

# Mobilizing Change: Feminist Strategies for Climate

## Responsive Mobility in Vienna

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*Thesis submitted in partial fulfilment of the requirements for the degree of:*

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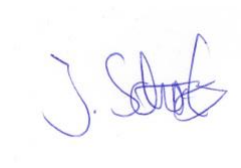
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Jette Lina SCHUETZE

## **Abstract/Executive Summary**

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This thesis explores how gender-responsive policies can facilitate climate action within Vienna's urban mobility framework. A mixed-methods approach is used, including qualitative document analysis and expert interviews, which provide data for the analysis of Vienna's integration of gender and climate objectives in mobility policies. The findings reveal significant overlaps between gender-responsive and climate-responsive mobility, which becomes apparent in shared goals such as promoting active mobility and reducing car dependency. However, practical implementation faces ideological and logistical challenges. Overcoming these barriers requires holistic and inclusive approaches that consider diverse needs. Thereupon, this thesis suggests that applying these insights can help integrate gender and climate considerations into mobility planning, ultimately contributing to more equitable and sustainable urban mobility systems. This can be achieved through holistic thinking and working towards equitable mobility for all through gendered policy approaches. Overall, this research fills a gap in the literature on the practical implementation of gender-responsive mobility policies, demonstrating their potential to advance climate goals and emphasizing the need for ongoing research and dialogue.

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## List of Abbreviations

EU - European Union

FPE - Feminist Political Economy

UPE - Urban Political Ecology

## 1. Introduction

Urban transitions are essential for fostering resilient and inclusive cities, especially in the face of the climate crisis. Effective urban governance plays a vital role in navigating these transitions, particularly in addressing the intersection of mobility and gender (Hughes and Hoffmann 2020). Women and other marginalized groups often experience urban spaces and mobility systems differently due to distinct social roles and responsibilities (Hanson 2010). Climate change exacerbates these disparities, as women are often more vulnerable to its impacts, given their roles in household tasks and caregiving, particularly in urban spaces (United Nations, n.d.). Addressing these differences is essential for creating sustainable urban environments including women's needs. Gender disparities in mobility access and safety concerns, emphasise the importance of integrating gender considerations into urban mobility planning and decision making. This becomes apparent for instance, as women are more likely to rely on public transportation and non-motorized modes of travel, making the safety, reliability, and accessibility of these systems crucial for their mobility, economic and social inclusion (Loukaitou-Sideris 2014; Joelsson and Scholten 2019a). Recognising the importance of the gender, climate and mobility intersection, Vienna has been acting as a pioneer in gender mainstreaming, integrating gender perspectives into various facets of its urban policies. This commitment to inclusivity is particularly evident in the city's approach to urban mobility, which strives to create equitable transportation systems that address the unique needs of all its residents (Bauer 2009). Seeing an intersection of gender concerns and urban opportunities during transition times, it is interesting to look at how the two points of concern, gender inequality and sustainable mobility, can be thought together. Thereupon, this thesis examines the intersection of gender, mobility, and climate action in Vienna, aiming to address a significant gap in both academic literature and practical policy implementation.

## **1.1 Mobility, Sustainability and Gender in Vienna: Pioneering Gender**

### ***Responsiveness***

Vienna's efforts in gender mainstreaming are exemplified by the work of Eva Kail, a pioneer in this field who has been instrumental in integrating gender perspectives into Viennese urban planning. These initiatives have focused on making public spaces safer and more accessible for all genders, reflecting and incorporating gendered needs in urban spaces and mobility, which are often connected to care responsibilities, thereby, contributing to a more inclusive urban environment (Suissa 2017; Miller 2023). Vienna's gender mainstreaming efforts include various projects and initiatives aiming at making the city more equitable. One example is the Maria Hilf district as a pilot project for gender responsive urban design, improving safety and accessibility for women and children and the expansion of cycling infrastructure and safe walking routes to promote active mobility. Additionally, the city's public transport network has been enhanced to better accommodate women's travel patterns, reflecting care responsibilities and short complex journeys, related to gendered care work (Stadt Wien, n.d.-a).

However, gender mainstreaming is not the only method for producing gender-responsive policies. Gender budgeting, for instance, involves analyzing government budgets to understand their impact on different genders and allocating resources more equitably. Vienna has implemented gender budgeting to ensure equitable allocation of public funds by analyzing budget impacts on different genders, adjusting allocations to address disparities, and monitoring outcomes to promote fairness and inclusivity in public spending, including urban policy design (Stadt Wien, n.d.-b). These initiatives not only improve the quality from a gender responsive perspective but also contribute to the sustainability and inclusivity of urban spaces (Robinson 2021; Bauer 2009). Overall, Vienna

executed about 60 pilot projects across planning levels, guided by a gender planning expert and involving interdisciplinary collaboration across administrative levels (Stadt Wien, n.d.-a). Therefore, the city is considered a pioneer in gender planning, with more than 25 years of practice (Robinson 2021), and represents an important case to study the potential of gendered approaches to urban transition and mobility.

Looking at the sustainable dimension of Viennese mobility governance, the city's commitment to sustainable urban mobility is evident through its mobility policies that aim to reduce car dependency and promote active and public transportation in recent years (Stadt Wien 2021). The city's mobility strategies align with broader climate action goals, recognizing the critical role of mobility in reducing greenhouse gas emissions. Vienna's approach includes the expansion of public transport networks, the promotion of cycling and walking, and the implementation of low-emission zones to limit car use in certain areas (Stadt Wien 2021). Whilst the city remains to work on climate neutrality and designing sustainable mobility options, it is following continuous progress (Qasseer and Szalkai 2023; Treude and Schüle 2021).

## **1.2 Relevance of this Thesis**

Given the significant role of mobility in urban sustainability, climate action, and gender equity, exploring their intersection is crucial for identifying potential fast tracks for urban transitions. Integrating these concerns within urban mobility enhances overall urban goals (Peters 2013). Investigating how gendered mobility policy can facilitate climate action in the mobility sector is particularly relevant. Such findings could illustrate pathways to enhance urban mobility and sustainability while promoting gender equity, thereby addressing multiple objectives more effectively. This research uses Vienna as a case study due to its leadership in gendered policy-

making and success in sustainable urban transitions. By focusing on Vienna, this research provides practical strategies for integrating gender considerations into urban mobility, offering valuable insights for other cities facing similar challenges. Ultimately, researching the intersections of gender, climate, and mobility is essential for developing inclusive, equitable, and sustainable urban spaces. This holistic approach not only addresses the needs of all residents but could also promote resilience, economic inclusion, and environmental sustainability in urban development (Joelsson and Scholten 2019b).

Academically, the intersection of gender, climate, and mobility has been explored but lacks depth and empirical findings on the practical implementation of gendered mobility policy due to it not being streamlined. Vienna, with its well-established gender mainstreaming, offers an interesting case to empirically identify synergies between gender- and climate-responsive mobility, a largely unresearched area (Smidfelt Rosqvist 2019; Dymén and Langlais 2017). While scholars such as Smidfelt Rosqvist (2019) and Dymén and Langlais (2017) have addressed connections between gender and climate concerns within mobility policy, this remains lacking in empirical conclusions. This thesis aims to fill this gap by investigating how integrating gender perspectives in mobility strategies can simultaneously promote climate goals.

### **1.3 Research Question, Objectives and Outline of this Thesis**

Given the social and academic relevance as well as need to delve deeper into the subject matter, this thesis investigates: *How can the implementation of gender-responsive policy facilitate climate action within the Viennese mobility strategy?*

Doing so, multiple objectives are addressed in this research. First, it aims to contribute to the understanding of the intersection between feminism and climate action, highlighting how feminist

perspectives can enrich climate policy discussions within the mobility sector. Second, it seeks to identify gender-responsive policies as key facilitators of climate action, demonstrating their potential to drive environmental sustainability. Third, the research will zoom in on good practices in mobility policy that enhance gender equity and environmental justice, showcasing Vienna as a model for integrating these dimensions.

By addressing these objectives, the thesis provides a comprehensive analysis of how gender-responsive policies can be effectively utilized to advance climate goals in urban mobility, offering both theoretical insights and practical recommendations for policymakers. This research employs qualitative document analysis and expert interviews to assess the current state of gender integration in Vienna's mobility policies, exploring avenues for further enhancement. It aims to illustrate how gender-responsive policies can be harnessed to achieve climate objectives, thereby promoting more inclusive and sustainable urban environments.

This thesis begins with a state of the art literature review to examine existing research on climate-responsive urban policies, gender mainstreaming and gender and mobility, as well as their intersection, thus finding uncovering a gap in the literature. Thereupon, the theoretical framework discusses feminist political ecology and urban political ecology as they relate to gender and mobility, and conceptualising gender- and climate-responsive mobility. Following, the research design and methods detail the mixed-methods approach, including document analysis and expert interviews, explaining how data is gathered and analysed. The results then present the findings from the analysis in light of the research question. Findings are then interpreted in the discussion section, contextualizing them within the theoretical framework and literature as well as the concepts of feminism, emotions and norms. The conclusion summarizes the research findings, offering empirical conclusions and suggesting future research directions.





## 2. Literature Review

The literature review firstly reveals the complexity of urban sustainable mobility, identifying it as a “wicked problem”. Secondly, mobility justice therein is explored as a crucial dimension, emphasizing equitable policies that address inequalities. This review then highlights women's increased vulnerability amidst climate change and the critical importance of their inclusion in urban transitions. Investigating policy tools of gendered integration reveals that despite the potential of gender mainstreaming in policy, practical implementation often falls short. Lastly, the review demonstrates the need for integrating gender into mobility policies due to how inequities manifest therein, and outlines a gap in practical implementation using Vienna as a case study for effective gender and climate-responsive strategies.

### ***2.1 Urban Mobility: Equity and Justice in Context***

To begin with, this literature review examines sustainable mobility in urban contexts, focusing on policy implications and equity to understand how mobility justice is addressed. The literature on urban sustainability reveals a complex landscape, particularly concerning urban mobility, which is regarded as a “wicked problem” due to its multifaceted nature and the involvement of diverse stakeholders as well as lack of simplistic solutions (Brzica 2023; Ortúzar 2019). Ortúzar (2019) delves into sustainable urban development, presenting it as a great challenge of our time. The article argues against simplistic solutions like expanding road infrastructure and proposes a nuanced approach involving taxing and expansion of public transportation. It seems like sustainable urban development is one of the main challenges of ecological transitions, therein mobility being a wicked problem, in need of analysis.

Given the complexity of urban mobility transitions, policy interventions as potential starting points for solutions need to be further analysed. The political dimension and leadership are crucial to address complex topics effectively (Schipper, Emanuel, and Oldenziel 2020). City governments adopt urban mobility planning concepts and sustainable urban mobility plans, which have become vital strategic documents. Still, Brůhová Foltýnová et al. (2020) find approaches to sustainable mobility planning across cities vary greatly, with stakeholders often holding divergent views on both definitions and implementation strategies of sustainability into mobility plans. Bardal, Gjertsen, and Reinart (2020) agree that urban sustainable mobility transitions face many obstacles including cultural, legal, and financial challenges. They argue therefore that in order to be successful, strategies should employ different policy measures and better stakeholder involvement to speed up the transition to sustainable mobility. It becomes apparent that urban sustainable mobility transitions are very complex involving diverse challenges and stakeholders, therefore analysis of sustainable transition strategies and the role policy become relevant, focusing on equity generally, before specifying the gender dimension.

Mobility justice emerges as a significant concern and main strand of research, particularly amidst increasing economic disparities that become more pronounced during the climate crisis. These disparities and the effect of the crisis on marginalized groups become more visible in mobility experiences (Verlinghieri and Schwanen 2020; Sheller 2021). Injustice in urban mobility transitions refers to the unequal distribution of benefits and burdens in mobility. Marginalized communities often face limited access to affordable and efficient mobility, safety concerns, and greater environmental burdens such as pollution. To address such issues, inclusive and equitable mobility solutions are necessary (Monyei, Upham, and Sovacool 2024). As an example Monyei, Upham, and Sovacool (2024) showcase injustice in public transport systems, emphasizing the need

to address transport poverty and promote equity in decarbonized mobility transitions. They address the importance of considering existing material poverty and injustice to ensure an equitable transition. Similarly, Loorbach et al. (2021) point towards social inclusion in mobility transitions explaining that while the focus on electric rather than combustion vehicles addresses environmental concerns, it does not inherently tackle issues of equity because of economic inequalities. The authors explain that one way to address justice concerns is by promoting fair and sustainable mobility such as walking, cycling, and public transport. This approach fosters justice incorporation in urban mobility policies as it lowers economic barriers and environmental burdens (Loorbach et al. 2021).

There seems to be much coverage of justice dimensions of urban mobility transitions, demonstrating the importance of equity and just transitions fostered through policy. Therein, one might look into greater detail for example by identifying different concepts of justice in the mobility context to understand how they can be addressed. Deka (2021) discusses environmental justice, transport justice, and mobility justice. Therein environmental justice directly influences planning, transport justice tackles traditional planning limitations, and mobility justice emerges from dissatisfaction with both approaches (Deka 2021). Moreover, the rapidly expanding literature on justice in sustainable mobility reveals that different groups benefit unequally from mobility subsidies, policies, and infrastructure, one of these groups being women (Pereira et al. 2019; Foth, Manaugh, and El-Geneidy 2013). Others have followed up on this explaining how such discrepancies lead to social and economic exclusion due to limiting access to commuting (to jobs), accessing health care facilities and taking part in public and social life (Lucas 2019). A substantial body of literature covers various dimensions of justice and equity in urban mobility and sustainable transitions. To align with the focus of this research, the following sections

specifically examine the literature on gendered inequity, as it addresses how women specifically experience injustices and how the injustices are embedded within mobility systems.

