievement of results that don't only produce a transformation of the physical environment, but also enhance the well-being of the people who live and interact in the space. However, Næss (2001) points out how the traditional rational model of planning is based on a utilitarian perspective in which the total amount utility

is taken into account rather than the distribution of it between groups (Næss 2001). This has the effect of disadvantaging minority groups (Ibid).

In order to improve the social outcomes of urban projects Kahila-Tani et al. (2016) suggest that public participation in urban planning plays an important role. They argue that participatory processes in urban planning help to achieve better overall outcomes as well as reach social goals and support policy decisions (Kahila-Tani et al. 2016). Haklay, Jankowski, and Zwoliński (2018) recognize that the input of public participation produces benefits for all stages of development of a project shown in Figure 1.

Figure 1: Public participation support system



Source: Kahila-Tani (2016) in (Haklay, Jankowski, and Zwoliński 2018)

There is no doubt that participation is beneficial to decision-making processes, however it is important to note that for a good outcome, participation has to be meaningful and not just performative or symbolic (Arnstein 1969).

2.1.3 Social sustainability

The concept of social sustainability, the focus of this research, is particularly nebulous. Despite the spike in the sustainability discourse, social sustainability remains the least explored in academia (Dempsey et al. 2011; Sugandha, Freestone, and Favaro 2022). In the context of this lacking literature, there is no definition of social sustainability that is commonly agreed upon (Larimian and Sadeghi 2021; Sugandha, Freestone, and Favaro 2022; Littig and Griessler 2005). Moreover, the lack of definition of social sustainability is even more evident in the field of built disciplines (Shirazi and Keivani 2017; 2018). The lack of extensive research in this field is particularly surprising since, as Enyedi (2002) puts it, reiterating the message from the Brundtland report, “environmental sustainability is inconceivable without social sustainability”.

With this research I intend to contribute to the social sustainability discourse by identifying characterizing elements of it and building a framework that is useful to make social sustainability considerations of urban projects that are in the development stage and therefore cannot be evaluated on their outcomes.

Many scholars have attempted to identify the essential elements that characterize social sustainability (Dempsey et al. 2011; Shirazi and Keivani 2017; Chan and Lee 2008; Sugandha, Freestone, and Favaro 2022). The difficulty in defining social sustainability derives from the fact that it’s a dynamic concept, constantly changing and evolving as the field of its study is still developing (Shirazi and Keivani 2017).

Dempsey et al. (2011) note how there is a significant overlap between the concepts of social sustainability and sustainable communities. With this is mind, the variety of definitions provided broadens even more. Dempsey also highlights how the policy field

has contributed to the definitions of the concepts in question more than the research field (Dempsey et al. 2011). The Bristol Accord is one example in which EU policy has made progress in developing further the concept of sustainable communities by identifying eight fundamental features (The Office of the Deputy Prime Minister 2005). In the academic field, Sugandha, Freestone, and Favaro (2022) claim there are certain themes common to the literature on social sustainability. These themes are social capital, social infrastructure, social equity, social inclusion, and collaborative planning (Sugandha, Freestone, and Favaro 2022).

Other authors distinguish physical and non-physical factors concerning social sustainability (Dempsey et al. 2011; Vallance, Perkins, and Dixon 2011). The non-physical factors, as defined by Dempsey et al., include elements related to equity, culture, participation, justice, social cohesion, and health or quality of life (Dempsey et al. 2011); the physical factors relate to accessibility, housing, and neighborhood elements (Ibid). Vallance, Perkins, and Dixon (2011) distinguish between tangible and intangible factors. The tangible factors include access to water, food, and housing, while the intangible, or less tangible, relate to education, jobs, equity, and justice (Vallance, Perkins, and Dixon 2011).

Eizenberg and Jabareen (2017) include four elements in their social sustainability framework: safety, equity, urban forms, and eco-prosumption. Safety derives from the assumption that risk is at the base of this social sustainability framework, and the elimination of risk for humans and non-humans is a focal goal (Eizenberg and Jabareen 2017). The concept of equity is similar to the ones found in other frameworks, and relates to concept of justice (Ibid). Social equity in the urban context can be defined as the condition in which there is no exclusion of individuals from

participating socially, economically and politically in society (Dempsey et al. 2011). Social equity can also manifest itself in the sense of equal distribution of resources and of environmental risk (Ibid). The concept of urban forms can be compared to what Dempsey et al. described as physical factors (Dempsey et al. 2011), and to what Vallance, Perkins, and Dixon define as tangible elements (Vallance, Perkins, and Dixon 2011). Lastly, eco-prosumption relates to the need of pursuing a mode of consumption and production that is more sustainable (Eizenberg and Jabareen 2017).

Ghahramanpouri, Lamit, and Sedaghatnia (2013) distinguish two approaches in defining social sustainability: one focused on the conditions of social sustainability, and one based on measurement frameworks. The latter often focuses on identifying indicators that can either be positive or negative (Ghahramanpouri, Lamit, and Sedaghatnia 2013).

Lastly, an important element to consider when discussing social sustainability is scale. Shirazi and Keivani (2019) say that every analysis has to be based on a carefully selected scale in order to give context to the analysis itself (Shirazi and Keivani 2019). It is possible to distinguish between macro-scales, based on regional or city level, and micro-scales that take into consideration district or neighborhood levels but also building level (Ghahramanpouri, Lamit, and Sedaghatnia 2013).

2.2 Theoretical framework

The superblock project in Vienna, referred to as Supergrätzl, is currently in its pilot phase. Therefore, the scope of this research is confined to the vision, planning and initial implementation of the pilot phase of the project. Access to jobs, food, education, and other physical factors related to this sphere cannot be evaluated in the context of

the Vienna superblock as the stage of development of it does not permit such evaluations yet. Research in the future should address these issues, once the outcomes of the project are measurable. For this reason, social sustainability frameworks that concern outcomes of urban projects were considered not adequate to assess social sustainability of the superblock project in Vienna, and were therefore excluded. The following is a new conceptual framework that is derived from the current literature on urban social sustainability and that can be applied to urban projects that are under development.

Given that the Supergrätzl is an urban transformation project, it is immersed in a thick network of actors that characterizes the institutional framework of cities as complex adaptive systems. The scale chosen for this research is a micro-scale, the one of the neighborhood, or “Grätzl” in Viennese. However, urban social sustainability highly depends on urban policy (Shirazi and Keivani 2019), therefore other scales are also considered such as the district scale, the city scale and indirectly the national and international scale.

In the context of this micro-scale that I have selected, the first aspect of the theoretical framework is the institutional and political context. This includes the institutional framework around the superblock, and its actors which are immersed in a complex network of policies and governance measures. Projects that aim at improving the environment are not implemented in a vacuum but must be placed in the institutional context of the place of implementation. In this way, it is possible to recognize and understand the complexity of the system in question. In the institutional context I also include the political climate of the moment which has repercussions in the decision-making process. In fact, it is important to note that between each phase of the project

there is a decision-making node (indicated in purple in Figure 2) which affects the subsequent phase.

I have chosen to adopt the distinction between physical and non-physical factors of social sustainability operated by many scholars in the field (Dempsey et al. 2011; Vallance, Perkins, and Dixon 2011).

The physical elements that I have chosen to consider affecting the development process of the project are climate change and public space. Climate change is viewed through a social lens, in the sense that climate change does not affect people in a homogenous way, but rather its effects impact certain categories of people more than others. The second element is public space and its use. Access to public space is often unequal amongst the population. Public space in the context of the Supergrätzl includes grey, green and blue infrastructure.

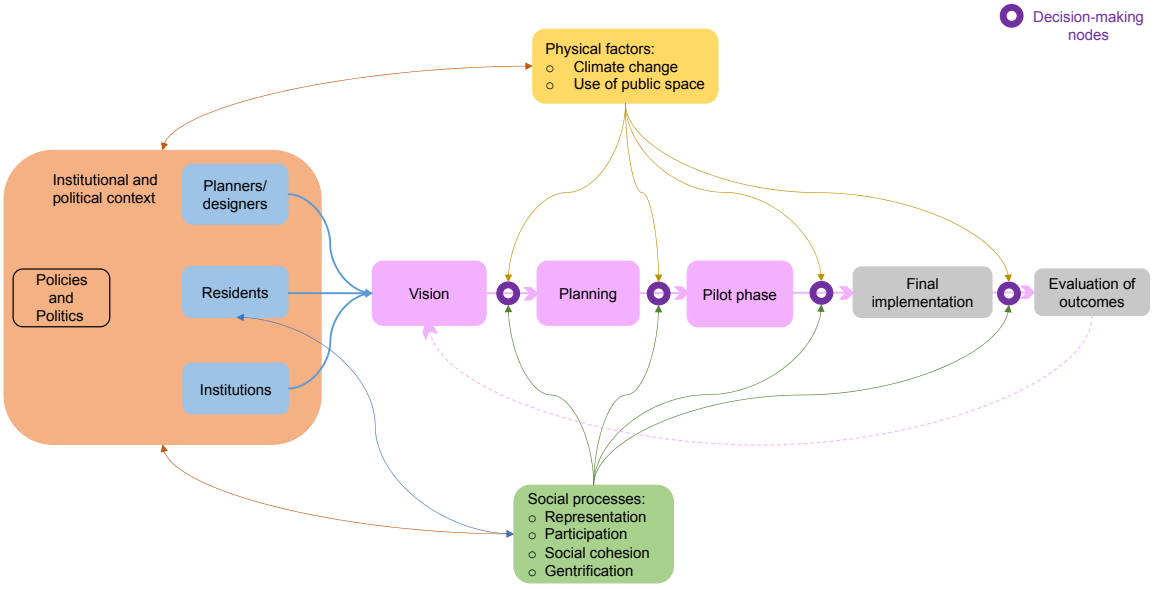
The non-physical factors considered in the theoretical framework are the social processes that occur within the neighborhood. The first element is representation. Especially in multicultural contexts, the groups of people represented play an important role in the development of urban projects.

The second social process is participation. As seen before, participatory processes are fundamental in all stages of an urban development project (Haklay, Jankowski, and Zwoliński 2018). Measures that guarantee meaningful participation are crucial, and for this reason social processes are strictly connected to the institutional and political context.

The next element of the social processes aspect is social cohesion. Rueda (2019) considers social cohesion an important aspect in urban realities and specifically for the superblock model.

The last social process considered is gentrification, which is a phenomenon that often occurs when new urban developments are put in place, although it is also driven by market forces.

Figure 2: Social sustainability framework for the Supergrätzl



Source: Bianca Nina Filastò-Buzzolan

2.3 The Superblock Model

In this section there is a detailed description of the superblock model and its main features as conceptualized by Salvador Rueda, the director of the Urban Ecology Agency of Barcelona. A description of the superblock project in Vienna is found in the results section as it emerged from the interviews conducted for this study.

This chapter concludes with the practical implementation of the superblock model in Barcelona and some of the outcomes of it.

2.3.1 Defining the superblock

The superblock model, developed by Salvador Rueda, can be defined as an urban planning strategy with the purpose of reclaiming public space for residents, reducing motorized traffic, promoting sustainable mobility, providing urban greening and ultimately mitigating effects of climate change (Mueller et al. 2020). There are certain physical elements that characterize the superblock model. A superblock is an urban cell shaped like a polygon usually around 400 meters wide by 400 meters (Rueda 2019). The space inside the polygon, referred to as intervía, is closed to outside motorized traffic (BCNecologia 2018). Motorized traffic remains allowed along the perimeter of the superblock (Ibid). This means that through the inner part of the selected area the only motorized traffic is made by resident cars, services and emergency vehicles (Ibid). Closing off the intervía to outside traffic permits to dedicate more space to active mobility with the introduction of cycling lanes and pedestrian areas (Ibid). In the intervía a speed limit is set of either 10 or 20 km/h which has two consequences: it makes the area safer for pedestrians, it ensures that crossing the area with a motorized vehicle only makes sense if the origin or the destination is within the superblock (Rueda 2019). The consequent reduction of traffic inside the superblock creates positive effects in terms of noise pollution and air pollution (Mueller et al. 2020). Cutting down on private motorized traffic, implies not only the introduction of new active mobility infrastructure, but also the need to strengthen the public transport system (Rueda 2019).

Another characteristic of the superblock model is the introduction of public green spaces (Eggimann, Lischer, and Bolliger 2021b). The combination of the increase of green areas and the reduction of traffic produces many environmental benefits by reducing the heat island effect and mitigating air pollution (Eggimann, Lischer, and Bolliger 2021b; Mueller et al. 2020; Palència et al. 2020). This leads to positive impacts on the health of the citizens (Mueller et al. 2020; Palència et al. 2020).

Implementing a superblock is also advantageous from an economic perspective. Since this urban model does not require major changes to the urban structure (BCNecologia 2018), the superblock has been defined as an urban recycling project (Rueda 2019). According to BCNEcologia the two main changes that need to occur in order to achieve the change in mobility dictated by the superblock model are a “modification to the basic road network and the establishment of differentiated routes for each mode of transportation” (BCNecologia 2018). These changes do not require investment in hard infrastructure or the demolition of buildings, making the superblock a low-tech and low-cost urban solution (López, Ortega, and Pardo 2020). Another indirect economic effect of superblocks derives from the health benefits they produce. A study from Mueller et al. calculated that the implementation of 503 superblocks in Barcelona would lead to the reduction of 667 premature deaths, resulting in an economic impact of 1.7 billion euros annually (Mueller et al. 2020). The results were obtained from the consideration of five factors: transport-related physical activity, air pollution, road traffic noise, green space, and heat (Ibid).

Another fundamental aspect of the superblock model relates to the use of public space (Rueda 2019). The superblock model aims at reclaiming public space for citizens, tailoring the urban space to people rather than cars (Ibid). The vision of Rueda of the

superblocks considers public space as a hub to foster social relations between residents (Ibid). Rueda envisions public space free from cars, where people can meet and interact with each other, and kids can play on the streets (Ibid). Social cohesion is an important aspect that the superblock model aims at strengthening. Social cohesion indicates the level in which different groups of people from different cultures, age cohort, professional backgrounds and incomes coexist in the urban context (Ibid). In order to increase social cohesion, Rueda indicates the importance of access to housing and public facilities which should be located at a 5 to 10 minute walking distance to guarantee the best livability (Ibid).

The model created by Rueda requires not only a change in the physical elements of the urban environment, but also a shift in mentality and how we understand urban functionality (López, Ortega, and Pardo 2020; Rueda 2019). In fact, every type of transition needs to be paired with a change in people's values and beliefs (Olazabal 2017).

2.3.2 Barcelona experience

Barcelona is a pioneer in the development of superblocks and from its experience one can draw a picture of the possible outcomes of such projects, considering that some projects in Barcelona are already in an operational phase. In order to understand how Barcelona came to be the internationally recognized driver of the superblock model, we have to retrace the steps of its urban development back to the 19th century. The modern configuration of Barcelona is the result of a massive urban development that started in 1859 based on the vision of the Spanish engineer Ildefonso Cerdá (Soria Y Puig 1995). Cerdá had a socialist vision of what the city should look like, one where there is no division of class and where the population is spread evenly (Bausells 2016).

Cerdá is also considered the father of the theory of urbanization which he based on a systematic analysis of the actual physical and social conditions present in cities (Soria Y Puig 1995). The result of his analysis led to the creation of Eixample (literally expansion), an area of Barcelona characterized by a rigorous grid pattern, with wide streets and octagon-shaped buildings that facilitate traffic circulation and visibility (Bausells 2016). Cerdá was already aware of the impacts of the industrial revolution on towns and his goal was to approach city planning with a scientific method and offer well researched solutions that could benefit towns in multiple dimensions (Soria Y Puig 1995). In his vision every block would also have a garden accessible to all residents, even though this part of his vision didn't materialize in Barcelona (Bausells 2016; Ayuso 2021). Where Cerdá's plan stopped, that is where the superblocks came into play in the 1990s. The city of Barcelona is densely populated (López, Ortega, and Pardo 2020) and particularly vulnerable to climate change threats like floods, droughts, heat island effect and low biodiversity (Zografos et al. 2020). Barcelona has one of the highest levels of air pollution in the country (López, Ortega, and Pardo 2020), and in January 2020 the city declared a climate emergency (Barcelona.cat 2020a). Barcelona has identified as a central solution to the problems of climate change the city-wide development of superblocks, Superilles in Catalan (Klause 2018; Ayuso 2021). The 2013-2018 Urban Mobility Plan of the city features a plan to implement a total of 503 superblocks, which was approved in 2014 (Klause 2018). The newest Urban Mobility Plan, that covers the period until 2024, and the Climate Emergency Action Plan for 2030 also feature the superblocks as a main point of action (Barcelona.cat 2020a; 2020b).

To date, the city of Barcelona established six superblocks, the first one being La Ribera (Born) developed in 1993, and the most recent Hortafrancs, developed in 2018 (López,

Ortega, and Pardo 2020). The implementation of the superblocks, however, did not come without difficulties. The main issues that accompanied their development are two: public resistance and gentrification (Zografos et al. 2020; López, Ortega, and Pardo 2020).

The superblock most resisted by residents was in Poblenou (Klause 2018). The reasons for the hostility towards the project are rooted in multiple factors. The first relates to public participation. Local residents were not adequately involved in the development of the project and saw their neighborhood being transformed from one day to the next without having been informed about it properly (Roberts 2019). The second reason is political. The development of the superblocks was, and still is, a focal point of Mayor Ada Colau's and her party's agenda, BComú (Ayuso 2021). Despite the fact that the superblocks had been introduced in the New Urban Mobility Plan under Mayor Xavier Trias, tied to a party that is traditionally oriented towards business-friendly policies, and far from the values of Ada Colau's party, superblocks are associated with Colau's party (Zografos et al. 2020). The close connection between the superblock and Colau's party resulted in utilizing dissent against the superblock program as an instrument to express dissent against Ada Colau's party and herself (Ibid). Zografos et al. (2020) highlight how another element of the political aspect is the struggle for political credit. The Poblenou superblock was implemented quickly because of the time constraint of the mayor's mandate (Zografos et al. 2020). The goal of Ada Colau's party was to make sure the superblock project was completed during her term as mayor in order to push the narrative that BComú brought to life the vision of Cerdà (Ibid).

The other issue encountered after the implementation of the superblocks in Barcelona is gentrification. The superblock in Born and Gracia both experienced this phenomenon (Roberts 2019). Anguelovski et al. (2018) describe as green gentrification the process that occurs when the introduction of green amenities result in the displacement of less advantaged residents. This process happens due to the increase of housing costs or the diffusion of unaffordable services for the population of the area (Anguelovski et al. 2018). Both districts of Barcelona mentioned, saw the increase of housing prices as well as a change of the services offered in the area where services traditionally catered to middle class residents were substituted with high end boutiques (Roberts 2019).

3 METHODOLOGY

This research makes use of three different methodologies: literature review, semi-structured interviews, and observations. The literature review provides the necessary background information to understand the scope of the research and to answer the first research question: what are the elements of social sustainability relevant for the planning of sustainable urban projects? The qualitative research, composed of interviews and observation, aims at answering the second research question within the framework established in the literature review: how is social sustainability being integrated in the Supergrätzl project?

3.1 Method 1 – Literature Review

The literature review is based on literature from different sources such as academic articles found through Google Scholar, but also online journals and websites. Given that the Superblock concept is quite recent, the literature is still not rich, at least in the academic field. The concept, however, gained considerable traction in the media, so many non-academic articles were written. Some of the material of the literature review was taken from such articles as well as official websites of the City of Barcelona and the City of Vienna. Examples of non-academic sources are “The Guardian” and “Vox”. The key words used to collect the material were “Superblocks”, “Barcelona superblocks”, “Supergrätzel”, “Superblock Vienna”, with regards to the superblock model specifically. In the broader context of urban social sustainability key words such as “urban transformation”, “sustainable urban solutions”, “social sustainability”, “urban social sustainability” and similar were used.

3.2 Method 2 – Semi-structured interviews

For the second part of the research, I conducted semi-structured interviews with people involved in urban planning, public participation, and social sustainability in general in the context of Vienna, as well as some residents and people who work in the area of the superblock.

Since the Supergrätzl project is currently in its pilot phase, I chose to use a qualitative approach as the best way to analyze and evaluate the perceptions of key stakeholders involved in this stage of the process (Chan and Lee 2008). López, Ortega, and Pardo (2020) also consider qualitative methods as the most appropriate for analyzing the implementation of the superblock model in a city. Semi-structured interviews have been used in order to "contextualize perceptions and understand social dynamics taking place in and around the superblock" for the case of Barcelona (Zografos et al. 2020).

The answers gathered were analyzed using discourse analysis in order to interpret the results and extrapolate a deeper meaning that goes beyond descriptive linguistics (Harris 1981).

The subjects were chosen using a mixture of the snowball sampling technique and purposeful sampling. Given the tight timeframe for this research, I chose a mixed sampling method in order to guarantee efficiency and validity of the study (Palinkas et al. 2015). The snowball technique ensured a higher probability of the interviewees to participate in the interviews as I had the previous participant vouch for me. With the purposeful sampling method, I made sure I had the key stakeholders I needed to gather the information desired. I had a few contacts as a starting point and the initial contacts provided names and recommended more subjects to interview. There are two categories of participants that were interviewed. The first category is professionals

in the area of urban planning in the city of Vienna. The second category is residents and business owners, or workers of the area chosen for the superblock project.

The interviews were conducted in the period between May 2022 and the beginning of July 2022. The methodology of the interviews differed based on the category of subjects.

3.2.1 Category 1 – city planning experts

This category includes developers and researchers involved in the project and experts in urban planning and participation processes.

The sampling technique used to find participants of this category is a mixture of snowball technique and purposeful. I first contacted Florian Lorenz as he is the landscape architect who is in charge of the development of the concept and project itself, and his name is mentioned in many newspaper articles about the Supergrätzl. The other person contacted was Eva Kail, an urban planner for the city of Vienna and gender expert. Through her, I got in contact with Niels Peters, a mobility expert of the same office of which Eva Kail is part. Both Eva Kail and Niels Peters provided the contacts of the project manager of the City of Vienna for the Supergrätzl who is part of the city administration unit number 18. Through this person I was put in contact with the competent person to answer my questions which lead me to interview Lena Rücker. Florian Lorenz referred me to Cansu Civelek an anthropologist involved in the communication of the project to the significant Turkish community in the area of the superblock.