## **2.2 Gender and Climate**

This section reviews literature on the connection between gender and climate, discusses integrating gender perspectives into policy, and identifies research gaps in gender and urban mobility.

Climate change and feminist literature agree on women's heightened vulnerability within the current climate crisis, which is fostered by structural inequalities, hence creating a need to study such vulnerabilities (Alston 2013; Brody, Demetriades, and Esplen 2008). Dankelman (2010) stresses that climate change disproportionately impacts the poorest countries, often in the Global South, and women due to their unequal socio-economic status and limited access to resources, education, and economic opportunities. Morrow (2017) adds that this issue is exacerbated by adaptation strategies that often assume equal resource access, overlooking women's disadvantaged social, legal, and economic positions. In urban settings of the Global North, women face economic vulnerabilities and care responsibilities, which relate to higher poverty rates and lower incomes, limiting their ability to invest in necessary resilience measures like home insulation or air conditioning whilst also having to deal with higher temperature sensitivity (MacGregor 2010). Women tend to have a higher reliance on public transportation, though urban planning often overlooks their specific needs further exacerbating their disadvantaged positions (Ravera et al. 2016). Other intersecting factors such as ethnicity, age, and disability then heighten these impacts, with women of color and immigrant women frequently living in areas with higher environmental burdens and less green space (Anguelovski et al. 2016). Generally, it becomes clear that women

can be considered a vulnerable group within the climate crisis, while this is particularly true for women in the Global South, it also plays a role in urban contexts such as Vienna in the Global North. Therefore, it is an underlying factor to be considered in research within the context of the climate crisis and sustainable urban transitions.

Literature has experienced important shifts towards arguing for more proactive measures to address gendered vulnerability issues structurally and politically, recognizing women not just as victims but also as crucial actors in climate adaptation (Morrow 2017; Tschakert and Machado 2012). Additionally, Bush and Clayton (2023) investigate gender differences in climate change concern relative to economic development. They explain in wealthier countries, women show more concern about climate change than men, whose concern decreases with rising wealth. Adding to similar lines of argumentation, women in political positions reduce carbon emissions due to gendered norms of environmental care and climate concern, highlighting the need for greater female inclusion in climate decision-making to achieve diverse policy outcomes and improve climate resilience (Magnusdottir 2021; Siriwardhane 2020). Research then finds that gender sensitivity in climate issues is crucial to address inequalities and utilize women's knowledge and skills resulting from gendered norms around the environment also to address inequities from this standpoint (Alston 2013). Evidently, literature covering gendered dimensions of the climate crisis addresses both gendered vulnerabilities as well as women's key role in climate adaptation, noting their higher concern and potential impact in reducing emissions. Indeed, including women in climate decisions can enhance climate resilience and address inequalities, which is why it is important to keep both dimensions in mind when looking at sustainable mobility solutions.

### **2.3 Political Gender Integration and Policy Tools**

To adequately address women's vulnerability and potential, it is important to look at the policy level. Within the study of gender integration in governance, gender mainstreaming emerges as a central and institutionalized tool (Meier, 2006). Gender mainstreaming means integrating a gender perspective into all actions, policies, legislation, and initiatives to ensure that gendered concerns are addressed and the perpetuation of gender inequalities at institutional level is obstructed (Meier 2006). Gender mainstreaming as a political strategy aims to tackle gendered inequalities in all aspects and phases of policymaking and requires all actors to promote gender equality (Alston 2013; Elomäki and Ahrens 2022). It is generally considered the most prominent strategy for promoting gender equality at the political level, largely because it has driven changes in typically inflexible bureaucratic structures (Caglar 2013; Meier 2006). However, despite its potential, gender mainstreaming has often fallen short of expectations, with many scholars, particularly feminist ones, finding it less effective than anticipated (True and Parisi 2013; Meier and Celis 2011; Vida 2021). The main issue here seems to be the lack of genuine commitment from institutions to implement a female perspective, treating it instead as a mere procedural formality. This problem is additionally compounded by internal resistance within institutions and the conceptual ambiguity surrounding the mainstreaming process itself (Meier and Celis 2011; 2011; Caglar 2013). It seems that while there is significant optimism about gender mainstreaming, its practical application has frequently been disappointing, and research points out shortcomings in gender mainstreaming integration. It is important to consider the role of this policy tool to be effective in the mobility sector.

Considering these general theoretical insights in literature, recent works have shifted focus towards examining the implementation of gender mainstreaming in more specialized areas. One main area

of study is gender mainstreaming at EU level, due to its strong institutional commitment to gender equality and being considered a role model for gendered policy integration. Literature has examined progress, shortcomings, and women's involvement in policymaking, considering its implications for achieving gender equality (Vida 2021; MacRae and Weiner 2017). Cavaghan (2017) and Vida (2021) have extensively analysed EU policymaking and identify a gap between the gender mainstreaming strategy and policymakers' understanding, with little meaningful implementation. This is because structural issues such as institutional resistance hinder gender mainstreaming. Elomäki and Ahrens (2022) analyse gender mainstreaming. They find that while the Committee on Women's Rights and Gender Equality oversees gender mainstreaming, other internal groups of conservative bureaucrats act as gatekeepers, affecting gender perspective integration. Party politics and committee structures play a significant role therein, with ideological resistance being a major barrier as well as informal patriarchal norms deeming gender perspectives irrelevant (Elomäki and Ahrens 2022). Such an analysis indicates possible problems associated with gender mainstreaming as a tool. The research reviewed above highlights the need for stronger gender integration in policy practice to achieve meaningful gender equality in diverse contexts. Despite widespread implementation, recent studies highlight the shortcomings of gender mainstreaming in specific areas. Looking at this from a mobility point of view is necessary, keeping in mind how such shortcomings may inhibit the potential of gender mainstreaming in Viennese mobility policy.

## **2.4 Gender and Mobility**

Combining the two focus areas of this thesis, it is important to explore how gender factors into mobility, particularly in the context of developing equitable and sustainable mobility systems. Several key areas within the literature on gender and mobility will be examined to provide a comprehensive understanding of this research context.

### **2.4.1 Debating the Integration of Gender in Mobility**

The integration of gender and mobility as research fields is relatively new, originating from both sustainability and feminist studies, and has recently been discussed in relation to policymaking. The gendered dimensions of mobility have historically been overlooked, lagging behind other equality concerns such as family life, workplace dynamics, health, and education (Levy 2013; Cresswell 2006). Such a gendered dimension is defined as the distinct travel patterns and mobility needs that arise from ingrained gender roles, such as women's higher reliance on public transport and active mobility due to caregiving responsibilities (Levy 2013; Christensen and Breengaard 2021).

Discussing the integration of gender, Hanson (2010) highlights significant gaps in both feminist and mainstream mobility research. She argues that feminist studies often focus excessively on gender, neglecting the implications of mobility and transport. In contrast, other scholars have recently opposed this view explaining that this oversight perpetuates stereotypes that associate women with immobility and domesticity (e.g., Cresswell 2006; Levy 2013; Christensen and Breengaard 2021). The neglect of gendered dimensions in transport policy obscures inequalities in resource distribution, such as the prioritization of cars over public transportation which women



rely on. Adding to this, Levy (2013) calls for integrating social identities into mobility studies, positing that mobility impacts diverse groups and their ability to make travel choices, due to the ingrained gender roles. Nonetheless, despite coverage in literature and feminist mobility research addressing access and justice, these perspectives are still not mainstreamed into wider fields of mobility (Christensen and Breengaard, 2021).

An argument for integration of gender and mobility is made in a case study of Oslo, where Maridal (2021) highlights the importance of gendered mobilities in climate policymaking, as mobility plays an important role in sustainable urban transitions. Gender differences in travel behaviour significantly influence the achievement of climate goals, such as the zero-growth objective in Oslo. This is because women's reliance on local services and employment areas affects their mobility needs dependent on care responsibilities, which needs to be considered in policy development. Furthermore, assuming travellers can easily switch to alternative modes of transport is problematic because of the lack of wider awareness about gender-specific travel patterns and policy efforts risks making current policies less effective. It is argued that effective climate policies in urban mobility settings require more empirical research to design targeted measures addressing both gender and age, based on gender mainstreaming principles (Maridal 2021). These implications of gender on mobility are important to keep in mind to understand gendered mobility policy in urban contexts and how mobility systems can account for them.

Some scholars also argue that mobility is often influenced by neoliberal ideologies, and focusses on economic growth, since mobility systems prioritize efficiency and profitability over people's needs, yet its political dynamics are often overlooked. This is important due to the gendered differences on economic levels, as explained above, reinforcing inequalities (Joelsson and Scholten 2019a). Integrating diverse perspectives into planning is crucial for sustainable and

equitable systems also keeping economic implications in mind. This is underlined by Joelsson and Scholten (2019) who put emphasis on the need of considering intersectionality in addition to gender to create forward-looking strategies.

There is a debate on whether and how to include gender in transport planning, and to what extent it should be integrated. Therein, one perspective contends that gender is overemphasized without adequately relating it to the context of mobility, leading to ineffective policies that fail to address practical aspects of mobility (Hanson 2010). On the other hand, others argue that not including gender considerations adequately perpetuates existing inequalities. They stress that without appropriate gender inclusion, there is a risk of maintaining gendered stereotypes and inequalities in transport policy and planning (Christensen and Breengaard 2021; Levy 2013; Maridal 2021). They argue that a nuanced understanding of gendered travel patterns and the incorporation of gender-sensitive approaches are essential for creating equitable and sustainable transport systems. This thesis addresses these perspectives to argue for the potential gender integration in mobility policy.

#### **2.4.2 Gendered Urban Mobility: Prioritizing Active Mobility and Car Reduction**

One of the most central links that needs to be established is the gendered dimension of car use, which is a predominantly male mobility mode (Christensen and Breengaard 2021), since women, due to gendered care responsibilities, rely more heavily on public transport and active mobility with shorter and more complex paths. Here Christensen and Breengaard (2021) explore the critical intersection of environmentally friendly transport and gender in policy-making. They demonstrate that, due to patriarchal power relations, mobility policy perpetuates a car-centered society and masculine norms by prioritizing car infrastructure over public transport and active mobility. The

study reveals institutional path-dependency, where existing norms around car-centrism and masculine dominance are maintained. Through the case of Danish mobility policy, they highlight both the potential and limitations for change, demonstrating how gender roles are shaped and reinforced within these institutional structures (Christensen and Breengaard 2021). Such research reveals how ongoing norms and structures of the patriarchy determine mobility policy, indicating starting points to change this from both a gender and climate perspective, as explored by this thesis.

Literature in gendered mobility field mostly focuses on the critique of such structures emphasising the need for change in mobility policy. Mobility policy currently predominantly faces criticism for disregarding gender and overemphasizing technological and environmental aspects. Greed (2019) highlights the disconnect between decision makers' visions and the actual needs of urban populations. This focus on environmental and technical aspects often neglects social considerations, constructing obstacles to accessible and sustainable mobility, especially for women. Instead, Greed (2019) advocates for the 'city of everyday life' model, which promotes short distances, mixed land uses, and multiple centres to create sustainable, accessible cities. Similarly, Levy (2019) emphasizes the importance of recognizing the social identities and relations of transport users, particularly gender, which are often overlooked in favour of economic and environmental concerns. Acknowledging these identities is crucial for developing mobility systems that promote social justice and equitable travel choices. Both scholars call for an inclusive approach that integrates gender considerations into transport plans instead of focusing of economic factors and technology (Greed 2019; Levy 2019).

Another idea to integrate gender in mobility policy comes from Madariaga and Neuman (2020) who introduce the concept of the 'mobility of care', which measures daily travel related to caregiving, mostly done by women, often unpaid and overlooked in mobility policies. Madariaga

and Neuman (2020) propose integrating gender dimensions into mobility statistics to specifically understand care-related travel patterns. As explained, these travel patterns involve shorter and more complex ways at diverse hours of the day, whereas wage labor mobility typically involves fewer, longer, direct commutes to work, emphasizing speed and efficiency, at traditional office hours (Madariaga and Neuman 2020). The same authors emphasise the need for gender-sensitive approaches in mobility planning, suggesting targeted measures to support caregivers and enhance accessibility.

Having understood the lack of gendered policy making in the mobility sector as well as why this needs to be changed, the main argument here is that integrating gender into climate action within the mobility sector is crucial for sustainability and equitable policy outcomes. This has been recognised by literature. Smidfelt Rosqvist (2019) argues that gendering transport policy is crucial for two reasons: women's transportation habits are inherently more environmentally friendly, and they strongly support sustainable measures. However, this aspect has been largely overlooked in policy making, leading to missed opportunities for promoting sustainability in the mobility sector. The study emphasizes the need to include a gender perspective in policy making to achieve more sustainable outcomes. Similarly, Dymén and Langlais (2017) found that increased representation of women in decision-making on municipal transport boards correlates with better sustainability performance in local mobility systems due to gendered norms of travelling and mobility. This highlights the importance of gender diversity in policy-making institutions for achieving climate goals. To address this, mobility policymaking should pay greater attention to understanding the connections between travel behaviour, climate goals, sustainability objectives, and gender considerations, which is suggested by both Smidfelt Rosqvist (2019) and Kronsell (2021).

Evidently, there is a call for incorporating gender-responsive approaches into policy making in order to enhance climate action and contribute to more inclusive and resilient mobility systems.

## **2.5 Research Gap**

The literature on sustainable mobility recognizes the complexity of achieving a sustainable transition due to the involvement of multiple stakeholders and considerations. Therein, the concept of justice within the mobility transition is crucial, as the climate crisis disproportionately impacts also women. Despite the recognition of gender as a critical consideration in mobility, its integration into mainstream policy remains limited. Existing research has highlighted the connections between gender and sustainability in the mobility sector, yet this issue has not been adequately mainstreamed. Building on the ideas of Smidfelt Rosqvist (2019) as well as Dymén and Langlais (2017), this thesis aims to delve deeper into incorporating gender perspectives in mobility strategies to also advance climate goals.