Lastly, given the importance of the topic of participation in the research, I contacted Sabrina Halkic, the managing director of Lokale Agenda 21 in Vienna, an association for the promotion of citizens participation processes.

For this category of people, the interviews were conducted in English and lasted approximately an hour for each participant. The interviews were recorded, transcribed, and coded. The interviews followed a semi-structured format. I had an initial set of questions on the themes I wanted the interviewees to touch on, however often questions were not answered rigorously, but rather followed a more organic, conversation-like format. All participants were first asked to introduce themselves and describe their role in the superblock project, or if not directly involved, to share what they knew about the project. Other questions participants were asked to answer were related to social sustainability, in particular if they could name five matters that relate to the social dimension and expand on them in the context of the Supergrätzl; questions related to public participation, how was the public involved, what was the outcome of the participatory processes. Table 1 includes the list of the participants interviewed and the reason for their inclusion in the research.

Table 1: Category 1 – Interviewee characteristics

Name of participant	*Role in the process*	*Reason for inclusion*
Eva Kail	Gender expert in the Competence Centre for Higher-level Urban Planning, Smart City Strategy, Participation, Gender Planning (KPP)	Involved in a preliminary phase of the process, but not directly involved in the current stage
Nils Peters	Mobility expert in the Competence Centre for Higher-level Urban Planning, Smart City Strategy, Participation, Gender Planning (KPP)	Not directly involved in the process, but expert in mobility and familiar with the project
Florian Lorenz	Landscape architect for Studio LAUT	In charge of the development of the Supergrätzl
Lena Rücker	MA18, Urban Development and Planning Unit for Transdisciplinary Urban Affairs Smart City Office of the City of Vienna	The city administration unit number 18 is a main stakeholder in the process

Cansu Civelek	Researcher at Central European University in the Democracy Institute in Budapest	In charge of collecting information and communicating the project to the Turkish population of the area
Sabrina Halkic	Managing director of Lokale Agenda 21 Wien	Not directly involved in the process, but expert in public participation

3.2.2 Category 2 – residents, business owners, workers

This category of people includes residents, workers, and business owners of the area of the Supergrätzl. Given how these people are personally affected by the project, their perceptions of the Supergrätzl add valuable insight to the research.

For this category I tried to collect interviews from people representing each prominent population present in the 10th district: Austrian, Turkish, and the Balkan region.

Subjects were approached during the public events organized for the superblock, in a local caffe of the area, and at the local park, Erlachpark. This allowed to have a mixture of subjects that knew about the project, as they were present at the events organized for it, and subjects that were not well informed about it.

Interviews were conducted mostly in German with the help of an interpreter, as many people only speak German or other languages other than English. In this case interviews were not recorded, and hand notes were taken. Participants were asked if they knew about the project and to express their perceptions of it. More specific questions were asked regarding the themes of climate change related effects, sense of community, use of public space, if and how they participated, and benefits or downsides of the superblock. All participants were asked if they owned a car and how

they would be affected by the new traffic regime. Table 2 includes the list of participants interviewed ordered on the base of the time of the interview.

Table 2: Category 2 – Interviewee characteristics

Name of participant	*Reason for inclusion*
Mariana Dikic	Waitress at caffe in the area
Dusan Savic	Resident of the area
Oguz Duran	Resident of the area/ habitual park user
Mark (anonymous)	Local politician
Peter Dressel	Resident of the area/ member of pedestrian lobby
Karl (anonymous)	Resident and business owner in the area

3.3 Method 3 – Observation

Before and during the pilot phase of the Supergrätzl project, different public events were organized in which the details of the project were explained and where the community members could participate and raise their wishes and concerns. I participated in these events and conducted observations. My role was what Baker defines as “Observer-as-Participant” (Baker 2006). Therefore, I was mostly observing and writing down what took place during these events and reporting on what participants were saying, while also occasionally interacting with the participants asking some questions (Ibid). The people that participated in the events were aware that there were researchers on the site, as I wasn’t the only researcher present. The events took place at the superblock site, an open and public space. There were two formats of the events organized: the first was a street laboratory that took place in the pedestrian area of the superblock, while the other events followed the format of a walk around the superblock site focused on specific aspects. Table 3 shows the events that took place and the role I had in them including the events I did not participate in but got information about through the interviews, and the ones that will occur after the study.

Table 3: Public events in the superblock site

Date	*Event Type*	*Role of Researcher*
17-09-2021	Street laboratory	Not present on site
12-05-2022	Informational event and poster exhibition	Not present on site
24-06-2022	Street laboratory and open-air exhibition	Observer
30-06-2022	Walk related to the topic of mobility and the new traffic regime in the Supergrätzl	Observer-as-Participant
07-07-2022	Walk related to the topic of heat and greening	Observer-as-Participant
25-08-2022	Walk related to the topic of open space and residence	After completion of the study
09-09-2022	Street festival in the area of Herzgasse, Pernerstorfergasse and Alxingergasse	After completion of the study

3.4 Limitations

For the literature review, many of the sources pertaining to the Barcelona case were either in Spanish or Catalan, therefore I had to rely on translation tools such as deepL or on articles written in English in which these sources were summarized. The same goes for certain sources regarding the Vienna superblock. Many news articles were in German and also the official institutional websites contained information in German only. With the help of translators and the basic knowledge of the language I have, I was able to gather the information needed.

When conducting interviews, the language barrier between me and many residents of the area constituted an obstacle to the number of interviews I could collect, as I was reliant on the availability of my interpreter. The fact that the interviews with the

residents were not recorded and transcribed might result in some bias with regards to the information I deemed as relevant and therefore wrote down.

The pilot phase of the superblock project started on the 24th of June and is expected to last until September 2022. Therefore, the interviews collected present the perspectives of the interviewees relative to this phase and not the completed project. However, given the scope of the research and the focus on the planning stage of the process of urban development, I believe this aspect doesn't represent a limitation of the study.

With regards to the observations, the language spoken at the events was German. I had an interpreter with me for some part of the events, but some of the observations relied on my limited understanding of the language, and on the ability of the participants I approached to speak English. Recordings of the events were not taken because I had concerns about the quality of them, given that the events took place in an outside space subject to sound dispersion.

3.5 Ethics

The subjects chosen for the interviews are non-vulnerable adults who voluntarily participated in the study. Consent from the interviewees was collected through a written consent form that states the aim of the research as well as how the data collected is going to be treated (Annex I). Participants who didn't speak English were informed about the study verbally in a language they understood through an interpreter. Participants had the option to remain anonymous in case they wanted to. Most of the participants agreed to disclose their name and identity and were informed that their names were going to be used in the research.

4 RESULTS

This section is dedicated to the results of the interviews and observations.

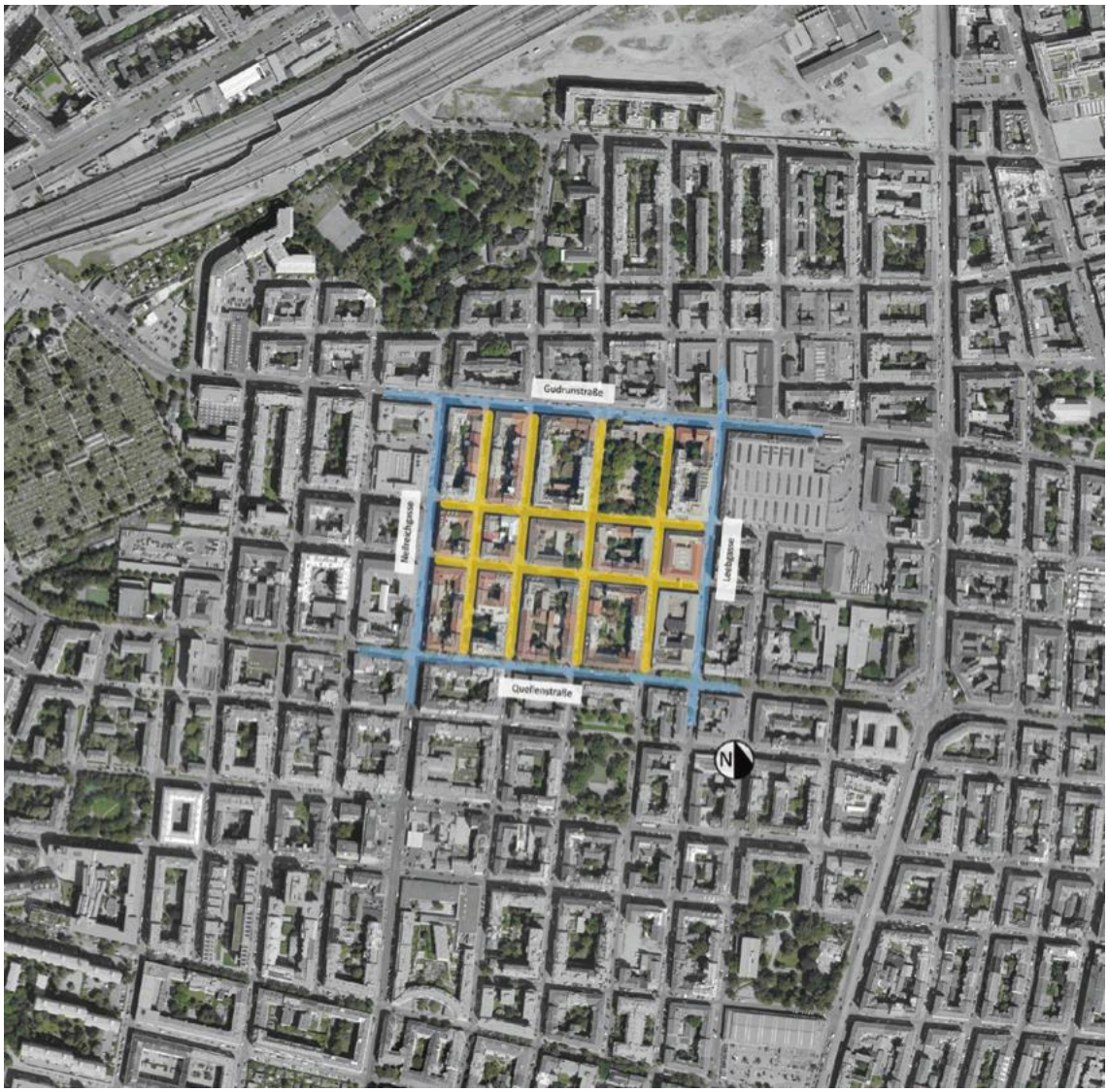
4.1 The Supergrätzl pilot project in Vienna

Vienna is divided in 23 districts and the implementation of the pilot project has been developed for the 10th district, known as Favoriten. The project area is the area between Gudrunstraße, Leebgasse, Quellenstraße and Neilreichgasse in Favoriten (wien.gv.at n.d.). According to the Stadt Wien website, the project will make the area traffic-calmed, greener, and cooler. This is both a step towards climate adaptation and a way to increase the quality of life for residents (wien.gv.at n.d.). The area chosen also comprehends an elementary school which, as mentioned by both Florian Lorenz and Lena Rücker, is a major supporter of the project. The area also includes a public park, Erlachpark (Figure 3).