There is a clear need to further explore how gendered mobility policies can facilitate climate objectives, especially within the context of urban governance. The case of Vienna, known for its progressive approach to gender mainstreaming, provides a valuable empirical example to investigate this potential in practice. By focusing on Vienna, this research seeks to uncover how to effectively integrate gender considerations into mobility policies to support climate goals and how this might already be done.

### 3. Theoretical Framework

This research employs the theoretical frameworks of Feminist Political Ecology (FPE) and Urban Political Ecology (UPE) to analyze the intersection of gender, mobility, and environmental sustainability. By integrating these perspectives, the study aims to highlight how gendered experiences and social inequalities influence urban mobility patterns and policies, while addressing both social justice and ecological concerns.

#### 3.1 *Conceptualizing Gender in Feminist Research*

Feminism has achieved significant progress, celebrating numerous victories. However, the work of feminism and feminist research remains crucial as individuals from non-cis-male gender groups still face unequal social structures and gender-based discrimination. Despite the progress, profound inequities persist in modern society (Hesse-Biber 2013). Feminist research plays a vital role in highlighting ongoing gendered inequalities and continuously challenging patriarchal structures (Goldingay 2020). It combats systemic discrimination by advocating for social justice and driving transformative change through addressing injustices that disadvantage non-cis-male individuals. By examining the status of various gender groups within society, feminist research challenges entrenched patriarchal structures and amplifies historically marginalized voices. Unlike traditional research, often shaped by and for cis men, feminist methods and theories provide a deeper, more nuanced understanding of power relations and dynamics (Goldingay 2020). This approach fosters a more inclusive and equitable understanding of our persistently unequal social landscape. Recent trends in feminist research emphasize global and digital perspectives, incorporate the influence of movements like #MeToo, and highlight dynamic conversations between transgender, non-binary,

and cisgender feminists (Leavy and Harris 2019). By centering the experiences of those oppressed within patriarchal structures, feminist research works to uplift marginalized voices while integrating intersectionality and poststructuralist theories (Hesse-Biber 2013; Leavy and Harris 2019). This research makes use of a feminist framework to uncover and analyse gender inequities within the mobility system, focusing on women due to existing gender inequalities that affect their mobility and daily experiences. By addressing the specific needs and experiences of those who identify as or are identified as women, this research aims to contribute to understanding and mitigating these inequalities through means of feminist research.

Presuming this research, it is necessary to dive into the concept of gender and its implications for research. This thesis uses gender as a general concept and facet of analysis as it is a root factor of discrimination (Eriksen 2015). Using a feminist theory, this thesis refers to gender throughout which is why this section provides for an overview on how gender is understood. It is essential to transcend the binary framework, which is perpetuated by patriarchal structures and focuses on biological sex as the basis of gender. Therein, gender encompasses societal norms, roles, and expectations that are deeply culturally, institutionally, and socially embedded, which are then categorized into ‘man’ and ‘woman’ (Eriksen 2015). This entrenched binary framework has been used to foster disproportionate power relations, and “gives rise to disproportionate power relations in the society which is stratified, hierarchical and discriminating” within the patriarchy (Singh 2020 38). Consequently, gender, as a socially constructed factor for discrimination, assigns certain roles, expectations, norms, and behaviours within a given society. Social institutions such as family, religion, education, media, and law collectively shape individuals' understanding of gender roles and identities. Within this patriarchal hierarchy, women are placed at a relative disadvantage, perpetuating structural inequalities (Eriksen 2015). This highlights the importance of recognizing

that gender identities extend beyond the binary categories of "female" and "male." Various gender identities exist, challenging the binary framework and highlighting the inadequacy of this perspective in accurately reflecting reality of gender identification (Monro 2005).

Nonetheless, this research makes use of the term “woman”, which is why the use of this term needs to be critically examined. The term “woman” should not be seen as a rigid, homogenous category. Rather, it should be understood as a construct historically produced within the patriarchy, informed by social, cultural, and biological attributions. It is neither a fixed identity nor a natural state (Schutzbach 2021). (Butler 1988 3) further points out that “perceiving gender as socially constructed explicitly foregrounds the situatedness and contextual character of gender positions”. Nonetheless, the enforcement of binary norms and subsequent gender-based discrimination are tangible realities. Discrimination is rooted in stereotypes and social norms derived from the binary framework and the terms of “man” and “woman”, and societal hierarchies reinforce these norms, disadvantaging those who do not identify as cis male. Particularly, individuals identifying as non-binary or gender non-conforming face discrimination within and because of this binary framework, perpetuating inequalities (Ridgeway 2001; Monro 2005).

Recognizing these biases and challenges, this study presumes that gender is socially constructed and exists on a spectrum. However, for the purpose of analysing prevailing structural inequalities, this thesis focuses on the experiences of women as a group subject to significant discrimination. This focus acknowledges the term “woman” not as a defining label but as a category used to reveal how ‘being a woman’ is normatively defined and devalued in society. This category, despite its patriarchal origins, is utilized in a critical and affirmative way to make visible shared experiences and political strategies that arise from these experiences (Schutzbach 2021). It is essential to note that the term “woman” is difficult because it stems from the patriarchy. Yet, it is also used to



organize resistance and reclaim terms, generating new meanings and questioning old ones. This duality reflects the tension between the continuing need to talk about women and the scepticism towards normative gender binaries (Schutzbach 2021). In summary, while this research primarily focuses on women, it acknowledges the spectrum of gender identities and the inherent limitations of this focus. The term “woman” is employed critically to highlight the normative definitions imposed by a patriarchal society. Thus, this approach aims to balance the necessity of addressing specific gender-based inequalities while recognizing the broader and more diverse landscape of gender identities.

Lastly, it is important to consider the aspect of the usage of gender concepts and terms within the mobility context, thus situating gender within this thesis. On the one hand, in mobility planning, ‘women’ and ‘men’ are often employed as social categories. However, considering the preceding discussion, it is clear that such categorizations rigidly define individuals and identities, oversimplifying the multifaceted realities of gender as a spectrum (Joelsson and Scholten 2019a; Monro 2005). On the other hand, mobility systems have been designed by and built for men (Joelsson and Scholten 2019a). Part of the problem is that sustainable mobility planning typically revolves around metrics, solutions, and norms tailored to the experiences and needs of men, thereby neglecting the perspectives and requirements of other gender groups. In order to change this, gendered mobility patterns, needs and experiences should to be identified and incorporated. This facilitates informed mobility planning decisions and addresses the specific needs of diverse gender groups (Joelsson and Scholten 2019a), i.e. in this research women. This situation presents a complex contradiction: the system in need of change is inherently structured around a binary framework. Consequently, efforts to reform the system often inadvertently reinforce this binary, at the cost of oversimplification. However, it reinforces problematic norms. At the end of the day,

it is necessary to ask to what extent there can be a fair solution, and to reach the end goal: the departure from a system designed for men by men. Therefore, this research focuses on women as a gender group, aiming at critically use this term and conducting research that addresses specific gender-based inequalities within the context of the patriarchy.

### **3.1.1 Intersectionality**

While a feminist approach has been demonstrated above, it is crucial to clarify that such an approach needs to be inclusive. With feminist theory, one aims for the “[conceptualisation of] the relation between systems of oppression which construct our multiple identities and our social locations in hierarchies of power and privilege” (Carastathis 2014). To grasp structural inequality it is necessary to account for intersecting subjectivities, beyond a gender based one. This is done by considering intersectional feminism as the foundational theory of this thesis. Such intersectional thinking can be “a prism for seeing the way in which various forms of inequality often operate together and exacerbate each other” (UN Women 2020). The school of thought originally focused on the intersectional character of the discrimination experienced by Black women, though the notion was extended to other structural inequalities due to the embeddedness of most of them within a capitalist and patriarchal society (Díez-Bedmar 2022; Crenshaw 2017). An intersectional approach therefore makes use of a more complex outlook on discrimination which avoids reducing individuals to a single category. Indeed, by taking into account the different intersections, women’s experiences are reflected more comprehensively and profoundly. This can subsequently reflect on women’s empowerment by understanding the depth of the structural and intersectional inequalities they face (Anthias and Yuval-Davis 1983). Therein, it also implies a more nuanced analysis, which interprets categories as well as connected power positions as dynamic and relational (Kaijser and

Kronsell 2014). This thesis' theoretical framing therefore aims to draw on many complex interlinked relations in society which lead to forms of discrimination and unequal power positions that are embedded in the system (i.e., capitalist patriarchy).

### **3.2 *Feminist Political Ecology***

Supporting this thesis, Feminist Political Ecology (FPE) provides a theoretical framework for understanding the complex political landscape of mobility policy, addressing both gendered inequalities and environmental concerns.

FPE encompasses environmental feminisms providing a theoretical framework to analyse global systems as well as their material realities. This is done multiscalarly and considers intersecting systems of power and oppression, i.e., the patriarchy, racism and coloniality (Díez-Bedmar 2022). Drawing upon lived experiences and emotions, provides a lens to examine ecological issues within the broader context of political economy and situated experiences (Sundberg 2016). Essentially this framework provides a lens to look at ecological issues, which takes into account relations of the political economy and the context and situated experiences in which it takes place. Therein gender is an important variable in addition to an intersectional understanding of inequalities (Sundberg 2016). The theoretical framework aims to bridge historically siloed issues crossectorally in academia, political decision making, and activism, thereby closing the gap between theory and practical applications in real-world contexts (Sundberg 2016; Nightingale 2011).

FPE integrates insights from various feminist disciplines, including ecofeminism and postcolonial feminist critiques, emphasizing lived experiences from the Global South (Agostino et al. 2023;

Mohanty 2003; Shiva 2009; Harding 1991). Ecofeminism highlights ethical concerns for the natural world, encompassing more-than-human life (Chiro 2017). This approach examines ecological issues within the context of human material practices (Nightingale 2011). Politically, FPE investigates power relations, prioritizing whose interests and voices are emphasized, and how power favours certain groups and knowledge forms. It analyses how gender, ethnicity, and class dynamics shape environmental issues and policies. This involves examining intersecting social inequalities and complex subjectivities that create unequal vulnerabilities and capabilities within environmental contexts (Nightingale 2023; Ahlborg and Nightingale 2018).

One of the main concepts within FPE is the understanding of subjectivities rather than identities and how they shape the political ecology within environmental contexts. As a basic assumption it is a more flexible way to find an intersectional understanding of situated power relations and how that manifests within the social context (Nightingale 2023). Subjectivities here refer to different aspects of the self identity which are fluid and shaped by lived everyday experiences. Therefore each person can have multiple subjectives, shaped by the different contexts of their lives, backgrounds and circumstances, which are dynamic (Crenshaw 2017). Nightingale (2023 145) explains that “subjectivity can also help to explain collectives such as ‘climate activists’, ‘village women’, ‘city dwellers’ [...] which are similarly dynamic and performed in the everyday through which collective identities emerge”. Considering these groups as the result of power dynamics and their internalization, explains their agency and why their impacts may sometimes appear ambiguous or conflicting. Understanding subjectivity can clarify how climate actions interact with societal responses, showing both acceptance and resistance (Nightingale 2023). Integrating this understanding of subjectivities helps to grasp the complex implications of an intersectional understanding of environmental issues, including mobility. It reveals how different genders

navigate and experience mobility within social contexts shaped by power relations, highlighting the unique gendered challenges

### **3.3 *Urban Political Ecology***

Whilst FPE provides for a useful perspective to include a gendered dimension of environmental political decision making, the situated urban context is significant. Urban political ecology (hereafter UPE) is an interdisciplinary theory that examines the relationships between cities, the environment, and political processes (Rice 2014).

UPE delves into the complexity of how cities serve as arenas for capital flows, social-political relations, and the interactions between human and non-human elements. It views the urban environment as a web of socio-natural relations over time and space. Therefore the theory sheds light on urban environmental governance, social justice, environmental inequality, and the uneven distribution of environmental benefits and burdens within urban areas. By considering material relations as intertwined with social-political dynamics, this approach examines the risks posed by for example climate change, which can help explain politics in adapting to a changing environment (Tzaninis et al. 2021). UPE acknowledges that governance and social relations in cities are shaped not only by jurisdictional powers but also by everyday interactions transcending both the human and non-human, which can drive transformative change. This perspective is crucial for understanding climate change adaptation processes in urban areas, as it recognizes that challenges may not neatly align with municipal responsibilities and actions (Nightingale 2023). Using a UPE perspective helps understanding how cities are at the forefront of climate change action and

adaptation. At the same time, it demonstrates how complex urban climate action is, due to its situatedness in socio-political circumstances.

In this thesis the UPE lens is used to showcase the multifaceted set of responsibilities and challenges urban governance faces when dealing with issues such as mobility. UPE helps understand mobility by positioning it within the socio-economic realities influenced by political, economic, and social power relations. Therefore, it helps pointing towards environmental and gender inequalities within the mobility sector.

### **3.4 *Using Gender as an Analytical Tool in Mobility***

This framework combines feminist theory and political ecology, incorporating an urban approach to climate action. To meet the thesis objectives, it applies gender as an analytical tool in mobility, exploring the intersection between gendered politics and mobility.

Firstly, the traditional planning and interpretation of mobility lie in its situated context within capitalist structures. Mobility and transportation are often viewed through a technical lens, assessed by quantifiable metrics and calculable flows of goods and people (Joelsson and Scholten 2019a). This reductionist approach prioritizes economic efficiency and profit maximization, as seen in the political discourse where complex physical and social relations are reduced to measurable numbers (Joelsson and Scholten 2019a). However, it is crucial to recognize that mobility is deeply intertwined with societal expectations, experiences, emotions, and meanings associated with movement. An analysis of mobility must consider its inherent contextuality. Feminist political ecology argues that a gendered dimension of mobility analysis should move beyond capitalist-determined frameworks (Joelsson and Scholten 2019a). This section explores

how such an analysis incorporates holistic and integrated approaches to make mobility more inclusive, equitable, efficient, and ultimately sustainable.

Part of an analysis moving beyond previously mentioned analytical tools involves the moving away from the ingrained capitalist and male focused analysis, stemming from patriarchal structures. Therein, it is firstly important to note the deconstruction of the connection of the biological sex and the social construction (Butler 1988; Joelsson and Scholten 2019a). The latter of which determines how women in particular experience mobility. The idea that gender positions are socially constructed, shows that socio-cultural and socio-economic context and situatedness of mobility experiences need to be understood in decision making. Secondly, gender as a concept is continuously changing and under scrutiny. Since gender is relational and dynamic, evolving with social, spatial, and cultural dynamics, mobility policy must continuously re-evaluate and assess its inclusion of gendered implications (Joelsson and Scholten 2019a). This conceptualisation of gender in the mobility context underpins the analysis of this thesis.

Beyond the conceptualisation of gender, the concept of situatedness as stressed by FPE can be applied in the mobility context. According to Hanson (2010), when discussing mobility, it is essential to also take into account the social, cultural, and geographical factors that shape it. In other words, the situatedness of the people involved in mobility, which are not just men. By considering such implications, the author explains that “mobility is not just about the individual (...), but about the individual as embedded in, and interacting with, the household, family, community and larger society” (Hanson 2010, 8). Following the line of argument as presented by FPE it is also crucial to then illuminate the situatedness of power relations as determined by the patriarchy. Firstly, power relations become clear already at the starting point of the rationale of this thesis, namely that mobility was initially designed by men and for men, without consideration

of varying gendered mobility experiences. In fact, patriarchal structures have led to mobility being based on the requirements, needs and interests of those who have designed it. In order to change this, it must be recognised that mobility is experienced in varied ways depending on the resources available to the user (Joelsson and Scholten 2019a).

Secondly, feminist-informed mobility considerations must therefore take into account that mobility systems play a critical role in either facilitating or impeding individuals' access to public spaces and essential services, impacting their ability to live independently. Joelsson and Scholten (2019, 13) clarify that it is crucial to “[understand] why people [...] travel despite the way society is set up, and how the layout of transportation systems either helps or hinders people in accessing public spaces, services, and amenities they need to live independently”. Additionally, other factors such as ethnicity, class, age etc. influence access and ability to use mobility. Thus, feminist informed mobility policy has to comprehend these dynamics, and has to delve into the intricacies of power relations and their intersections, including intersecting unequal access and experiences, in line with the abovementioned intersectional feminist ideas (Joelsson and Scholten 2019a). Consequently, mobility policy shall comprehensively address power relations between genders in addition to intersecting social subjectivities in connection to mobility.

### ***3.5 Conceptualisations: Gender- and Climate-Responsive Mobility***

Lastly, it is important to comprehensively conceptualize gender responsive and climate responsive mobility. The understanding of these two facets of mobility relies on the theoretical framing of this thesis and is stipulated by previous research. This research refers to and understands gender- and climate-responsive mobility as stipulated below.



Firstly, gender-responsive mobility requires infrastructure that addresses the distinct needs and travel patterns of all genders, with this thesis particularly focusing on women. Women often have different mobility patterns due to their primary responsibility for care work, leading to shorter, place-based, and more complex travel routes (Uteng et al. 2021; Madariaga and Neuman 2020). Thus, active mobility, reducing car dependency, and understanding how different genders use mobility is essential (Uteng et al. 2021). Ensuring accessibility and mobility for everyone is crucial for fostering inclusion and encouraging the use of public transport and non-motorized mobility modes (Peters 2013). Furthermore, political strategies must integrate gender considerations into mobility policies to address the unique challenges faced by women (Joelsson and Scholten 2019a). Gender mainstreaming ensures that gender concerns are consistently integrated into all stages of policy development and implementation (Peters 2013; Madariaga and Neuman 2020). Additionally, the importance of green spaces in urban areas is crucial, as they support care responsibilities by offering safe and accessible places for activities like childcare, which are often shouldered by women (Madariaga and Neuman 2020).

Secondly, climate-responsive mobility involves creating mobility policies and infrastructure that reduce carbon emissions and adapting to climate change conditions. It focuses on designing resilient mobility systems that can withstand climate-related disruptions, such as extreme weather events (Hickman and Banister 2014; Camilleri, Attard, and Hickman 2022). The aim is to decrease the environmental footprint of mobility, improve air quality, and contribute to overall climate goals, while ensuring the system remains efficient and reliable under changing climate conditions through low emission mobility (Hickman and Banister 2014). Both conceptualisations help underpin the analysis and informs the coding of the data.

## **4. Research Design**

To adequately justify the methodology and means of analysis the research design is outlined as follows: Firstly, the qualitative content analysis of Viennese mobility policy and strategy documents is detailed, explaining how indicators guide the analysis. Secondly, the interviewing methodology is elaborated on, describing how semi-structured interviews with experts on Viennese mobility and gendered mobility provide nuanced insights into these fields within the Viennese context. Following this, both methodological limitations and ethical concerns are addressed. Finally, the author's positionality is outlined to contextualize the research and acknowledge potential influences on the analysis.

### **4.1 Methodology**

#### **4.1.1 Qualitative Document Analysis of Mobility Strategy**

The starting point of the analysis is the qualitative document analysis of relevant Viennese mobility policy and strategy. Qualitative data is chosen as it gives a more nuanced explanation of gendered implications in relation to climate action goals within the relevant field of mobility policy (Flick, Kardoff, and Steinke 2004). This methodology uses qualitative content analysis for a systematic examination with specific indicators, offering deeper insights beyond simple content evaluation (Flick, Kardoff, and Steinke 2004, 266). This method uses primary data analysis through systematic coding and examination, developing empirical knowledge to support the research (Strauss and Corbin 1998). This research uses primary sources from the City of Vienna, including policy documents and mobility strategies. These unobstructed documents, taken directly from the city's database, are free from individual bias. By employing unobtrusive data collection, the study

minimizes biases, systematically analysing the original documents using the coding framework detailed below (Halperin and Heath 2020, 374).

For data sampling, documents were selected based on the most relevant and recent strategies related to Viennese climate and mobility goals. Initially, the aim was to analyse current mobility policies of the City of Vienna. However, research and interviews reveal that urban decision-making in Vienna follows a non-linear, learning-by-doing approach, guided by strategies rather than formal policies. The Viennese context involves strategic rather than strictly formal processes, with policy implementation often occurring directly at district and community level. Therefore, the documents analysed represent the current strategic approaches to mobility in Vienna. The table below indicates the document selection.

***Table 1 Document Selection***

Document	Publishing	Content
STEP 2025	Municipal Department 18, Urban Development and Planning Vienna 2014 <sup>1</sup> Citation: (STEP 2025 2014)	Urban Development Plan
Smart (Climate) City Strategy	Magistrat City of Vienna, 2022 Citation: (Smart City Strategy 2022)	Updated its Smart City goals and alignment with the UN's Sustainable Development Goals
Vienna Climate Guide	Vienna City Administration, 2022 Citation: (Vienna Climate Guide 2022)	Climate roadmap, which has set out the path to achieving climate neutrality by 2040

Nonetheless, this method has biases since the keywords, operationalization, and interpretation are tailored to this research context, potentially skewing the findings toward the research question.

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<sup>1</sup> Note: The STEP 2025 is the most updated version from 2014, the city is currently working on STEP 2035, which is supposed to be finalised Summer 2024 after the thesis submission.

Additionally, this method may not fully capture the complexities of gender, intersectionality, and equality. Systematic coding and content analysis of policy documents may inherently limit nuanced interpretation in these complex fields. To address these limitations, semi-structured interviews are used as a complementary method, providing expert knowledge and lived experiences for a more nuanced understanding.

#### **4.1.2 Semi-Structured Expert Interviews**

The insight on the strategy-based approach of Vienna has prompted a shift in this thesis' focus towards interviews, recognizing their importance in uncovering the intricacies of municipal decision-making processes. While strategy documents outline strategic intents, they do not fully capture the nuances of policy implementation. Interviews can effectively complement the document analysis, offering a deeper and more nuanced understanding of Viennese mobility policy.

For data gathering, semi-structured interviews are chosen as they allow for guided themes and questions but still constitute natural conversation flows. This can deliver insights on “people’s perceptions, feelings, opinions, experiences [...] formal and informal roles and relationships” (Halperin and Heath 2020 315). The interviews serve to deliver data in form of expert statements; therefore, the selection of the interviewees takes place through stakeholder search and thesis relevance in the Viennese context. The specific selection of interviewees has been done using a dual approach, employing both the snowball sampling technique and purposeful sampling. Using purposeful sampling ensures the involvement of key stakeholders, thus securing the necessary expertise in mobility policy. Snowball sampling has been used as some selected interviewees indicated recommendations and contacts for additional partners. Four interviews were conducted

from April 2024 to May 2024 with different leading experts of relevant fields (i.e., sustainable mobility and gender mainstreaming/planning). Interviews were either conducted in English or German (the latter being both the author's and the interviewee's native language). Interviews conducted in German were translated to English by the author. For the sake of protection of privacy and given that some experts interviewed are public figures, the interviewees shall remain anonymous throughout the thesis. The table below indicates the interviewee selection.

**Table 2 Interview Selection**

	<u>Interview A</u>	<u>Interview B</u>	<u>Interview C</u>	<u>Interview D</u>
<u>Position</u>	Member of interest representation for sustainable transportation and traffic	Formerly active politician in Vienna working on green politics	Working in academia and consultancy on gender planning and urban design and gender planning	Member interest representation and agency for sustainable and active mobility
<u>Expertise</u>	Expertise on Austrian and Viennese mobility and the context of sustainable design of transportation	Expertise on Viennese policy (making), application of gender mainstreaming in mobility policy and pursuit of climate policy (making)	Expertise on gender responsive planning in the Viennese urban context	Expertise on active urban mobility and Viennese context
<u>Date</u>	15/04/2024	22/04/2024	22/04/2024	17/05/2024
<u>Location</u>	Vienna	Online/Zoom	Vienna	Online/Zoom
<u>Length</u>	25mins	60mins	60mins	30mins
<u>Language</u>	German	English	German	German
<u>Citation</u>	Interviewee or Respondent A	Interviewee or Respondent B	Interviewee or Respondent C	Interviewee or Respondent D

The selection of these experts provides critical insights into policymaking, planning, and the practical implementation of gender mainstreaming and climate action mobility initiatives in Vienna. This diverse expertise forms a well-rounded sample to effectively address the research question. To gather data from the semi-structured interviews, a combination of common themes and individually tailored questions have been employed based on each interview partner's expertise<sup>2</sup>. All interviewees were asked about their perspectives on gender-responsive mobility design, sustainable and climate-responsive mobility, and their experiences with policymaking related to both gender and climate, specifically within Vienna's mobility landscape. Each respondent was asked four to six questions, with space given for contextual follow-up inquiries, elaborations, and relevant points raised by the respondents themselves. This approach effectively facilitated a systematic examination of diverse viewpoints, providing valuable insights to address the research question while also allowing for the inclusion of unforeseen yet relevant information.

The interviews were transcribed using the word dictate function and manual editing where necessary. These transcripts were used to break down and simplify the data into categories relating to gender mainstreaming, Viennese policy making and overlap of content of gender and climate concerns. Followed by the coding process, constituting the data processing process (Halperin & Heath, 2020, p. 329). The data was structurally interpreted based on categories of data and codes. Thereupon, the data, relevant to answering the research question, drawn from the coding thus allows for a systematic analysis of the urban policy making processes and provides nuanced pictures and insights on the Viennese gender equality pursuit in connection to climate action. which aids the internal validity of the research given that qualitative interviews may be hard to generalize in terms of findings because of their individual and experience-based nature. The

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<sup>2</sup> An anonymised example of an interview guide can be found in the appendix.

limited selection of a few experts and the subjective nature of interview responses may restrict the ability to generalize the findings to other contexts.

Nonetheless, combining qualitative document analysis and stakeholder interviews provides a solid foundation for a nuanced analysis. This approach addresses the complexities of gender and intersectionality. Generalizability is ensured through diverse sampling, though some bias is inherent in the qualitative, interpretative nature of this research.