The City of Vienna is known for its climate friendly programs (Thomas 2012). In particular, there are: the Vienna Climate Protection Program (KliP I and KliP II) in its two iterations from 1999 to 2009 and from 2010 to 2020 (extended until 2021); the EcoProcurement Vienna (ÖkoKauf Wien); the Repair and Service Centers (RUSZ); the EcoBusinessPlan Vienna (Ibid).

In the context of the 10th district the WienNeu+ project is important to note. It is an urban renewal program that focuses on social and ecological innovations at the Grätzl level (wienneuplus.wien.gv.at n.d.). The aim of WieNeu+ is to make neighborhoods more livable and climate-friendly, and reach climate neutrality through soft urban renewal interventions (Ibid).

Figure 3: Supergrätzl site area



Source: https://www.wien.gv.at/stadtentwicklung/projekte/pdf/supergraetzl-favoriten-pilotphase-intro1.pdf

Lena Rücker explained that the initial input for the project came from the district administration of the 10th district. The Stadt Wien unit number 18 (MA18), which is in charge of urban development and planning, commissioned Studio LAUT to draft the concept, which is a studio for landscape architecture and urban transformation. The project initiated in summer of 2021 and the pilot phase launched in June 2022.

Florian Lorenz, one of the founders of studio LAUT[1], said he first got interested in the concept of superblocks when he visited Barcelona in 2017 and spoke to the planners of one of the Superilles there. He said that the main idea that hit home for him was the change of the urban landscape that results in a change of the mobility paradigm. He said there is no reason why public space should be mostly allocated to motorized mobility and said that it's sad that "no kid will play on the street because it's organized this way".

The main elements of the project, as described by the people who are involved in it that were interviewed, are the following:

- Measures for traffic calming and traffic safety
- Opening of new public spaces
- Initial temporary measures to understand the different uses of the street space that will identify the long-term potential for the Supergrätzl.

These last measures include green infrastructure as well as infrastructure that can be used by the residents to increase their "Aufenthaltsqualität" (literally quality of stay in the public space), such as seating areas and shaded areas.

4.2 Characteristics of the 10th district

The 10th district is a very big and most populous district of Vienna (citypopulation.de n.d.). Lena Rücker highlighted how it is characterized by "very long and straight roads leading from north to south that make it very easy for cars to drive above the speed limit" constituting an issue for road safety. Lena Rücker also explained how the 10th district "is an area that has very low-quality public space, very little greenery and trees and areas where you can just rest and meet people. Therefore, the overall goal was

[1] Studio LAUT: *landscape architecture and urban transformation* - http://laut.studio

just to create greener spaces, high quality public space, and of course less motorised traffic, both motorised traffic on the street, but also less parking spaces". Cansu Civelek reported how many women from the Turkish community raised concerns about the lack of public space available to them and their children, as well as the lack of play areas and shaded areas in the summer.

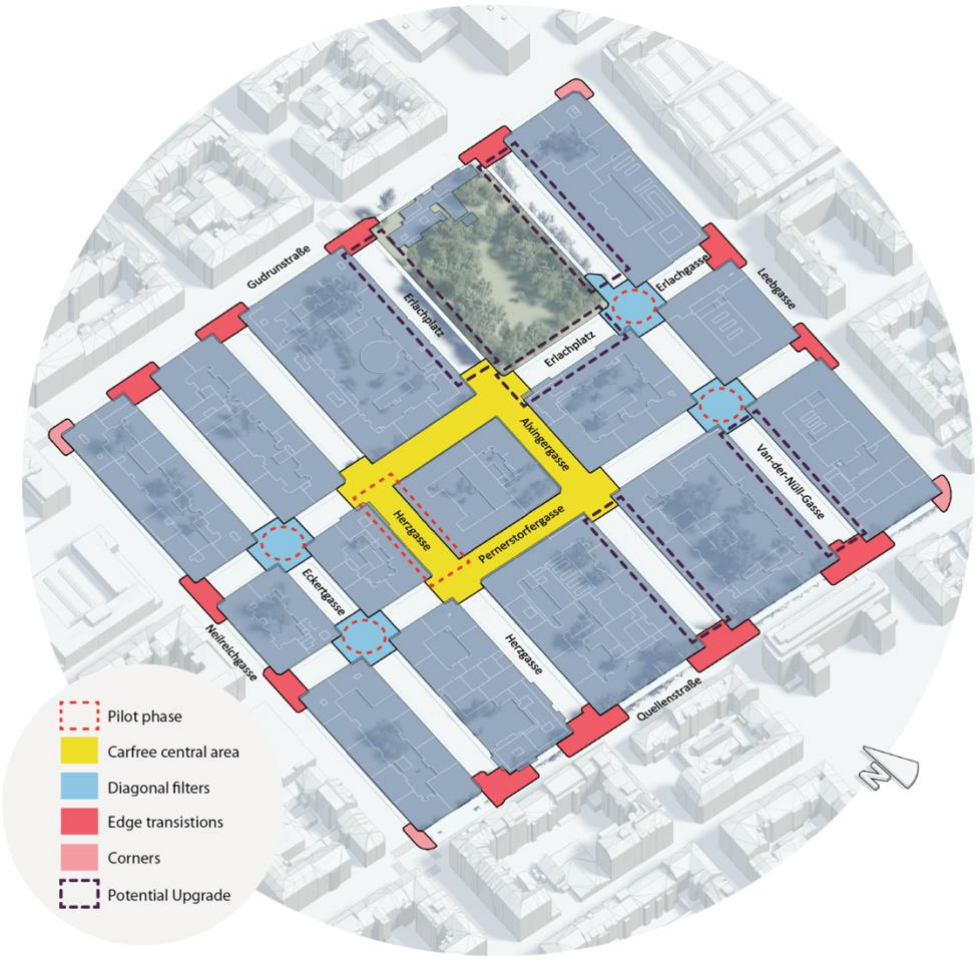
The 10th district is also a densely built district as Lena Rücker pointed out, and Niels Peters stated that districts which are more densely built and where lower income residents live, like the 10th district, suffer more from climate change related issues such as the heat island effect.

Eva Kail pointed out how the 10th district is a socially weak area as much of the population comes from a migrant background. In fact, 40% of the population of Favoriten does not have Austrian citizenship (citypopulation.de n.d.). All experts who were interviewed pointed out how not being an Austrian citizen excludes people from voting in national and city elections and excludes non-EU citizens from voting in district elections. Cansu Civelek also highlighted the multicultural aspect of the 10th district and identified Serbian, Croatian and Turkish population as very prominent communities in the area.

4.3 Characteristics of the Supergrätzl project and pilot phase

The Supergrätzl project introduces gradually different features based on the stage of implementation as shown in Figure 4.

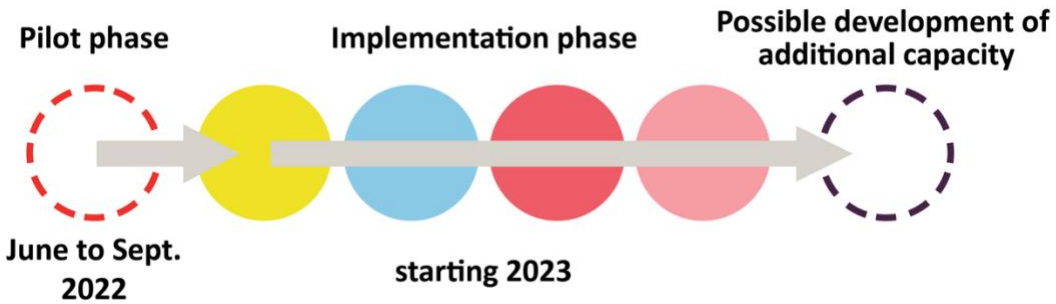
Figure 4: Supergrätzl features



Source: Studio LAUT – landscape architecture and urban transformation

The timeline of the implementation is shown in Figure 5. The pilot phase was launched in June 2022 and will last until September 2022.

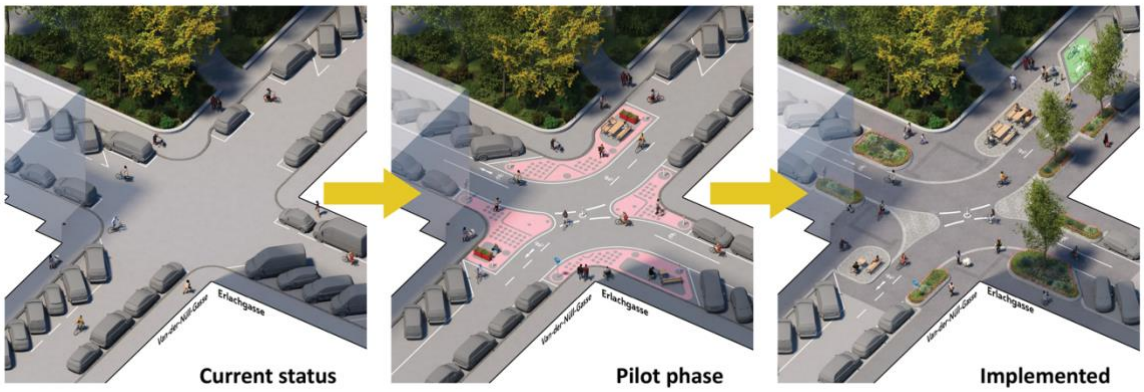
Figure 5: Timeline of Supergrätzl development



Source: Studio LAUT – landscape architecture and urban transformation

During the pilot phase some temporary features are installed in the area, while from 2023 the construction of permanent elements will take place, as shown in Figure 6.

Figure 6: Pilot phase vs permanent implementation



Source: Studio LAUT – landscape architecture and urban transformation

The pilot phase includes a car-free zone in Herzgasse in the stretch of road adjacent to the elementary school. It also includes the establishment of “diagonal filters”, street measures to reduce traffic and ensures that cars cannot cross the intersection in a straight line. These are shown in Figure 7. Eventually the full implementation of the project will expand the car-free zone to the whole area indicated in yellow in Figure 4, and more permanent measures such as green infrastructure and seating space will be introduced in the areas indicated as adequate for expansion potential.

Figure 7: Diagonal filters of the Supergrätzl

Source: Bianca Nina Filastò-Buzzolan

Planting new street trees is an effective measure for increasing the quality of public space and an important climate adaptation measure that was identified by Florian Lorenz as a key feature of the project. Trees provide shade and cooling in the summer heat.

Florian Lorenz explained how the potential for new tree plantings was surveyed for the entire project area. As a result, short- to long-term potentials for new tree plantings in Supergrätzl Favoriten were identified as shown in Figure 7.

Figure 8: Existing and potential locations for urban trees

Source: Studio LAUT – landscape architecture and urban transformation

4.4 Participatory events

There were different events organized to inform the residents about the project, and to collect their input.

The first event was held on September 17th, 2021. It was a street laboratory in which the participants could get informed about the project and contribute with ideas. Many kids from the elementary school of the area also participated and wrote their ideas on postcards that were collected. Lena Rücker said that one great aspect of this first street lab was that “there was childcare offered so people who were out on the road with

children could maybe stop for one hour and just participate in the workshops and in the dialogue."

The second public event was held on May 12th, 2022. Neils Peters and Florian Lorenz explained how the residents of the area received an information leaflet about the event in their letterboxes. During this informational event a poster exhibition presented to the residents the development concept and the program of the pilot phase. Several experts provided information about the project contents. Participants were able to talk to representatives of urban planning, experts, and the teams of Local Agenda 21 and the Gebietsbetreuung Stadterneuerung (approximate translation: "Area renewal office), a service institution of the City of Vienna which offers information and advice on issues of housing, the residential environment, infrastructure, urban renewal, community and living together in the city. According to the website of the City of Vienna, the ideas and concerns of the participants were collected and will flow into the further course of the project.

On June 24th, 2022, another street laboratory took place to inaugurate the start of the pilot phase. During this event an interactive model of the superblock area was laid on the ground in a 1:50 scale, as shown in Figure 8. The aim of it was for people to contribute with ideas of permanent features of the superblock with the use of colorful chips with different symbols or with paper and pens. Many kids participated in this interactive activity with suggestions that ranged from ice cream places to swimming pools just for girls.

Figure 9: Supergrätzl 1:50 scale representation

Source: Bianca Nina Filastò-Buzzolan

Some questionnaires were also distributed to attendees with questions related to existing public space use and wishes and desires for it. Many questionnaires were filled by elementary school students. Cansu Civelek said that she also helped a few Turkish women to fill out questionnaires.

From the 24th of June, 2022 until September there is an open-air exhibition in the area of the new pedestrian zone in Herzgasse where people can learn about the project and the upcoming steps of the development.

On June 30th, 2022 an event focused on the topic of mobility and the new traffic regime in the Supergrätzl took place. The format of the event was a walk around the superblock site, starting from the pedestrian area in Herzgasse. About 25 to 30 people participated including researchers and residents. During the walk, the developers of the project explained the key features of the new traffic regime, while giving a chance to the public to raise questions and concerns. A few residents expressed unhappiness towards the new traffic regime and the reduction of parking space. The people that raised these concerns made similar statements to the ones from Karl in his interview, stating that the change is “too radical” and that a compromise should be found. During the walk some people passed by and got curious about the event. When they understood what the event was about, some contributed to the discussion by also raising concerns about the traffic regime. One person stated that they need to drive the car for work and the new restrictions make it more difficult for them. Another person said that they want to drive their car and not walk.

In contrast, some residents were very favorable to the project and said that in their opinion the implementation is taking longer than expected. Another resident was concerned with the fact that there seems to be many people who are not respecting the new traffic regime and therefore thinks there should be more enforcement by the police. During the walk we witnessed many cars disregarding the new road signs, however some people pointed out how there is a bit of confusion between the signs that are meant for cars and the signs that are meant for cyclists.

On July 7th, 2022 the second event following the walk format took place. The theme of this event was heat and greening. The day of the event was a particularly chilly day for July in Vienna, and this was mentioned during the event multiple times. The walk started in Herzgasse as the previous event. Around 20 people participated in the walk with significantly fewer residents. Representatives of different organizations and city departments were present. In particular there was a representative of MA 22, the unit concerned with environment protection; a representative of Lokale Agenda 21, an organization that promotes citizens participation; a representative of Kinderfreunde, an organization for the rights of families and children.

The person representing MA 22 spoke about greening measures and the impacts they have on temperature and perceived temperature. Informational leaflets were distributed to the participants on the topics of green roofs, façade, and inner courtyard greening. The representative of MA 22 as well as the developers of the project spoke about the importance of vegetation selection which also impacts maintenance. Another topic discussed was the issues related to planting urban trees. The space for trees and large green infrastructure is limited because the streets must stay clear for garbage collection and emergency services vehicles.

Concerning the topic of heat, the representative of Kinderfreunde pointed out how many kids in the 10th district don't go on vacation in the summer, therefore, the streets become a place for them to play and interact with each other, constituting an extension of their living space. With summers getting hotter and hotter, she highlighted the importance of shaded areas and water sources where kids can play. It was also pointed out how the park already present in the area, Erlachpark, is not big enough to accommodate the needs of all the kids in the area. She also suggested that kids should be involved in the implementation of the green measures as a learning experience.

The representative of Kinderfreunde also brought up the importance of seating in shaded areas for the elderly.

From the residents present at the event, one lady expressed her concern with people, specifically men, meeting in the pedestrian area at night, because it doesn't make her feel safe.

There were two more public events already scheduled for the Supergrätzel. The first was to be another walk around the superblock where the topic of open space and residence would be discussed, and will take place on the 25th of August, 2022. The other event is scheduled for the 9th of September, 2022, and will be a street festival in the area of Herzgasse, Pernerstorfergasse and Alxingergasse.

4.5 Institutional and political context

The development of the Supergrätzl is embedded in a thick network of actors that all play a role in the process. Lena Rücker summarized the stakeholders in the process which are shown in Table 4. Many of the stakeholders are municipal departments of the City of Vienna, referred to in German as "Magistratsabteilung" (MA in short). Each department is assigned different competences.

Table 4: Stakeholders involved in the process

	Name of stakeholder	*Description*
Main stakeholders	10th District Administration	District Administration of Favoriten that started the process
	Administrative Group for Innovation, Urban Planning, and Mobility	One of the seven Administrative groups of the City of Vienna, headed by the City Council
	MA 18	Urban Planning and Mobility
	Studio LAUT	Landscape architecture and urban transformation studio

Other municipal departments involved in the consultation process	MA 19	Architecture and Urban Design
	MA 25	Technical Urban Renewal
	MA 33	Public Lighting
	MA 42	Parks and Gardens
	MA 48	Waste Management, Street Cleaning and Vehicle Fleet
	MA 68	Fire Services and Disaster Relief
	WienerLinien	Public Transport Operator
	Austrian Disability Council	
Other municipal departments involved in the consultation and implementation process of the pilot phase	MA 46	Traffic Management and Organization
	MA 28	Road Management and Construction
Other stakeholders	Wien Neu+	Urban renewal program
	Gebietsbetreuung (GB*)	Service institution of the City of Vienna which offers information and advice on issues of housing, the residential environment, infrastructure, urban renewal, community and living together in the city
	Lokale Agenda 21 office	Organization promoting citizen participation in sustainable urban development processes
	Kinderfreunde	Organization for the rights of families and children
	MS Herzgasse	Public Elementary School of the area
	Kindergärten	Kindergarten in the area
	Local businesses	
	Public	
	Media	

From the interviews, it emerged that the Viennese district administrations have significant autonomy when it comes to decision-making processes for the development of new urban projects. Something that all experts mentioned, however, is budgetary. Lena Rücker said that there are very few other districts that have the extra budget to afford projects like this. She also mentioned how “the pilot phase has

proven [itself] very insightful, but also very expensive". Eva Kail said that it was great that the head of the 10th district was so enthusiastic about the superblock project and said that he made a courageous decision in initiating this process. Lena Rücker mentioned another superblock project was set out to be implemented in the second district. The project, however, didn't take off due to political reasons. Political climate, in fact, is another important element to be considered. Eva Kail said that for example the districts run by the FPÖ party (Freiheilichen Partei Österreichs, the Freedom Party of Austria), which is "traditionally extremely car oriented", will not support the implementation of climate friendly projects like the superblock model. Peter Dressel said that even among members of the SPÖ (Sozialdemokratische Partei Österreichs, the Social Democratic Party of Austria), traditionally closer to more climate friendly policies, there are disagreements, and some members remain very "car-centric". Lena Rücker said that political approval from the top institutional levels is important in order to "access more financial resources in the future".

Regarding the voting system in Vienna and Austria in general, all the people interviewed perceive this aspect as an important issue to address. Evai Kail said that since Austria is a federate state, Vienna as a state is dependent on the national law and "this is a political debate that is really problematic". Sabrina Halkic said that it is not possible to change the fact that a lot of people cannot vote at the local level because they are not citizens, therefore it is important to find other ways to integrate their voices. Some people present at the event on the 24th of June, 2022 at the superblock site, said that voting becomes central when politicians are forced to cater to the wishes of voters in order to be reelected, and sometimes these wishes might not match the best interests of the large non-voting population. On this matter, however, Sabrina Halkic pointed out how, since in Vienna the non-voting population

is so high, politicians are obliged to consider the needs of these people or social resistance might occur.

With regards to the implementation approach of the superblock project in Vienna, Lena Rücker and Florian Lorenz described the process as top-down. As mentioned before the initial impetus for the project came from the administration of the 10th district, which contacted Stadt Wien, which then commissioned Studio LAUT for the development of the concept. In contrast, some researchers from Berlin, who are involved in the development of the superblock model in Berlin, described the processes occurring there as bottom-up, where citizens come up with superblock projects and initiate the process through a formal request. Sabrina Halkic said that there is no approach that is better than the other, but bottom-up processes are harder and usually work better for small scale projects. She added that a possibility is to start with a top-down approach and then move to bottom-up processes.

4.6 Climate change and use of public space

In the context of the Supergrätzl many participants mentioned how the district of Favoriten is affected by certain climate change issues more than other districts. Eva Kail mentioned that in her opinion the choice of this district for the project was done with these aspects in mind. Lena Rücker stated that climate change “is a social issue and might not often be seen as such. But we know that people that are vulnerable in different ways are also more vulnerable towards the effects of climate change”. For this reason, Lena said that by creating greener and cooler areas we increase the resilience of the inhabitants to climate change while also increasing the quality of the public space at their disposal. Florian Lorenz stated that one of the main goals of the Supergrätzl is to introduce climate adaptation measures while at the same time

increasing the quality of life of residents. Therefore, the Supergrätzl aims at fulfilling a climate function as well as a social function. Florian Lorenz also expressed the hope that this project can jumpstart a process in the whole city that is both social and ecological.

Eva Kail pointed out how the city of Vienna, and Austria as a whole, has made the commitment to become climate neutral by 2040, and how the traffic regime plays a big role in achieving this. She said that there needs to be a push for a major transition and a pilot phase like the one laid out for the superblock in Vienna represents an important step because if it works well, it could be the beginning of the transition at the city level. Lena Rücker also stated that the superblock can be seen as "a vehicle to communicate how we must transform public space and how transformation can be done without [negatively] impacting the quality of life of individuals", but rather increasing it.

Peter Dressel and Mark also believe that reducing traffic and introducing more green space will improve people's quality of life. Peter Dressel pointed out the importance of projects that put pedestrians first. He said that pedestrians are often an anonymous mass that lack an entity that represents their rights. Peter Dressel brought up the example of two different car lobbies in Austria (oeamtc.at and arboe.at) and a cycling lobby (radlobby.at), and compared it to a very small pedestrian lobby present in Vienna (geht-doch.wien) which only counts around 35 people, and that he is part of. He said that there aren't enough organizations that are powerful enough to defend and increase pedestrian rights.

Niels Peters and Mark both pointed out how the corona virus pandemic has made evident the importance of public space, especially in socially weaker areas where people might have less private space at their disposal.

A crucial theme that emerged from the interviews is the use of public space and its quality. Florian Lorenz stated how right now there are “established privileges of public use” that the Supergrätzl aims at changing. So far cities are organized in a way that benefits car users. Most public space is dedicated to moving motorized traffic and parking space, leaving very little room for other types of mobility. Lena Rücker also highlights how “public space has a very motorized focus”. Eva Kail said that it is important that the reduction of motorized traffic and parking space will lead to giving “that public space back to people”. In her opinion this might upset some car owners, but it is a necessary shift that will benefit most people in the long run as well as the environment.