## **4.2 Data Analysis**

### **4.2.1 Document Data Analysis**

The selected documents were coded and analyzed to understand climate and gender-responsive mobility. The qualitative document analysis aims to identify Vienna's public approach to climate-responsive mobility and pinpoint parallels between gender and climate concerns in its mobility strategy. This analysis draws on the theoretical framework's links between gender, mobility, and climate, uncovering existing strategies and potential intersections in Vienna's mobility policies. The coding process involved the following codes, which were adapted to align with the nature of the documents. Since these documents are strategic in nature, they focus on the city's aspirations and desired outcomes rather than on implementation details or shortcomings:

**Table 3** *Qualitative Document Analysis Codes*

Code	Relevance to Research Question
Active mobility aspects	This is considered both gender- and climate responsive
Car reduction	This is considered both gender- and climate responsive
Accessibility and mobility for everyone	Relevant to foster inclusion and gain more participants or users of sustainable mobility
Instance/implementation of gender mainstreaming	Relevant to pinpoint gendered concerns and check on implementation

#### **4.2.2 Interview Data Analysis**

The data analysis of the interviews is conducted in light of the research question and the theoretical framework of this thesis. To achieve a systematic analysis, a coding framework was constructed to aid in interpreting the data and yielding insightful results. The analysis is guided by several categories: identifying parallels and discrepancies of gender-responsive and climate-responsive policies, examining resistance to both gender and climate concerns, and identifying possible issues that could hinder facilitation as stipulated by the research question. This might involve examining feminist ideology or specific wording. Lastly, the overcoming of such limitations is being looked at. These categories determine the systematic analysis and coding of the data and have been derived from the theoretical framework, with particular regard to gender- and climate responsive mobility as outlined above. The following list of codes was used:



*Table 4 Interview Analysis Codes*

Code	Relevance to Research Question
Definition of sustainable and equitable mobility	Possibly identify parallels of mobility ideals
Active mobility aspects	This is considered both gender- and climate responsive
Car reduction efforts	This is considered both gender- and climate responsive
Minimizing the need for cars	This is considered both gender- and climate responsive
Historical mobility patterns	Point towards Issues, Hurdles or Facilitation of Synergistic Gender and Climate Governance
Accessibility and mobility for everyone	Relevant to foster inclusion and gain more participants or users of sustainable mobility
Political strategy	Point towards Facilitation of Synergistic Gender and Climate Governance
Resistance (identifying groups and manifestations)	Point towards Issues or Hurdles of Synergistic Gender and Climate Governance
Allies and cooperation between sectors and actors	Point towards Facilitation of Synergistic Gender and Climate Governance
Problems of implementation and limitations	Point towards Issues or Hurdles of Synergistic Gender and Climate Governance
Implementation of gender mainstreaming	Relevant to pinpoint gendered concern and check on implementation
Feminist ideology	Point towards Issues, Hurdles or Facilitation of Synergistic Gender and Climate Governance

To address the research question, these categories were tested to demonstrate either overlap or discrepancy between gender- and climate-responsive mobility policies. This analysis aims to determine whether these policies facilitate or hinder each other. By identifying parallels between

gender and climate concerns in mobility policy and their application, this thesis pinpoints how gender-responsive mobility policy can enhance climate action in the mobility sector.

### **4.3 Ethical Issues**

Having established the research design of this thesis, it is important to take into consideration the ethical concerns of the research. Firstly, this research has been conducted without any funding, and has not involved travel beyond Vienna. Secondly, it is worth to acknowledge that the research involves participants. Since the interviews are conducted with partially public figures, it does carry a certain level of risk, as they may potentially make critical statements about other public figures or institutions, leading to potential repercussions. However, to mitigate this risk, anonymity is ensured, for participants and their statements within the thesis, by not using any data holding the risk of revealing any identity, instead sticking to broad descriptive roles for each person. Furthermore, consent to use interview responses as data was obtained prior to the interviews, ensuring participants are aware of and agree to the use of their statements in this thesis. Consent was obtained through a manually or digitally signed form prior to the interview, with additional reaffirmation of consent at the beginning of the interview recordings for further verification with the interviewees. Lastly, I, as the researcher, was exposed to minimal risk, as all interviewees are female, reducing personal security concerns. Additionally, in-person interviews were conducted in public offices or universities, with precautions taken on the part of the researcher to be in touch with colleagues prior to and after the interview. While there are some important factors of ethical consideration, risk was reduced and mitigated.

#### **4.4 Positionality**

My positionality is shaped by a combination of personal interest, academic experience, and social identity. This research was primarily driven by a personal interest in gender concerns and a commitment to understanding and addressing issues of inequality in my area of experience and interest, i.e. climate action and urban mobility. This interest was further informed by my academic experiences, which have provided me with theoretical frameworks and research methodologies to explore these topics more deeply. However, while academic and personal involvement are significant here, my being a student also limits me to the capacity therein in terms of contacts, time, and resources I can dedicate to this project, which might reflect on the depth or scope of the research.

Moreover, my social identity as a white woman from Europe significantly influences the perspective and methodology employed in this research. This positionality encompasses both privileges and perspectives, while also positioning me within broader structures of power and privilege. Privileges arise from facing less discrimination than other women in terms of ethnicity or other intersectional factors. Recognizing these aspects is crucial, as they can shape the analysis and interpretation of data and literature, as well as the resulting conclusions. Additionally, being a woman carries its own implications, including levels of acknowledgment, respect, and safety concerns, which have been somewhat mitigated through safety measures. Overall, understanding my positionality shall point both towards the working environment as a female master student as well as my biases, assumptions, and privileges and therefore add to an understanding of the background and work put into this thesis. I aim at creating a thesis that can contribute to academic and social responsibility and does a small part for gender and climate justice in an urban context.

## 5. Results

In the following results section, the gathered and analysed data is presented in light of the research question thereby indicating the implications of gender responsive mobility policy in its ability to facilitate climate action goals. Firstly, basic parallels that run through both gender responsive as well as sustainable mobility are pointed out, indicating the underlying assumption that these two objectives have similar goals and share the same ideals for mobility design. Secondly, structures, strategies and general mobility policy making, and the urban context is analysed in light of the research question. Thirdly, discrepancies and limitations of gendered policy making, and gender mainstreaming and their implication in the Viennese mobility sector are addressed. Lastly, the section ends with policy strategies beyond gender how different equity dimensions fit together.

### ***5.1 Overlapping Goals: Gender and Climate in Vienna's Mobility Policy***

Overall, the results show that there is much concern, agreement and logical overlap and connectedness between gender and climate issues within the mobility field. All respondents seem to agree on the evident interconnectedness of gender and climate in mobility policy and voice their support to integrate these fields.

#### **5.1.1 Exploring the Overlap of Gender and Climate Goals in Mobility**

Presupposing the understanding of overlap between gender and climate responsive mobility in Vienna, the general goals of Viennese mobility policy are laid out. As outlined in the Vienna Climate Guide (2022), the city aims to reduce per-capita CO<sub>2</sub> emissions by 50 percent by 2030 and achieve a 100 percent reduction by 2040, compared to 2005 levels. Additionally, commercial

traffic within the municipal boundaries is targeted to be largely CO<sub>2</sub>-free by 2030. The city plans to increase the share of low CO<sub>2</sub> emission transport to 85 percent by 2030 and well over 85 percent by 2050, while reducing private motor vehicle use to 15 percent of the modal split. Furthermore, a key objective is to ensure that residents can be mobile in Vienna without owning a car, achieving a mobility guarantee. The city also embraces the concept of the “15-minute city”, which promotes short trips and supports mixed-use neighbourhoods by establishing local pedestrian priority zones and enhancing the attractiveness of these areas. This initiative is further supported by reallocating public street space to favour active mobility and creating inviting public spaces. These goals are integral to Vienna’s broader climate action plan, aiming to foster a sustainable, low-emission urban transport system (Vienna Climate Guide 2022). Evidently, the focus of the city lies on the lowering of emissions through primarily reducing motorized vehicles, i.e. non-electric cars. This should be facilitated through promoting other transport modes. Already this basic understanding demonstrates that this is very compatible with gendered mobility policy due to the gendered mobility patterns, and women’s reliance on non-car centred mobility.

First, the awareness and understanding of connectivity of gendered mobility and climate issues within the mobility field are analysed. Interviewee A indicated that an ideal mobility system should mean that “everyone can be mobile, meaning they can pursue their needs as far as possible in an ecologically sustainable way, which is available to everyone” (Interview A). Additionally, Interviewee D asserts that “mobility should be equally accessible to everyone, regardless of income, social status, age, or physical fitness, meeting all mobility needs efficiently and fairly. It must also be environmentally just, minimizing harm and using the limited public space wisely. It can impact the quality of life and the environment” (Interview D). Ensuring mobility that is fair for all and environmentally friendly is crucial. This echoes the principles of gender-responsive

mobility, aiming to make non-car mobility options available to everyone, not focusing on car-centricity. As these options become more accessible, usage rises, decreasing reliance on cars, and thereupon adapting to needs of those with shorter more complex travel patterns. Therefore, the need for equitable sustainable mobility emphasizes the link between gender equality and climate action.

The respondents have also demonstrated an understanding of the problem of gendered discrepancies since they have also been “about eco-friendly mobility, though not explicitly labelled as such. Historically and today, there are more men driving cars, indicating gender disparity. Men walk and cycle less in cities. Women, who predominantly handle caregiving responsibilities, rely more on walking, cycling, or public transport for their daily activities” (Interview C). Just as this understanding has been around for some time, Interviewee C pointed out that so have the solutions, stemming from the second feminist wave. She posits that for a long time “It has been important to focus on making cities pedestrian-friendly, with good cycle connections and well-connected, accessible, and frequent public transport. This approach eases everyday life for those with caregiving responsibilities, promoting equality and sustainability” (Interview C). This statement support the literary evidence how mobility differs according to gender, which is closely tied to patriarchally determined care responsibility, which necessitates differed mobility options. This gender discrepancy is then linked to the issue of emissions and sustainable mobility due to emissions of car centred mobility. This discrepancy is both a gender and a climate concern, and solutions, which already exist in theory should address both aspects. A clear solution addresses caregivers' needs while promoting sustainable mobility, is to shift the mobility focus from cars towards active mobility and public transport.

Having demonstrated the existence of the know-how and an understanding of how both climate and gender concerns overlap in mobility, it is also important to identify exactly how the two overlap. In the following several areas and indicators are presented and how in each field the gender and climate objectives in mobility overlap.

### **5.1.2 Pushing for Active Mobility**

In terms of active mobility, meaning walking and cycling, the city of Vienna plans to expand by promoting the concept of the “city of short distances”, also referred to as “15-minute city”, which aims to make walking and cycling more attractive and better integrated with mobility infrastructure (Step 25). Urban areas are being designed to ensure that all inhabitants, especially children, older persons, and individuals with special needs, can navigate their neighbourhoods actively, independently and safely. A notable example is the findings from the “Gender Mainstreaming Pilot District Mariahilf” project, which highlights the importance of safe and well-connected cycleway networks to enhance non-motorized mobility options (Step 25). Furthermore, the city is significantly expanding its cycling infrastructure by closing existing gaps, improving the continuous usability of routes, and ensuring that these routes are safe for children (Smart City Strategy). Vienna is also committed to the systematic expansion and quality improvement of walkways, ensuring that pedestrians have safe and accessible paths throughout the city (Smart City Strategy). These initiatives are designed to create a more inclusive and sustainable urban environment, integrating active mobility. From a gendered perspective, these plans are very assuring, since active mobility is integral to incorporating women’s needs in city planning.

Women predominantly rely on active mobility like biking and walking, aligning naturally with sustainability since motorized vehicles and emissions are reduced. Interviewee D supports this

claim stating that “Women typically walk and bike more, thereby favouring eco-friendly options for local trips. This distribution raises questions about transport priorities, especially as women often handle care responsibilities. Achieving gender equality in care work could shift transport dynamics”. Interviewee D outlines the progress made thus far in Vienna in this regard: “Active mobility, especially walking and cycling, has risen notably. Walking has stabilized around 30%, up from 26%, while cycling has increased from 7% to 9%” (Interview D). The importance and increase of the active mobility sector becomes clear, and Interviewee A stresses that “Ideal solutions combine many elements; walking and cycling are key” (Interview A). These statements underline the importance academia gives to active mobility in urban mobility form women. Whilst in Vienna there is some progress, connecting gendered mobility to climate goals represents further potential to increase active mobility in the modal split, i.e. the distribution of usage of different mobility modes, and generally reduce emissions.

Whilst both gender and climate concerns share the active mobility objective, and walking has seen significant success in Vienna, all respondents agree on the rather slow progress for biking in the city, with a particular lack of biking infrastructure. Respondent A stresses that “there have always been problems with cycle paths and a lack of cycle infrastructure, whilst a lot is happening at the moment, but Vienna is still a patchwork, what is missing are car-free areas”. In addition, Interviewee C posits that “There is still some catching up to do, removing the cars and adding more footpaths and especially cycle paths, which are mostly lacking”. However, Interviewee D offers some hopes stating that “There is progress supported by investments in cycling infrastructure and subsidies. Vienna is actively promoting transport bicycles and bike hire systems, with various initiatives in place to encourage cycling, indicating a positive trend.” Despite recent efforts, Vienna's biking infrastructure evidently still needs improvement. Significant gaps remain,



hindering active mobility, thus constraining women due to gendered mobility patterns. Instead, working on active mobility and thinking these gendered and climate mobility objectives together would foster both equality and sustainability.

### **5.1.3 Car Reduction as a Key Factor**

Next to active mobility, the primary goal of reducing emissions and promoting climate-friendly mobility is to significantly decrease the number of cars within urban areas (Bardal, Gjertsen, and Reinart 2020). In Vienna, this objective is pursued through a multitude of strategies, for instance through the provision of affordable, high-quality public transport. The city seeks to adapt and create a flexible combination of mobility options tailored to specific mobility needs, which is part of a broader effort to transition towards a more people-friendly mobility policy (Vienna Climate Guide). Significant improvements in public transport and cycleways, along with expanded parking management and the 365€ annual pass, have increased annual pass holders to surpass car owners (Vienna Climate Guide). Public transport is regarded as the backbone of Vienna's mobility. The city plans to enlarge and improve the public transport system within the city and the metropolitan region to accommodate the anticipated short and medium-term increases in passenger volume (Step 25). These efforts are designed to create better alternatives to car travel, fostering more accessible and thus gender responsive mobility due to the gender discrepancy in car usage. Thereupon, also climate responsive goals are met as cars' emissions are lowered.