Out of the residents interviewed who are car owners, Dusan Savic said that he understands that change is happening and wants to be on board with it and not against it, while Karl believes that the superblock model is “too radical”, and that people still need to use their cars.

Eva Kail pointed out how car owners that have a garage would probably benefit from the Supergrätzl because they are not affected by the reduction of parking space but will see an improvement in the quality of their surroundings. Karl, despite owning a garage, expressed his disinterest in improving the quality of his neighborhood because he said there are many beautiful areas in Vienna, and he will go there if he wants to have a walk. He added that in his opinion the aesthetic improvement that the superblock will add to the area will still not be enough to make the area appealing to him. In his opinion the tradeoff between the new traffic regime and the improvement of the quality of public space is not worth it. Cansu Civelek reported how most women she spoke to are excited about the new traffic measures because one of their main

concerns for their children is traffic security. Cansu Civelek believes that these people are the “real owners of the public space”.

4.7 Public participation, representation, social cohesion, and gentrification

Another crucial theme, and maybe the one that came up the most, is public participation and representation of the different groups of the area. Cansu Civelek said “the Supergrätzl project tries to be participatory” in the sense that different barriers to public participation were identified and the developers put in place certain measures to try bring the barriers down. She said that it’s important to have people who are in charge of such projects be sensitive to issues of participation and representation.

Lena Rücker said that there were different participation formats chosen for the participatory events aimed at informing the population and collecting their inputs. Both Lena Rücker and Florian Lorenz said that the location and timing of the events is an important aspect that influences how many people participate. With events happening on the streets, Florian Lorenz said that it provides the possibility to people to be curious and just stop by, as opposed to events organized in closed spaces where Lena Rücker said there are both a physical barrier, but also a mental barrier to participation.

Once the pilot phase was launched in June, it made it easier for people to get involved in the process because when “measures are visible in the public space, more people will be interested in what’s going on”, Lena Rücker pointed out.

One of the biggest barriers to participation identified by all experts interviewed is the language barrier between who is developing the project and a large part of the population of the area. Cansu Civelek and Sabrina Halkic identified Turkish, Bosnian, Serbian and Croatian as prominent groups present in the area. When conducting interviews with residents, I also found that many people belonged to these groups and

many of them do not speak German. Lena Rücker said that this part of the population is especially hard to reach. Florian Lorenz and Cansu Civelek said that for them it was important to include the voices of these people in the process. At first the information material that was distributed was only in German and Cansu Civelek said that when speaking to members of the Turkish community they were not interested in the project and felt like the leaflets were a waste of paper since they couldn't read them anyways. For this reason, Cansu Civelek explained, it was important to create informational material in different languages other than German. Cansu Civelek also spent time with members of the Turkish community in order to inform them about the project, but also to collect their perceptions and inputs. She said that at first the people were skeptical because nobody had ever approached them to ask their opinions on such matters. Cansu Civelek said that at first she received responses such as "who's gonna listen to us?" and "who cares about our interests?". Sabrina Halkic said that, at the beginning, it's common to experience skepticism from these groups of people because most of them have never felt like they were included before.

Creating questionnaires and flyers in Turkish, Serbian and Croatian "is not a small change for them", Cansu Civelek said, because they saw progress. Cansu Civelek also said that "it's a structural problem, it is so established that these people are unheard, and they're not represented" so including them into the participatory processes is extremely important. Sabrina Halkic and Lena Rücker highlighted the importance of multilingual participation processes, however Lena Rücker also noted how "multilingual participation processes are only possible when there are funds for it", and that is not always the case.

Another element concerning the relation between developers and community members is how to communicate technical terms is a simple manner. Lena Rücker

said that experts are often not trained in conveying information in easy-to-understand terms. Cansu Civelek also said that when helping women from the Turkish community to fill in questionnaires sometimes she would have to explain terms that were not clear, such as the concept of use of public space.

Before initiating participatory processes, Florian Lorenz said that it's important to identify what is possible to change. Niels Peters said that people are unfortunately not educated enough in urban planning and sometimes don't understand the reasons why certain things are not possible to implement. "It's not possible to plant a tree anywhere" said Niels Peters, and it's important to communicate these conditions to people.

Once the participatory processes are initiated and input is collected from people, Lena Rücker said that it is equally important to then communicate what is done with the input received. Sabrina Halkic said that people's inputs need to flow into the planning and then it has to be communicated to them to make adjustments.

Despite the measures put in place to guarantee public participation, Cansu Civelek said "you can't expect a miracle from such projects!". The residents and workers interviewed at the caffe of the area for example were completely unaware of the project despite flyers laying on the tables of the caffe. When told about the project, Mariana Dikic said she didn't care what happened to the area at all. Similar sentiment was shared with some other residents. However, when asked if they had children and if they would like for their kids to be able to be safer on the streets, their attitude seemed to change. Mariana Dikic said she would like for her kid to be able to walk around the neighborhood without worrying about fast cars driving by. Oguz Duran, who was interviewed at Erlachpark, also seemed excited about the idea of fewer cars passing by because he is a father of four and would like to have more space to play with his kids outside.

All residents were also asked if the project could help the different cultural groups come together. Most residents said they would like to increase social cohesion between different groups but don't think it's possible because of Austrian mentality. Dusen said that the Balkan cultures and the Muslim cultures are too different but he likes the multicultural aspect of Favoriten and Vienna in general. He said that's what makes Vienna Vienna. Mariana Dikic said that Viennese people don't greet each other so she thinks that more access to public space won't necessarily lead to more social interactions between people. Oguz Duran said that sometimes he speaks to the parents of children from different cultural backgrounds, but he mostly interacts with people from the Turkish community like him.

Florian Lorenz noted how unfortunately there are specific categories of people that participate more than others in the events and to the development process in general. He said that it's mostly people who are either very enthusiastic about the project and want to express that to him, or people who are very against the project, mostly because of parking space issues, and show up to express their disagreement. Lena Rücker, Cansu Civelek, Eva Kail, and a few people that were present at the street laboratory of the 24th of June all said that there is a very loud minority composed of old white men that tend to participate in the events to complain about the fact they won't be able to use their cars. Karl said that, in his opinion, there is a concerning trend towards the reduction of car use and he thinks it is not fair since car users contribute the most to the city's budget by paying for car insurance, parking and other expenses.

Lena Rücker pointed out how it is sad to see the media pick up on this loud minority and reporting on such projects in a negative light, while there is a larger group of people who are mostly silent that would benefit greatly from these urban

transformations. For this reason, she stated that “there must be a better dialogue established between the planners, the district, and the media”.

A topic that almost all experts brought up in the interviews, but didn’t seem to be considered by the residents, is the issue of gentrification. Florian Lorenz said that one of the aims of the superblock project for him was to “invest the attention and resources of the city, not in one of the inner-city districts to make them even nicer, but to go in an area where people could really benefit from this”. He also recognized that the issue of gentrification comes up a lot because it happens in other cities. However, he believes that for Vienna this represents much less of an issue because of the policies in place. Lena Rücker said that gentrification is inevitable and is a natural process that occurs “whenever you make a city greener and increase the quality of public space”. Lena Rücker also pointed out that gentrification and especially processes of displacement in Vienna are mitigated to some extent because there is a “large stock of public social housing and also subsidized housing”. Sabrina Halkic said “you can see in Vienna when bigger developments come in, the social structure of residence does change. But if it will be the case with the superblock project, I don’t know”.

Niels Peters distinguished between two types of gentrification processes: the one that occurs when rent goes up, and the one that occurs when the cost of the services of a certain area become unaffordable for the people living there. Lena Rücker pointed out how “gentrification cannot be avoided through planning interventions but more top-down regulation of rent and housing cost”. Florian Lorenz also believes that there should be countermeasures to gentrification, however he said that these “don’t happen on the streets” but come through appropriate policies. Eva Kail said how operating social space analyses can help urban design serve the population that actually lives in the area. This helps with budget and with gentrification in her opinion.

Florian Lorenz said that in their analysis of the area of Favoriten they looked at indicators such as the average time people spend living in a certain area. He said that in Favoriten this time is less compared to the average in Vienna which is about 14 or 12 years. Florian Lorenz also pointed out that sometimes people move out from a more central area towards the outskirts of the city but they improve their living space, so the overall quality of life also improves.

The interview with Florian Lorenz took place in an empty building in the area of the Supergrätzl which Florian explained has been bought by some developers who, in his opinion, might use the superblock as a future selling point for the property.

Both Lena Rücker and Florian Lorenz said that the end goal is to make projects like this scalable and distribute them across the city. In the long-term the goal is to make the whole city more walkable and green for everyone.

Florian Lorenz concluded on the topic of gentrification by saying that “gentrification happens, but it cannot be an argument to not adapt our cities to climate change and to not improve public spaces in our cities”.

5 DISCUSSION

The nebulous nature of the concept of social sustainability, which emerged from the literature review (Larimian and Sadeghi 2021; Sugandha, Freestone, and Favaro 2022; Littig and Griessler 2005), was further confirmed by the results of the interviews. Each expert interviewed, when asked to name five aspects of the superblock that relate to social sustainability, named different aspects from one another. However, as the result section demonstrates, it is possible to find a common thread that relates to all answers. This leads me to believe that, despite not having a clear definition (Dempsey et al. 2011), social sustainability encompasses some fundamental aspects recognized by everyone and that were part of the theoretical framework chosen for this research. These elements, political and institutional context, physical aspects, and social processes, were addressed to different extents in the planning and preliminary implementation of the Supergrätzl in Vienna.

5.1 Institutional and political context

As it emerged from the results, the Supergrätzl project includes a plurality of actors and stakeholders with varying levels of involvement. This network of people and entities shows a complex institutional framework around the project which is also influenced by politics. The picture painted through the interviews reflects the complexity which is typical of cities viewed as complex adaptive systems (Olazabal 2017). The Supergrätzl, in fact, is embedded in a context specific set of institutional dynamics considered in the theoretical framework that affect the stages of development of the project.

The district administration of Favoriten, Vienna has quite a wide autonomy in the decision-making process. However, there are constraints to the district activities that derive from economic reasons, such as budgetary ties, and institutional constraints. Urban development projects need support from the city's administration and if the political views of the district and the city don't match, it can create an obstacle. An example of this is the project that was initiated for the second district in Vienna that never came to life for political reasons. It was clear that political climate played a major role in the implementation of the superblocks in Barcelona as well. Unfortunately, this means that transitions to more sustainable models in urban areas are at the mercy of the current political climate which by nature is constantly changing. It is therefore crucial to adopt theoretical frameworks that address institutional and political complexity when assessing processes and outcomes of urban development. This aspect has implications for the scalability of the project in the future. Evaluations on this matter, however, can only be done once the outcomes of the project are measurable since the project is not embedded in a larger program of superblock development like for the Barcelona case.

The other institutional constraint is given by the national framework. Vienna, as a state of Austria's federal state, is tied to the legal framework of the nation, therefore, despite having a climate-oriented agenda, Vienna's policies are subordinated to the national agenda. This constraint emerged very clearly in the issue of voting. Voting laws depend on the national level and although the city of Vienna seems to be sensible to multicultural issues, this is not reflected in the national policies around immigration, citizenship and therefore voting. The fact that 40% of the population of Favoriten cannot vote is an aspect that needs to be kept in mind when assessing social sustainability of the superblock. For this very significant part of the population it is not

possible to participate to local or national elections, therefore measures that guarantee that their voices are heard are fundamental.