Whilst these outlooks sound promising the effectiveness to significantly shift urban mobility can be questioned having consulted with the experts during the interviews, revealing the stagnating share of cars in Viennese mobility. Interviewee D points out that “Despite all efforts, the proportion of motorized private transport in Vienna has remained constant at 26% for many years. Vienna,

now with 2 million inhabitants, hasn't seen a change in this figure since the turn of the century. This stability illustrates the many influencing factors that make it difficult to alter the modal split with individual measures". Thus, it is worth going into more detail on the issue of car reduction.

One key factor that benefits both gender-responsive and climate-responsive mobility is affordability. The economic accessibility of public transportation is an important pillar for achieving both objectives. Respondent A points out that "The €365 ticket is definitely a good approach, and the climate and regional tickets are also extremely good offers. Public transport usage is very affordable in Vienna". These observations are crucial as initiatives like the €365 ticket aim to make public transport more affordable, leading to reduced car usage and emissions in Vienna. Respondent B adds that the rationales behind such initiatives involve "improving air quality and reducing congestion, for environmental, but also for economic purposes" (Interview B). Moreover, she specifies that "the city wanted to gain space, one of the biggest assets in cars centred cities, rededicate it to the people for e.g., active mobility. This means that you need to reallocate it from private car use towards placemaking looking into how to boost public transport use" (Interview B). The 365€ ticket illustrates how reducing car usage can support gender and climate goals. It addresses women's economic vulnerability with affordable public transport and reduces emissions by lessening reliance on private vehicles. Reduced car use not only eases congestion but also accommodates women's travel needs better since more space to non-car mobility is achieved. This integrated approach is a good example of how gender and climate objectives can be thought together.

Connected to this idea of reallocation to space is the recreational purpose of urban space and car centric needs around it. Respondent C explains that "Mobility is closely linked to residence, involving open spaces that are easily accessible, where people can move around and relax. The

more a city offers such spaces, even within a small-scale network, the less people feel the need to drive to the countryside for relaxation on weekends”. This shows that homes and residence are important for mobility policy as people’s mobility starts and ends there. Again, the idea is to reduce cars, so by creating such spaces in the city, emissions are reduced and green spaces for climate mitigation are created. Besides the climate factor, “The gender issue is important here, as women are more likely to have fewer cars and depend more on public and active mobility. This approach also promotes equality, benefiting older people who may no longer have or be able to drive a car” (Interview C). What becomes clear here is that one way to meet both objectives is by creating green spaces to reduce the need for taking cars to leave the city for recreation and rest. Not only does it meet gendered concerns but would aid other disadvantaged groups such as elderly or disabled people and families, since the need for longer travel for recreation are eliminated.

The factor of car reduction seems to be a useful tool to achieve many goals. And it has been recognized as a priority in Viennese city planning. Respondent B explains that Vienna has “managed to have shifts in the model split in favour of cycling, walking, public transport and reducing private car use but then it stagnated”. Interviewee D confirms further elaborating that this seems to be a generational issue: “The 60+ age group has increased car use, offsetting all other group’s reductions. This cohort, mainly baby boomers, organized their working lives around cars and continue this behaviour into retirement”. Despite significant progress, further action seems to be essential. She specifies that “It's not that you do something, and things start moving in one direction and they keep moving in this direction. If you don't do more, you will stick to where you were. You need to think in advance about and what is the next step and what is a step after the next step” (Interview B). Respondent C adds to this by pointing out that what it needs is further following a strategy of car reduction through “pushing for radical implementation of initiatives

and policy reducing cars in the city from a gendered perspective”. This is supported by Interviewee D’s view “It is less about fighting against cars and more about showing people alternative ways to get around. Our mobility habits are deeply ingrained and changing them takes time”. Prioritizing car reduction has been and remains critical for sustainable urban mobility and gendered concerns, though is not an easy fix, rather requiring consecutive intervention.

#### **5.1.4 Security Issues as an Overarching Concern**

One of the most well-known examples of gendered concerns is the issues of safety (Hanson 2010). Respondent C sheds light on this issue by explaining that “Safety has always been a major concern in gender planning, especially for women using public transport, cycle paths, or footpaths at night. Ensuring that women feel safe is crucial”. Vienna has integrated this in urban planning by “improving street lighting and conducting night walks to identify areas where people feel unsafe. These initiatives help pinpoint why women might choose taxis or avoid certain areas” (Interview C). This point is significant also from a climate point of view since “gender equity, fairness, and climate friendliness are also important. If women feel safe cycling at night, they are less likely to switch to private cars or taxis” (Interview C). Due this interlinkage, interviewee A posits that “it is important to do everything possible to make people feel safe, you can inform users about the high level of safety, you can make sure that transfers are safe, for instance with good lighting, etc.”. Evidently, to enhance the usage of public transport and reduce car dependency, ensuring safety in public spaces including transport is crucial. Often safety concerns are gendered and stem from sexualised violence and concerns for security as well as subjective feelings of anxiety. Women, in particular, face unique challenges and anxieties regarding safety when using public transportation, which can deter them from avoiding safer options, i.e. cars (Hanson 2010, Interview

A). By addressing and improving safety measures sustainable mobility options are fostered, thereupon contributing to the overall reduction of cars and climate responsive mobility.

## **5.2 Urban Policy and Design, Identifying Strategies Promoting Objectives**

Having recognized the underlying similarities and shared objectives of mobility from both gender and climate perspectives, it is essential to analyse the political implications. This analysis sheds light on how Viennese mobility policy functions (or fails to function) at a practical level and how it is technically implemented. Thereby similarities, possible allyships and complementary solutions as well as general strategies are identified.

Firstly, to preface this section, it makes sense to consider the Viennese policy landscape. For this Respondent B points out that the way policy making in Vienna takes place is through forming guidelines as a result of trial and error of strategic actions. She describes that “It is an approach where you go step by step. And where ideas and practice of different objectives feeds into each other. If something works well, it is translated into guidelines.” (Interview B). This is important to keep in mind when putting these findings into the Viennese context of mobility policy.

### **5.2.1 Strategies of Policy Making: Allyships, Intersectionality and Holistic Decision**

#### **Making**

Firstly, a theme coming up during the interviews was the decentralised character of Viennese decision making. Respondent B clarifies that decisions regarding urban planning are often “decentralised so that the people have decision power over their own neighbourhoods and not so much the municipality at the central level”. As an example, she points out that “gender walks are

done to identify room for improvement e.g. for accessibility and walkability to gradually redesign public space” (Interview B). Gender walks, she explains, help participants look at urban spaces through a gender sensitive lens, for instance to understand the implications of pushing a trolley or accompanying young children (Interview B). Decentralisation of decisions also extends to gender mainstreaming as Respondent C confirms and additionally indicates a bottom-up approach: “gender mainstreaming was not a top-down initiative dictated by city hall. Instead, it started with Eva Kail who began working at the district level and was very feminist in her work, she promoted and advocated for these principles within urban planning at all stages, representing women’s needs”. Decentralized, place-based policymaking ensures decisions are made at the local level. Vienna’s well-established gender mainstreaming initiative exemplifies a bottom-up approach, addressing specific needs of women and fostering inclusivity. This is relevant since this kind of thinking focusses on people’s needs and could thus be a good leeway to do comprehensive gender and climate responsiveness policy as they closely align and are helped by such strategies. Overall, Vienna’s approach demonstrates how local involvement and gender perspectives could create sustainable and equitable urban environments within the mobility sector due to overlap of these goals.

To illustrate this point further, one respondent outlines a project where this kind of thinking has been employed. She explains: “we wanted to look into neighbourhoods and how to create space, from e.g. a gender perspective but also holistically. We then wanted to strategically close streets for car traffic in every neighbourhood and instead create places for life let’s put it this way” (Interview B). Furthermore, to give some examples of this holistic thinking she specifies: “It could be green spaces, it could be playgrounds, it could be, whatever local communities wish for. And that could actually be combined with expanding parking space management, making public

transport cheaper as well as closing the gaps and expanding the cycling network” (Interview B). The respondent went on to name this project “an excellent example for a place-based approach. Rather than a typical top-down policy” (Interview B). This example project showcases the place-based and bottom-up kind of policy and decision making that could facilitate both climate action and gendered concerns in mobility. It focuses on the specific needs of a place and its people, creating solutions that are appropriate and target oriented. This way one strategy, which is already employed in Vienna aligns with the given objectives and strategically works towards them.

This kind of decision making would call for meticulous work on the ground as well as a very holistic approach comprehending problems and solutions as well as complex synergies. Respondent B outlines this by stating “But think of, let's say, an approach where we want to look into the neighbourhoods for potential places for life. But many neighbourhoods in Vienna are highly dense, very grey no open spaces. So identifying such potential and to be able to use it can be challenging”. Whilst there are some challenges to such thinking, redesigning public space for planet and people is a common strategy, that employs a holistic policy approach. Though this can be realised as another respondent outlines: “From a gender- perspective a well-designed system includes a small-scale network where you can quickly get to a tram or a bus or subway by foot. The transfer options and junctions enhance stops with barrier-free access and weather protection. E-buses and trams are climate-friendly, and passengers can board the underground using lifts or escalators” (Interview C). This indicates that the holistic decision making is possible and can be done meeting different objectives. Indeed, Respondent C adds “You have to think of quite complex grid, though it all fits together under a holistic approach.” This demonstrates how the many different layers, including gender and climate can be thought together through complex but

systematic implementation, which is accommodated by the holistic approach already employed in Vienna.

Going hand in hand with such a holistic approach to decision making, is to look at possible synergies and allyships. For developing effective gender mainstreaming strategies, it is crucial to create partnerships and scout the stakeholder network. As Respondent B highlights, “you need to start by involving all relevant stakeholders and focus on allies and not only on enemies, which are easily forgotten. So you need to do the homework properly in terms of thinking about allies, identifying them, involving them as well”. A significant example of allyship in mobility is the collaboration between gender mainstreaming initiatives and accessibility improvements for people with disabilities. Respondent B notes, “It was the combination of gender mainstreaming on the one hand and then the accessibility for people with disabilities on the other. We had also legal obligations in this regard. For instance, to make all pavements accessible in Vienna”. Respondent B emphasizes the importance of accessible public transport, stating, “Additionally we were making public transport means accessible for people with disabilities, wherever possible. So all of these things actually worked together very well to take us where we were then also in terms of gender mainstreaming”. This collaboration highlights the potential for allyship, ensuring that public spaces and transport systems are accessible for all, and demonstrating the power of intersectionality in advancing inclusive urban planning, in this instance for women and people with disabilities.

In connection to allyship, it makes sense to look at the other side of the coin, the resistance or opponents of gender or climate responsive mobility. Respondent B highlights that residents often have mixed reactions: “in many cases residents were strongly for traffic calming, mostly young families, or you had fierce resistance from mostly elder residents”. This accentuates the importance



of focusing on allies while navigating opposition. The interviewee emphasizes a strategic focus on organized groups, noting that these stakeholders can be significant sources of opposition due to their ability to mobilize: “it makes sense to concentrate on the organised groups. It can be the Chamber of Commerce, politicians, e.g. the bus drivers’ union is another stakeholder that was fiercely opposing to everything” (Interview B). Within the organisation of resistance, social media can be an important factor, since “nowadays, as everybody has a mobile phone and with social media, it is very easy to organise them towards referenda against any kind of change” (Interview B). This ease of organization can turn initially unorganized opposition into a significant force. Respondent B further notes, “if unorganised groups get organised or somebody decides to organise them, you have a problem. Nowadays it's easy to organise them because you may have somebody from opposition”. Given these dynamics, a strategic focus on allyship and counter-organization is essential and important to consider when looking at gender responsive or climate responsive policy making. Thinking both objectives together can be eased since often, both allies as well as opponents are similar for both climate and gender concerns.

### ***5.3 Discrepancies, Resistance and Limitations of Aligning Gender and Climate Goals***

Having seen a lot of overlap between mobility concerning gender or climate, there is some discrepancy between the two. It is then worth looking at the limitations of employing gendered approaches, and its potentially hindering nature for climate responsive mobility. Therefore, this section represents an overview of possible counter argument to merging gender and climate responsive mobility.

### **5.3.1 Discrepancies Between Gender and Climate Concerns**

Whilst this thesis has pointed out many angles of how to manage both gendered and climate concerns in urban mobility, there are some points of discrepancy to meet both objectives. In the context of practical implementation Respondent C points out that “creating pedestrian-friendly areas, while also providing space for cyclists and reducing sealed surfaces for climate adaptation can be difficult. Balancing the needs of pedestrians, cyclists, and public transport with greenery and permeable surfaces also creates some discrepancies”. She continues to explain that this issue is also common in participatory processes, as applied in Vienna. It seems to be connected to the aim of incorporating many needs simultaneously. She asks: “When considering participatory processes for public space design, it is crucial to address the diverse needs of all groups, as well as environmental factors such as green and blue initiatives. How can we harmonize these elements effectively?” (Interview C). Evidently, answering this question is not always easy as some aspects, such as the balancing of permeable surfaces and pedestrians as well as cyclists needs, show discrepancies. Whilst this issue is not solely or directly linked to the practice of gender responsive policy making, it is one to consider regarding incompatibility between gender and climate in mobility.

### **5.3.2 Barriers to Implementing Gender Mainstreaming in Climate-Responsive Mobility:**

#### **Ideological and Practical Obstacles**

As indicated above, employing a strategy of gender mainstreaming to incorporate women’s needs also includes shortcomings which might hinder using them to implement sustainable mobility.

First ideological limitations are outlined focussing on resistance to feminism. Second Practical ones are presented.

Since incorporating gendered concerns can be considered feminist policy making, there is some resistance accompanying such efforts. One of the most prominent forms of resistance is the strong emotional and ideological reaction to feminism. Interviews revealed that feminism often triggers opposition simply due to its terminology and ideological associations.