With regards to policies aimed at guaranteeing good quality of life, a good example of policies impacting this sphere is the social housing regime. As pointed out by a few interviewees, Vienna has adequate measures to mitigate the phenomenon of gentrification and displacement of members of lower income communities.

The Supergrätzl project itself does not have the capacity to create or eliminate such phenomena, therefore this issue is one that highly depends on the legal framework around it.

Important to note is the necessity to evaluate the outcome of the Supergrätzl in the future. The success of the project can lead to two important consequences: it will hopefully lead to the mobilization of more financial resource to make the project scalable across the whole city; it can jumpstart bottom-up processes of implementation of more superblocks.

5.2 Physical factors

From the result of the interviews, it is clear that a central goal of the superblock is to introduce climate adaptation measures that also increase the quality of life of the residents, creating a synergy between the environmental and the social sphere. Integrating urban design with teachings from ecology is a crucial aspect of moving towards a sustainable transition in cities (Childers et al. 2015).

Climate change is an issue that affects urban areas more and more every year and it's clear that a transition to greener systems is needed. With Covid-19 containment measures impacting on people's movements in the city, the public space adjacent to people's residences became increasingly important. The introduction of seating

features and green infrastructure makes public space more attractive so that people will be more inclined to use the public space as an extension of their private living space.

Reducing the area dedicated to cars, on top of the environmental benefits that derive from the reduction of traffic, can also encourage the increase of active mobility.

However, the physical transformation of the space needs to be paired with a shift in mentality (Olazabal 2017; Rueda 2019). From the interviews and observations, it emerged that there is still a significant part of the population that does not agree with taking away a little bit of the privilege that cars have in the public space. This point can make it harder to transition from a top-down approach to a bottom-up approach. If a part of the population is still not on board with changing the mobility paradigm, the initiative to start new projects like this will not come from them. From a social sustainability perspective, bottom-up processes are generally preferred as they guarantee a more active involvement of the community (Fraser et al. 2006). This aspect was not considered by the theoretical framework which could be a point to touch on in future research.

5.3 Social processes

Favoriten is a very multicultural district and it's important that such diversity is represented in participatory processes. Introducing meaningful participatory processes at the different levels of development of urban renewal projects ensures better overall outcomes as seen in the literature (Kahila-Tani et al. 2016; Haklay, Jankowski, and Zwoliński 2018). It emerged clearly that the diversity of the 10th district in Vienna is recognized by the people involved in the superblock project. The barriers to participation were clearly identified and include not only language barriers derived

from the multicultural aspect, but also knowledge barriers. Efforts are being made to bring down the barriers that prevent different groups from accessing the participatory processes. However, planners are aware of the gaps in the participation process that reflect in the lack of interest shown by some of the residents of the area. Participation cannot be forced, it happens naturally when there are no barriers to it. Even when the barriers are removed, participation remains an element that is dependent on the cultural context as well as on individual circumstances. Furthermore, participatory processes require appropriate funding in order to be as inclusive as possible and budgetary constraints often don't permit this. The fact that part of the budget of the Supergrätzl project was allocated to guaranteeing a certain level of multilingualism, at least when it comes to the informational material distributed, shows the planners' awareness of these issues. However, complete multilingual engagement wasn't or couldn't be guaranteed which could be an aspect to improve on in the future.

Culture is an important aspect that affects social processes and needs to be considered along representation. Therefore, culture is an element that should have been included in the theoretical framework. Recognizing multiculturalism and diversity in urban planning should translate in an approach that aims at catering also to specific groups and not only to an abstract general public (Burayidi 2015).

According to the City of Vienna's website (wien.gv.at n.d.), input from the participatory processes will flow into the following steps of development of the Supergrätzl. However, it is not clear how this will be done exactly. Therefore, it is necessary to better communicate the outcomes of the participatory processes that took place.

The categories of people that often prominently participate are, unfortunately, the ones that have strong opposing opinions and can sometimes hinder the smooth development of the project especially if their voices are picked up by the media. There

is, however, a large silent majority that will benefit from the project in the long run. It is comprised of women and children, especially, who access public space on an everyday basis, and this aspect should always be kept in mind. Public space, as the word says, is public, therefore it should be accessible to everyone. However, at the moment access to it is dominated by motorized traffic, excluding a large part of the population from safely accessing public space and interacting with and within it.

Residents value the diversity present in the district and aspire to a more cohesive existence between the different nationality groups, while also showing doubts about its achievability. Culture plays a major role in matters of social cohesion and the fact that many interviewees recognized how Austrians are more closed off generally, points to difficulties in improving on social processes such as social cohesion.

5.4 Further research prospects

The scope of this research is on the initial stage of the implementation of the superblock model in Vienna and has focused on the aspects of social sustainability within the area of the Supergätzl. Therefore, further research is needed to evaluate the outcome of the project both in the short-term and long-term. Furthermore, a possible prospect for research is the evaluation of the effects of the superblock in the surrounding areas of the Supergrätzl, which were not considered in this research.

6 CONCLUSION

With climate change posing threat to the ever growing urban population, urban design and urban planning play a crucial role in addressing the new environmental and social challenges ahead (Pickett, Cadenasso, and McGrath 2013; Childers et al. 2015). The superblock concept has been identified as a sustainable urban solution that can improve cities sustainability goals (Rueda 2019). The City of Vienna has begun the implementation of its first superblock (Supergrätzl) in order to achieve results on all aspects of sustainability. As the Brundtland report has taught us, environmental sustainability must be achieved along with economic and social sustainability (Childers et al. 2015).

The theoretical framework adopted for this research considers institutional and political context, physical factors, and social processes in order to evaluate social sustainability aspects of the Supergrätzl project, which is still in a development phase and therefore final outcomes are not yet measurable.

The institutional and political context around the project creates a tight framework in which the other elements are placed. This network of actors and policies wraps around the whole process of planning and implementation and impacts on social processes such as participation and gentrification.

High sensitivity towards issues of diversity and representation are fundamental especially in a multicultural context such as the district of Favoriten. Recognizing diversity has implications on the participatory processes put in place which should aim at guaranteeing inclusion of all groups. Such inclusion needs to be meaningful and not merely symbolic which in practice should translate in gathering actual input from

residents and being clear and transparent in communicating the outcomes of the input received.

Multiculturalism is an element that is being recognized as prominent in modern cities and therefore urban planning has to adapt to new community needs (Burayidi 2015). The Supergrätzl in Favoriten is a great example of a project that tries to recognize the multicultural aspect of the city and integrate it into its design, to the extent allowed by the institutional and political context, while also aiming at achieving environmental goals.

REFERENCES

Anguelovski, Isabelle, James J. T. Connolly, Laia Masip, and Hamil Pearsall. 2018. "Assessing Green Gentrification in Historically Disenfranchised Neighborhoods: A Longitudinal and Spatial Analysis of Barcelona." *Urban Geography* 39 (3): 458–91. https://doi.org/10.1080/02723638.2017.1349987.

Arnstein, Sherry R. 1969. "A Ladder Of Citizen Participation." *Journal of the American Institute of Planners* 35 (4): 216–24. https://doi.org/10.1080/01944366908977225.

Ayuso, Julia Webster. 2021. "How Barcelona's 'Superblock' Plan Is Carving out a Post-Car Future." Time Out Worldwide. November 7, 2021. https://www.timeout.com/news/how-barcelonas-superblock-plan-is-carving-out-a-post-car-future-110721.

Baker, Lynda. 2006. "Observation: A Complex Research Method." *Library Trends* 55 (1): 171–89. https://doi.org/10.1353/lib.2006.0045.

Barcelona.cat. 2020a. "Climate Emergency Declaration." Barcelona and the Climate Emergency. January 15, 2020. https://www.barcelona.cat/emergenciaclimatica/en/home-en.

———. 2020b. "Aprobación inicial del Plan de movilidad urbana 2024." Movilidad y transportes. December 16, 2020. https://www.barcelona.cat/mobilitat/es/actualidad-y-recursos/aprobacion-inicial-del-plan-de-movilidad-urbana-2024.

Bausells, Marta. 2016. "Story of Cities #13: Barcelona's Unloved Planner Invents Science of 'Urbanisation.'" *The Guardian*, April 1, 2016, sec. Cities.

https://www.theguardian.com/cities/2016/apr/01/story-cities-13-eixample-barcelona-ildefons-cerda-planner-urbanisation.

BCNecologia. 2018. “SUPERBLOCKS | BCNecologia.” 2018. http://www.bcnecologia.net/en/conceptual-model/superblocks.

Bettencourt, Luís. 2015. “Cities as Complex System.” In *Modeling Complex Systems for Public Policies*, edited by Bernardo Furtado, Patricia Sakowski, and Marina Tóvolli.

Boyko, Christopher T., Rachel Cooper, Caroline L. Davey, and Andrew B. Wootton. 2006. “Addressing Sustainability Early in the Urban Design Process.” *Management of Environmental Quality: An International Journal* 17 (6): 689–706. https://doi.org/10.1108/14777830610702520.

Burayidi, Michael A. 2015. *Cities and the Politics of Difference: Multiculturalism and Diversity in Urban Planning*. University of Toronto Press.

Chan, Edwin, and Grace K. L. Lee. 2008. “Critical Factors for Improving Social Sustainability of Urban Renewal Projects.” *Social Indicators Research* 85 (2): 243–56. https://doi.org/10.1007/s11205-007-9089-3.

Childers, Daniel L., Mary L. Cadenasso, J. Morgan Grove, Victoria Marshall, Brian McGrath, and Steward T. A. Pickett. 2015. “An Ecology for Cities: A Transformational Nexus of Design and Ecology to Advance Climate Change Resilience and Urban Sustainability.” *Sustainability* 7 (4): 3774–91. https://doi.org/10.3390/su7043774.

citypopulation.de. n.d. “Vienna (Austria): City Districts - Population Statistics, Charts and Map.” Accessed June 23, 2022. https://www.citypopulation.de/en/austria/wiencity/.

Dempsey, Nicola, Glen Bramley, Sinéad Power, and Caroline Brown. 2011. "The Social Dimension of Sustainable Development: Defining Urban Social Sustainability." *Sustainable Development* 19 (5): 289–300. https://doi.org/10.1002/sd.417.

DER STANDARD. 2021. "'Supergrätzel' in Wien-Favoriten geplant: Mehr Grün, weniger Verkehr." DER STANDARD. August 14, 2021. https://www.derstandard.at/story/2000128923266/supergraetzl-in-wien-favoriten-geplant-mehr-gruen-weniger-verkehr.

Dias, Nuwan, Steve Curwell, and Erik Bichard. 2014. "The Current Approach of Urban Design, Its Implications for Sustainable Urban Development." 2014. https://doi.org/10.1016/S2212-5671(14)00968-X.

Eggimann, Sven, Philipp Lischer, and Janine Bolliger. 2021a. "Evaluating Superblock Design to Enhance Urban Greening." *Journal of Physics: Conference Series* 2042 (1): 012005. https://doi.org/10.1088/1742-6596/2042/1/012005.