One of the respondents themselves spoke about concerns when using words such as ‘feminist’ or ‘gender mainstreaming’. Indeed, the respondent commented “We shouldn't call it gender mainstreaming, feminist anything. In Austria or as I feel it, sometimes it's better to just talk about people and not focus so much on gender” (Interview A). Evidently, the wording of such approaches represents a problem because of the reactions of people involved in decision making processes or other stages of policy making or implementation. Furthermore, it becomes clear that there is a lack of understanding why such words should be used given that much feminist progress has been achieved. During the interviews it has been commented that “Nowadays, young men are completely different, I don't know if you still need feminist as a term then” (Interview A). This particular reaction highlights the challenge of using certain terminology, particularly related to feminism. The wording can trigger defensive attitudes and reactions, hindering progress. When people react negatively to feminist language, it can lead to resistance and inaction, obstructing the integration of important discussions on both gender and sustainable mobility. Thereupon, it is crucial to be mindful of how feminist concepts are presented, keeping in mind the implications of negative responses that can hinder the achievement of the overall objective.

Such resistance in connection to wording becomes apparent when this is specifically connected to certain trigger words. Within the same conversation, the overarching and complementing

objectives were recognized and accepted as the respondent explains “I can imagine that gender-responsive mobility is very close to the sustainable mobility system anyway, because women are statistically more sustainable when travelling, for example by bike, on foot or public transport” (Interview A). Furthermore, it was recognised that “The problem is that Vienna, like most cities, is planned for and by car drivers. Someone who is travelling differently, e.g. with children, or elderly people would plan urban spaces differently.” (Interview A). These results suggest that, despite resistance to gender-focused approaches or feminist terminology, there is still some recognition of the underlying issues. This interviewee has demonstrated that there is evidence for feminist issues and solutions in mobility, though if labelled as such, are deemed unnecessary or controversial. Therefore, feminism in itself still faces much resistance, and it can be questioned to what extent it could be useful or obstructive in mobility planning to meet climate objectives, as it may trigger strong resistance.

Such concerns have been confirmed as some respondents point out the practical resistance against gender policy faced in political processes. In very practical terms it was voiced that “the greatest resistance was and sometimes even still is men rolling their eyes when they hear about gendered issues. They find it a bit weird and awkward. So I would say that there was resistance in terms of feminism” (Interview B). Respondent B adds that men would ask “why are we sitting here to deal with pavements, crossings, shading, benches and women with buggies? Is this so important? We have important things to do” (Interview B). It highlights that the idea of addressing gendered concerns is often met with criticism or unwillingness to work on these issues. Despite them being “aspects that are decisive for everyday life quality of the majority of the population. And still they thought it unimportant and awkward” (Interview B). Respondent B additionally addressed possible reasons for this stipulating that “there was resistance because there were men who were fearing

disadvantages, and they were right.”. Addressing that men often resist due to uninterest, non-prioritisation and fear. Apparently, they hold up resistance in terms of having issues and not understanding, blocking it in decision making or not taking it seriously. This can be an obstacle as the implementation of objectives through gender mainstreaming is inhibited through resistance connected to feminist ideology.

Apart from ideological reasons, practical implementation hurdles can also inhibit the successful integration of gender and climate synergies in mobility policy making. Costs and effort are required for gender mainstreaming. Respondent C explains that “The obstacles and resistance stem from the lack of understanding about why it is necessary to engage with so many different population groups and user groups and their needs. This process is very time-consuming and costly, and translating these considerations into planning is challenging”. Not only does this require effort, but the cost factor weighs heavily. “Money and budgets always play a role. Why not more trees, more benches, more water. Is that a question of money? Because it is well known that it is necessary to design our street spaces for pedestrians and greenery. We actually need to provide and remodel the space” (Interview C). While this cost factor evidently plays a big role, it is questionable why the budgets cannot be directed in the required direction. Apparently, the cost factor of implementation of people and place-based needs weighs heavy and can inhibit the implementation. This concerns gendered concerns, though also climate ones that aim at incorporating people’s needs. Therefore, this can inhibit both gendered and climate concerns in mobility policy making.

In similar practical terms, the historical architecture of Vienna hinders the building or redesign of required infrastructure. Respondent C elaborates “In all major urban development areas, significant planning has focused on pedestrians and cyclists. However, in historic city areas

originally designed with car centrist plans, there is still work to be done. Much effort is needed to remove cars and create more footpaths, cycle paths, recreational areas, and play spaces”. Evidently, hurdles are posed by the way the historic city has been designed, due to car centrality. This leaves little space and adds obstacles to implementing required infrastructure of gendered concerns, i.e. increasing walkability and bike infrastructure. Consequently, this not only inhibits gendered policy but also climate responsive mobility, since active mobility is restricted due to physical barriers of historic urban design focusing on cars.

Lastly, one point that has been mentioned in other regards too, is the fact that decentralisation of Viennese policy making can make processes difficult and slow. Merging several objectives, such as gender and climate, again requires much effort. As Respondent C asserts, there is “an extremely large number of municipal departments in Vienna, which dates back to the imperial era. And they all have their own areas of responsibility, so MA 42 is primarily responsible for trees. But if there's water involved or whatever, then someone else is responsible. It is very bureaucratic, it's very difficult”. Evidently, the decentralised set up of Viennese urban politics and its implementation represent a hurdle. Additionally, making comprehensive policy making, as needed to meet environmental and gender objectives, is quite difficult. Therefore, decentralisation is another obstacle to the successful merging and subsequent implementing of both gendered and climate concerns in urban policy design in Vienna.

## 5.4 *Overcoming Limitations and Existing Solutions*

This section explores how holistic thinking could be employed to find pathways beyond limitations of considering gendered concerns, by considering feminist progress as well as ‘design for all’ or ‘gender plus’ approaches.

Firstly, it is crucial to highlight that gender mainstreaming is already actively practiced in Vienna. Despite ongoing resistance to feminist ideas, the city is resolutely implementing gender mainstreaming as the primary strategy for addressing gendered concerns. This was confirmed by Respondent B “We had an executive city councillor who was responsible for women affairs, and she really was powerful and influential within her party and also implementing gender mainstreaming”. It is important to point out that the resistance mentioned during the interviews, has mostly been in the past. Respondent C pointed out that in the context of gendered policy “it is important which words are used. In the past, it wasn't as progressive as it is now. Nowadays, such initiatives face less resistance because society has diversified over the last 30 years, and it's a widely discussed topic. If such actions were taken now, there would be less opposition”. Seeing these two outlooks, it becomes clear that on the one hand there is and has been strong enforcement of gendered policy, and on the other hand there is less resistance. Due to strong proponents as well as progressive thinking, to some extent it is possible to overcome some of the ideologically based limitations. Thus, advancing climate goals in mobility through a gendered approach would not necessarily be impeded by ideological constraints.

Secondly, shifting the angle of the strategic integration of a gendered perspective can alleviate constraints from an ideological side. Indeed, several respondents point out how opening up the idea of gendered mobility and urban space can yield success in decision making. Respondent B

specifies that she “took the same principles of gender sensible planning but argued with children. Because I said that it’s good for children, it is good for every generation. So that was a step towards design for all”. This approach of designing for all serves as a strategy to overcome the limitations of feminist ideology. By focusing on children's needs, which align closely with the needs of all generations and vulnerable groups therein, gendered concerns are still represented, though also include more people’s needs. This method not only addresses gendered aspects but also resonates universally, thus reducing resistance. Respondent B adds that “It worked, and resistance faded. There are people who do not want to understand if you take just the gender perspective. But if you look, what do we wish for our children? We want them to be able to access everything and to access everything safely, right. And suddenly all of this leads to the same result, but in an awesome way”. This shift not only diminished opposition but also embedded these principles into the urban planning. Designing policies that prioritize children's needs can create a framework that addresses both gender and climate-responsive goals, achieving similar outcomes with less resistance compared to focusing on gendered perspectives.

In a similar manner Respondent C explains that one way to address resistance against feminism is to introduce a ‘gender plus’ approach. Under the slogan “Share the city fairly”, this approach advocates to create an inclusive and equitable urban environment. “A gender plus approach extends beyond just gender perspectives. It encompasses all vulnerable population groups or groups already disadvantaged for various reasons, be it structural, financial, economic, ethnic, cultural, age-related, and so on” (Interview B). By recognizing the diverse forms of disadvantage faced by different groups, Vienna has already adopted such ideas. “Good city planning should cater to the everyday needs of all people” (Interview C). By ensuring that the mobility design addresses the needs of vulnerable groups, making it both gender and climate responsive, it moves



beyond traditional gender perspectives to include a wide range of needs. Thereby also resistance is reduced, and inclusivity fostered. For instance, in gender-responsive design, “From a pedestrian viewpoint, gender equality is vital but also all user groups and mobility types are crucial. Wide pathways accommodating various needs such as prams, wheelchairs, and the elderly for safe and accessible city navigation” (Interview C). This inclusive approach shifts the focus from cars to people, addressing the needs of disadvantaged groups while also promoting sustainability. By doing so, it not only meets the objectives of gender and climate responsiveness but also provides comprehensive benefits for all.

While these ideas do not specifically promote gendered aspects of mobility, the objective remains the same and accounts for climate responsive mobility at the same time. Due to these synergies of ‘gender plus’ or ‘design for all’ approaches, it is logical to question the role of strategies such as gender mainstreaming. Yet, respondent B suggests that gender mainstreaming is “a means of arriving somewhere. Of designing a world that is not prototyped according to and designed around the needs of men. But takes into consideration, that actually the majority of the population is different and has different needs. And why don't we take it one step further?”. Apparently, it could make sense to move beyond an approach labelled as gender mainstreaming to avoid resistance and foster more inclusivity of disadvantaged people in system designed for men. Approaches such as gender mainstreaming would still be a means to an end. It becomes apparent that a holistic approach, that includes gendered concerns, is efficacious and could be a solution to also meet climate objectives.

## **5.5 Approaching Mobility Holistically**

Finally, what the analysis has demonstrated is the importance of synergies and holistic thinking. Not only is this important in the sense of reaching an integrated and intersectional solution, accommodating vulnerable people, but it reaches climate responsive mobility solutions, that are equitable. Respondent B stipulates that “In the end, be it decarbonisation, be it climate adaptation, be it resilience, be it gender sensible design, be it designed for children, be it walkability strategy. All these things are interrelated. And they feed into each other. And if you do politics today, you need to think and plan them together”. This interconnectedness stresses the necessity of handling mobility issues holistically, since strategies become effective if thought together. Striving for gender responsive solutions, is therefore, not only necessary but also an integral part of this holistic puzzle. By merging gendered concerns with broader needs, such as those of children, it is possible to reach more inclusive, comprehensive solutions and aids an integrated framework.

This is not to say that the incorporation of gendered concerns or employment of gender mainstreaming as a solution is overarching or all-encompassing. As Respondent C posits, “Beyond gender considerations, there is much to address here. For example, for cyclists, there's significant room for improvement. People prefer cycling in the shade of trees. Cyclists need dedicated paths, and pedestrians need their own separate, greened walkways. There are some questions not concerning gender, which are also lacking in mobility policy still”. Obviously, there are some topics beyond gender that are important in the mobility transition There is a lot to do besides gendered topics, concerning climate responsive and people friendly mobility. The implementation or its pursuance is not a solution that solves all concerns in this regard.

Yet, finishing the results section, it is worth to circle back to the status quo of Viennese policy making. All respondents agreed on the well-established mechanisms and progress, one of them asserting: “In Vienna, we are already in a good position. Within Austria, Vienna is the city where gender planning works best, has somewhat entered the mainstream, and where many people are aware of it and a lot has been done” (Interview C). This demonstrates that gender planning is already effective in Vienna, and it requires little effort to further implement these practices. The continuance and expanding these efforts can also support climate objectives, still making it a strategic and efficient approach for broader mobility goals.

## 6. Discussion

This research has produced significant findings on how gendered mobility can facilitate climate goals in Vienna. After contextualising the research by addressing limitations, the discussion interprets the findings in the context of theory, literature, and the broader Viennese mobility landscape. A particular focus on emotions, norms and feminism is put to underline the overarching rationale of this thesis.

### 6.1 *Limitations and Scope of the Research*

While the findings of this research provide valuable insights into the integration of gender and climate considerations in urban mobility strategies, several limitations of the research design and methodological choices must be acknowledged to fully understand the scope and impact of this study.

One limitation of this thesis is the inability to conclusively determine why certain gender-responsive and climate-responsive mobility initiatives in Vienna are not fully realized. While some hurdles have been addressed, the research could not pinpoint whether the main obstacles are financial or political. Simplifying the issue to cost or ideological resistance may overlook deeper barriers. This suggests the need for further investigation into the political dynamics, especially by engaging with those opposing these initiatives. These unanswered questions highlight the complexity of implementing comprehensive gender-responsive policies and underscore the need for ongoing critical examination of both the successes and limitations of Vienna's approach. This limitation is connected to the scope of this research, which may lack some depth and focus of the sampling of interviewees.

This thesis has investigated the Viennese context of mobility. While Vienna's progressive approach to gender mainstreaming in urban mobility offers valuable insights, its generalisability applies only to that context. The findings are situated within the unique socio-political and cultural context and thus may not be representative of other cities with different governance structures, cultural norms, and commitments to gender-responsive policies. Consequently, the results may not be easily applicable to other urban settings, limiting the broader generalizability of the research findings and conclusions. Nevertheless, the findings are very relevant for Vienna's context and can be used in comparative studies across multiple cities. Such an approach would help identify common challenges and best practices, thereby enhancing the generalizability and impact of gender-responsive and climate-responsive mobility policies on a wider scale.