———. 2021b. "Evaluating Superblock Design to Enhance Urban Greening." *Journal of Physics: Conference Series* 2042 (1): 012005. https://doi.org/10.1088/1742-6596/2042/1/012005.

Eizenberg, Efrat, and Yosef Jabareen. 2017. "Social Sustainability: A New Conceptual Framework." *Sustainability* 9 (1): 68. https://doi.org/10.3390/su9010068.

Enyedi, György. 2002. "Social Sustainability of Large Cities." *Ekistics* 69 (412/413/414): 142–44.

Fraser, Evan D. G., Andrew J. Dougill, Warren E. Mabee, Mark Reed, and Patrick McAlpine. 2006. "Bottom up and Top down: Analysis of Participatory Processes for Sustainability Indicator Identification as a Pathway to Community Empowerment and Sustainable Environmental Management." *Journal of*

Environmental Management 78 (2): 114–27. https://doi.org/10.1016/j.jenvman.2005.04.009.

Ghahramanpouri, Amir, Hasanuddin Lamit, and Sepideh Sedaghatnia. 2013. "Urban Social Sustainability Trends in Research Literature." *Asian Social Science* 9 (4): p185. https://doi.org/10.5539/ass.v9n4p185.

Haklay, Muki, Piotr Jankowski, and Zbigniew Zwoliński. 2018. "Selected Modern Methods and Tools for Public Participation in Urban Planning – A Review." *Quaestiones Geographicae* 37 (3): 127–49. https://doi.org/10.2478/quageo-2018-0030.

Harris, Zellig S. 1981. "Discourse Analysis." In *Papers on Syntax*, edited by Zellig S. Harris and Henry Hiż, 107–42. Synthese Language Library. Dordrecht: Springer Netherlands. https://doi.org/10.1007/978-94-009-8467-7_7.

Kahila-Tani, Maarit, Anna Broberg, Marketta Kyttä, and Taylor Tyger. 2016. "Let the Citizens Map—Public Participation GIS as a Planning Support System in the Helsinki Master Plan Process." *Planning Practice & Research* 31 (2): 195–214. https://doi.org/10.1080/02697459.2015.1104203.

Klause, Kai. 2018. "Barcelona Superblocks: How Power and Politics Shape Transformational Adaptation." *Barcelona Lab for Urban Environmental Justice and Sustainability* (blog). April 6, 2018. http://www.bcnuej.org/2018/04/06/barcelona-superblocks-how-socio-political-power-struggles-shape-transformational-adaption/.

Larimian, Taimaz, and Arash Sadeghi. 2021. "Measuring Urban Social Sustainability: Scale Development and Validation." *Environment and Planning B: Urban Analytics and City Science* 48 (4): 621–37. https://doi.org/10.1177/2399808319882950.

Littig, Beate, and Erich Griessler. 2005. “Social Sustainability: A Catchword between Political Pragmatism and Social Theory.” *International Journal of Sustainable Development* 8 (1/2): 65. https://doi.org/10.1504/IJSD.2005.007375.

López, Iván, Jordi Ortega, and Mercedes Pardo. 2020. “Mobility Infrastructures in Cities and Climate Change: An Analysis Through the Superblocks in Barcelona.” *Atmosphere* 11 (4): 410. https://doi.org/10.3390/atmos11040410.

Mueller, Natalie, David Rojas-Rueda, Haneen Khreis, Marta Cirach, David Andrés, Joan Ballester, Xavier Bartoll, et al. 2020. “Changing the Urban Design of Cities for Health: The Superblock Model.” *Environment International* 134 (January): 105132. https://doi.org/10.1016/j.envint.2019.105132.

Næss, Petter. 2001. “Urban Planning and Sustainable Development.” *European Planning Studies* 9 (4): 503–24. https://doi.org/10.1080/713666490.

Netto, Vinicius M. 2017. *The Social Fabric of Cities*. New York: Routledge.

Olazabal, Marta. 2017. “Resilience, Sustainability and Transformability of Cities as Complex Adaptive Systems.” *Urban Regions Now & Tomorrow*, 73–97. https://doi.org/10.1007/978-3-658-16759-2_4.

Palència, Laia, Brenda Biaani León-Gómez, Xavier Bartoll, Juli Carrere, Elia Díez, Laia Font-Ribera, Anna Gómez, et al. 2020. “Study Protocol for the Evaluation of the Health Effects of Superblocks in Barcelona: The ‘Salut Als Carrers’ (Health in the Streets) Project.” *International Journal of Environmental Research and Public Health* 17 (8): 2956. https://doi.org/10.3390/ijerph17082956.

Palinkas, Lawrence A., Sarah M. Horwitz, Carla A. Green, Jennifer P. Wisdom, Naihua Duan, and Kimberly Hoagwood. 2015. “Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research.”

Administration and Policy in Mental Health and Mental Health Services Research 42 (5): 533–44. https://doi.org/10.1007/s10488-013-0528-y.

Philipp Aust, Helmut, and Anél du Plessis. 2018. “Good Urban Governance as a Global Aspiration: On the Potential and Limits of SDG 11.” In *Sustainable Development Goals*, by Duncan French and Louis Kotzé, 201–21. Edward Elgar Publishing. https://doi.org/10.4337/9781786438768.00016.

Pickett, S.T.A., M.L. Cadenasso, and Brian McGrath, eds. 2013. *Resilience in Ecology and Urban Design*. Vol. 3. Future City. Dordrecht: Springer Netherlands. https://doi.org/10.1007/978-94-007-5341-9.

Postaria, Ronika. 2021. “Superblock (Superilla) Barcelona—a City Redefined. Public Realm.” *Citiesforum.Org* (blog). May 31, 2021. https://www.citiesforum.org/news/superblock-superilla-barcelona-a-city-redefined/.

Roberts, David. 2019. “Barcelona Wants to Build 500 Superblocks. Here’s What It Learned from the First Ones.” Vox. April 9, 2019. https://www.vox.com/energy-and-environment/2019/4/9/18273894/barcelona-urban-planning-superblocks-poblenou.

Rueda, Salvador. 2019. “Superblocks for the Design of New Cities and Renovation of Existing Ones: Barcelona’s Case.” In *Integrating Human Health into Urban and Transport Planning*, edited by Mark Nieuwenhuijsen and Haneen Khreis, 135–53. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-74983-9_8.

Shirazi, M. Reza, and Ramin Keivani. 2017. “Critical Reflections on the Theory and Practice of Social Sustainability in the Built Environment – a Meta-Analysis.”

Local Environment 22 (12): 1526–45. https://doi.org/10.1080/13549839.2017.1379476.

———. 2018. “The Triad of Social Sustainability: Defining and Measuring Social Sustainability of Urban Neighbourhoods.” *Urban Research & Practice* 12 (4): 448–71. https://doi.org/10.1080/17535069.2018.1469039.

———, eds. 2019. *Urban Social Sustainability: Theory, Policy and Practice*. Routledge.

Soria Y Puig, Arturo. 1995. “Ildefonso Cerdá’s General Theory of ‘Urbanización.’” *The Town Planning Review* 66 (1): 15–39.

Sugandha, Robert Freestone, and Paola Favaro. 2022. “The Social Sustainability of Smart Cities: A Conceptual Framework.” *City, Culture and Society* 29 (June): 100460. https://doi.org/10.1016/j.ccs.2022.100460.

Tengberg, Anna, and Sandra Valencia. 2017. *Science of Integrated Approaches to Natural Resources Management, A STAP Information Document*.

The Office of the Deputy Prime Minister. 2005. “Bristol Accord, Conclusions of Ministerial Informal on Sustainable Communities in Europe.”

Thomas, Aaron. 2012. “Vienna Green Planning.” March 1, 2012. https://wwf.panda.org/wwf_news/?204598/Vienna-green-planning.

Tonkiss, Fran. 2014. *Cities by Design: The Social Life of Urban Form*. John Wiley & Sons.

United Nations. 2015. “Transforming Our World: The 2030 Agenda for Sustainable Development.” New York.

United Nations, Department of Economic and Social Affairs, and Population Division. 2019. *World Urbanization Prospects: The 2018 Revision*.

Vallance, Suzanne, Harvey C. Perkins, and Jennifer E. Dixon. 2011. “What Is Social Sustainability? A Clarification of Concepts.” *Geoforum*, Themed Issue: Subaltern Geopolitics, 42 (3): 342–48. https://doi.org/10.1016/j.geoforum.2011.01.002.

wien.gv.at. n.d. “Supergrätzl Favoriten - Stadtentwicklungsprojekt.” Accessed June 23, 2022. https://www.wien.gv.at/stadtentwicklung/projekte/supergraetzl-favoriten.html.

wienneuplus.wien.gv.at. n.d. “WienNeu+.” WieNeu+. Accessed August 8, 2022. https://wieneuplus.wien.gv.at.

Zilans, Andis, and Kristine Abolina. 2009. “A Methodology for Assessing Urban Sustainability: Aalborg Commitments Baseline Review for Riga, Latvia.” *Environment, Development and Sustainability* 11 (1): 85–114. https://doi.org/10.1007/s10668-007-9099-y.

Zografos, Christos, Kai A. Klause, James J.T. Connolly, and Isabelle Anguelovski. 2020. “The Everyday Politics of Urban Transformational Adaptation: Struggles for Authority and the Barcelona Superblock Project.” *Cities* 99 (April): 102613. https://doi.org/10.1016/j.cities.2020.102613.

APPENDIX

Figure 10: Consent form

Researcher contact information:
Bianca Nina Filastò-Buzzolan
filasto_bianca@student.ceu.edu
+393382174322

Researcher supervisor:
Laszlo Pinter

Research consent form

I am a Master student at Central European University from the Environmental Science and Policy department. I am conducting a research study for my thesis by the title: "Are Superblocks the super solution to social problems? Assessing social sustainability of the Superblock pilot project in Vienna".

This research will explore and address the concerns related to social sustainability in the implementation of the Superblock (Supergrätzel) pilot project in Vienna, Favoriten. The aim is to identify and map the existing or arising social concerns related to the implementation of the superblock. The study will consist of qualitative research collecting data through semi-structured interviews conducted with people involved with the project and experts in city planning.

Consent to take part in research

- I …… voluntarily agree to participate in this research study.
- I understand that even if I agree to participate now, I can withdraw my consent at any time or refuse to answer any question without any consequences of any kind.
- I understand that I can withdraw permission to use data from my interview within a month after the interview, in which case the material will be deleted.
- I was informed in written form about the purpose and nature of the study and I had the chance to ask questions about the study.
- I understand that participation in the study involves the inclusion of my opinions as part of a Master thesis.
- I agree to my interview being audio-recorded and transcribed.
- I understand that extracts from my interview may be quoted in the research.

- I understand that signed consent forms, original audio recordings and the transcripts of the interview will be retained and stored safely until the end of July 2024.
- I understand that I can request access to the information mentioned above at any time.
- I understand that I am free to contact the researcher at any time to seek further clarification and information.
- I would like my identity to remain anonymous:

  [...] yes [...] no

  In case of "yes" the name will be changed and any details that may reveal the identity will be omitted.

I have read and understood the information given above and I give consent to participate in the study.

Signature of research participant

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Signature of participant Date

Signature of researcher

I believe the participant is giving informed consent to participate in this study

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Signature of researcher Date