The reliance on interviews as a primary research method in this thesis introduces several limitations that may also affect the generalizability of the findings. Initially, the shift towards interviews was necessitated by the document analysis, which failed to provide the expected depth due to the nature of Viennese decision making and the focus on strategy output rather than policy. While interviews offer rich, qualitative insights, they are inherently subjective and context specific. The use of language surrounding feminism, and conducting interviews in both German and English, presented additional specific circumstances. Interviewees' responses can be influenced by their comfort level with the language and their personal beliefs about feminism. Instances where participants felt triggered required nuanced discussions and questioning, which altered the course of the interviews. The generalizability of interview findings is also limited by the specificity of the sample. Although there was some overlap in responses, which strengthens the reliability of the points made, the fact remains that these are perspectives from a select group of experts. While their expertise lends credibility to the findings, it does not necessarily represent the broader population's

views or experiences. Therefore, while the expert interviews provide valuable insights into Vienna's gender-responsive and climate-responsive mobility policies, caution must be exercised when extrapolating these findings to other contexts. Future research should consider incorporating a more diverse set of data sources and possibly expanding the geographic scope to enhance the robustness and generalizability of the conclusions.

## **6.2 *Bridging Academic Gaps: Gender and Climate Responsiveness***

This section discusses how the findings integrate into existing literature on urban mobility, gender, and climate responsiveness. Overlaps and gaps identified in the literature are addressed, thereby acknowledging the wider academic relevance of the thesis.

Firstly, the theoretical framework of feminist political economy (FPE) has embedded the findings of this research. The FPE view that gender is a dynamic, relational construct shaped by social, spatial, and cultural dynamics, helps provide an understanding how this relates to mobility (Uteng, 2009; Sánchez de Madariaga & Neuman, 2016). It highlights the distinct mobility needs and travel patterns of non-cis-male gender groups, particularly women influenced by care responsibilities. Documenting how existing policies either support or neglect these needs provides a strong basis for advocating more inclusive and equitable mobility solutions, thereby fostering the creation of sustainable mobility. The thesis shows how gender responsive mobility, like promoting active mobility and reducing car dependency, can also address climate-responsive mobility policies. This dual focus aligns with FPE's emphasis on integrating social justice with ecological concerns (Hickman & Banister, 2014). Additionally, the research challenges male-centric mobility paradigms by demonstrating the need for feminist methodologies, aligning with FPE's critique of

conventional environmental policies that often overlook the needs of marginalized groups (Joelsson & Scholten, 2019). Overall, FPE has provided a comprehensive lens to understand and address the complex interplay between gender, mobility, and environmental sustainability in this thesis.

Secondly, the results integrate well into the literary discourse covering social implications of the urban mobility transition and justice concerns. The results have shown that overarchingly, gender responsive mobility not only aligns with climate responsive goals, but it can also facilitate them. This has been proven via several examples including the idea of the “15-minute-city”, strategies for active mobility or the gender mainstreaming project (e.g. Maria Hilf District). This supports arguments by Verlinghieri and Schwanen (2020) and Sheller (2021) that sustainable urban mobility must address both environmental and social justice concerns. Secondly, regarding the integration of gender mainstreaming as a tool to address gendered concerns in policy, the research aligns with existing literature on the resistance to gender mainstreaming (e.g., Vida 2021; Elomäki and Ahrens 2022). Both the literature and this thesis indicate that institutional and patriarchal norms hinder the implementation and representation of gender mainstreaming. Furthermore, this study contributes to the literature by identifying strategies to overcome the limitations and resistance associated with gender mainstreaming. It highlights the benefits of adopting inclusive approaches that also address the needs of other underrepresented groups, such as children and people with disabilities, which enhances intersectional problem-solving and benefits multiple groups, including women. In this regard, this thesis contributes to the ongoing calls to strengthen gender mainstreaming efforts and indicates the benefits of adopting more intersectional and inclusive approaches that extend beyond gender alone.

This research has also confirmed the literature investigating gendered dimensions of mobility. The findings corroborate that women, due to gendered care responsibilities, rely more heavily on public transport and active mobility, which involves shorter and more complex travel patterns. This aligns with Christensen and Brengaard (2021), who highlight the perpetuation of car-centred, male-dominated mobility norms. Vienna's efforts to promote active mobility and reduce car dependency illustrate practical steps to shift away from these entrenched norms. Most importantly, the study supports Smidfelt Rosqvist's (2019) argument that gendering transport policy is crucial for sustainability, as women's transportation habits are more sustainable, and they strongly support sustainable measures. By integrating gender perspectives into Vienna's mobility policies, the research outlines how gender-responsive approaches can effectively advance climate goals, contributing to more inclusive and resilient mobility systems. This alignment with key literature highlights the importance of addressing gender in mobility planning to achieve equitable and sustainable urban environments.

Beyond the consensus with existing literature, this thesis has contributed to filling literary gaps concerning the integration of gender perspectives into sustainable mobility policies by providing empirical evidence from Vienna, a city recognized for its advanced gender mainstreaming practices. The results show that Vienna's mobility strategies incorporate gender-responsive practices that align with broader climate action goals. By promoting active mobility and reducing car dependency, Vienna effectively tackles the gendered dimensions of mobility as well as climate action goals which the literature acknowledges but often lacks in coverage on practical application (Smidfelt Rosqvist, 2019; Dymén & Langlais, 2017). The thesis highlights the importance of improving safety and accessibility in public transport, supporting calls in the literature for inclusive and equitable transport systems (Sheller, 2021; Levy, 2013), thereby enhancing the understanding



of how these factors intersect with gender and then further align with climate goals. Moreover, by emphasizing the need for intersectional approaches that consider multiple dimensions of inequality, the research demonstrates how more inclusive strategies such as ‘gender plus’ strategies can effectively align with and support both gender equity and climate action goals in mobility planning. These findings illustrate the potential for integrating gender and climate considerations into urban mobility strategies, addressing the identified gap in the academic literature and providing a concrete example of successful policy integration in Vienna, as well as providing empirical examples of how this might look like, thus reaching the objective of this thesis.

### **6.3 *The Role of Emotions, Norms and Feminism***

When discussing the findings of the research, it is important to consider the role of emotions and norms. Emotions and norms significantly influenced the results of this research, which covers a much-debated topic due to resistance of feminist ideas. During the interviews, it became clear that some respondents were visibly influenced by their emotions and personal beliefs on this topic. Since this research is grounded in feminist theory and conceptualised gender as well as gendered norms and roles, feminist ideas and terms frequently came up during the interviews. Thereupon, participants reacted to questions based on their feelings, and their responses were notably influenced by their connection to the feminist framework of the research. For instance, the question of "what about other humans and genders" frequently emerged, highlighting the tensions surrounding gender discussions and indicates how feminist ideas trigger people. Some terms (e.g., gendered mobility, feminist approach) needed clarifications or were met with criticism by interviewees, some even feeling the need to express opinions on feminism itself. Whilst interviews

were not supposed to cover the substantial relevance of feminism and its justification for existing at this moment, such conversations or comments still came up. These emotional reactions highlight the importance of considering how feelings in this instance feelings of discomfort and defence, underpin both feminist and mobility discourses. Recognizing this emotional dimension is crucial when considering the findings of this thesis. It also shows the importance of dialogue and emotional awareness in decision-making and research. This awareness is essential when considering the implications of this thesis.

In addition to emotions, norms played a significant role in the research. Each interview revealed different norms and values connected to mobility, showcasing diverse societal attitudes towards mobility. Most prominently, while there was consensus among interviewees on the necessity of reducing car dependency, strong norms surrounding car usage remain a barrier which became clear in all interviewee's responses. This raises questions about why, despite general agreement on the need to reduce car use, substantial change has not been realized. Addressing this issue requires considering the cultural norms, and possibly the lobbying influence of the automobile industry, as these factors strongly influence the field of mobility. This issue has been recognized by literature as Sheller (2004) explains emotions such as freedom, power, and attachment are associated with car ownership and driving, which is problematic in times of climate change and patriarchal power structures underpinning mobility and genders (Cresswell 2006). While some of these aspects were addressed when examining generational discrepancies, car dependency and the norms surrounding it must also be considered within the context of patriarchal and political structures, not just generational ones.

It is important to readdress one of the main underlying issues in this context, the patriarchal structures underpinning urban mobility. The aforementioned dominance given to cars and the

emotional and cultural bonds people form with cars, are deeply tied to patriarchal structures (Sheller 2004). Cars symbolize traditionally masculine attributes like power and independence, reinforcing male dominance and car-centric infrastructure (Sheller 2004). This focus on cars neglects the mobility needs of women and marginalized groups who rely more on public transport and active mobility due to care responsibilities. Challenging this car-centric norm is essential for urban justice, as it promotes inclusive transportation systems that support gender equity and sustainability (Sheller 2004; Joelsson and Scholten 2019a). Therefore, how one addresses the car centrality is essential and again highlights the need, importance and potential of using gender responsive mobility policy to do so.

Understanding the influence of both emotions and norms is vital for addressing the underlying challenges in implementing gender-responsive and climate-responsive mobility policies. This becomes apparent in the differing views of interviewees when asked about the way forward. The disagreement on shifting the modal split in mobility reflects two approaches. One side advocates for promoting alternatives to cars, understanding that ingrained mobility habits take time to change. This method focuses on making non-car options attractive. The other side argues for more proactive measures, such as banning cars in certain areas, to ensure a sustained shift away from car dependency. This involves assertive efforts to dismantle deeply rooted patriarchal norms that prioritize car use. The latter approach recognizes that without significant interventions, car-centric values will continue to perpetuate inequalities in urban mobility. Therefore, in line with the rationale of this thesis it is important to consider more proactive ways going forward, since softer policy might reach limits. This ties into the line of argument of interviewee B, who advocates to proactively reduce cars as “the missing piece” in shifting the modal split. Therefore, it makes sense

to understand the underlying context of patriarchal norms and car use, which highlights the importance of feminist thinking in mobility.

#### **6.4 Contribution to the Overlap of Gender and Climate in Mobility**

It is noteworthy that the results remain rather theoretical, primarily suggesting solutions and highlighting obvious links and alignments. The findings do not provide concrete examples of how gender mainstreaming actively facilitates climate action goals. Rather, the research supports claims from the literature while providing evidence of how it could work in an empirical case. This is supported by the fact that Viennese policymaking is already aligned with gender mainstreaming practices, and the city actively follows projects integrating both gender and climate goals in its mobility strategies. However, there is no concrete policy that explicitly uses gender to address climate objectives. While this thesis has not fully achieved its objective of identifying specific policies where gender mainstreaming directly drives climate action, it still pinpoints the exact overlaps and the potential that gendered policy-making in the mobility sector has for advancing climate action goals.

## 7. Conclusion

This thesis has investigated Vienna's mobility policies, examining how gender responsive policy making might be able to facilitate climate action within the field. Despite the limitations of relying on a single case study and the challenges of generalizing interview data, this research has provided valuable insights into gender-responsive and climate-responsive mobility policies. The conducted expert interviews have offered detailed and nuanced responses, which contribute new data to the existing literary debates. These interviews were essential in capturing the perspectives of experts involved in Vienna's mobility planning as well as expertise on mobility and gendered policy. While the findings are specific to this context, the consistency in responses among different experts suggests a shared understanding of critical issues. The data collected through these interviews could not have been easily obtained through other methods or interviewee selection, hence emphasizing the importance of this approach and thesis. Overall, the findings contribute to an understanding of the overlap between gender, climate and mobility as well as indicated many instances of following these objectives in policy contexts. Moreover, the results show that Vienna's policies have been effective in addressing the distinct mobility needs of non-cis-male gender groups, particularly women influenced by care responsibilities, though do not purposefully use the synergies yet. This thesis suggests exploiting the potential of feminist mobility policy to pursue climate goals having demonstrated that inclusive mobility strategies including gender and generally focusing on equity beyond that, can effectively foster climate action in mobility.

The thesis has identified significant overlaps between gender-responsive and climate-responsive mobility. The findings highlight that women, due to their caregiving responsibilities, depend more on active mobility, such as walking and cycling, which are also low-emission mobility modes. This dual focus on promoting active mobility addresses both gender and climate goals.

Nonetheless, the expansion of cycling infrastructure in Vienna is slow, hindered by the city's historical architecture and a strong car culture. This points to the necessity of rethinking urban spaces to reduce car dependency through measures like reallocating space and creating green areas, which would also help achieve both gender and climate objectives. Security is another critical aspect for gender-responsive mobility, with the need for safe public transport and active mobility options being crucial for women. The thesis suggests that addressing these security concerns can help reduce car dependency and promote sustainable mobility practices.

Nonetheless, there are discrepancies and resistance hindering the integration of gendered policy, thus hindering efforts for climate goals. The thesis identifies practical implementation obstacles such as cost, effort, and the bureaucratic challenges of changing established mobility systems. Additionally, ideological resistance, particularly from men who may feel disadvantaged by gendered policies or deem them irrelevant, poses significant barriers. The research points out that feminist approaches in policymaking often encounter emotional resistance and a lack of understanding or willingness to implement changes.

To overcome these limitations, the research emphasizes the potential of strong enforcement of progressive gender mainstreaming practices in Vienna. The city's established approach to gender mainstreaming provides a foundation for achieving climate mobility goals. Furthermore, holistic decision-making is crucial for creating small-scale, efficient mobility solutions that benefit everyone. The 'gender plus' approach for instance, which considers the needs of all vulnerable groups, and designing mobility systems for all through fair share concepts, or designing for children, are presented as effective strategies. Overall, while these findings do not provide a perfect solution, they illustrate how thinking about gendered mobility efforts in conjunction with climate

goals can lead to more comprehensive and sustainable urban development and equitable urban transitions.

Contextualising the findings, the research highlights the theoretical alignment between gender-responsive and climate-responsive objectives but identifies practical application limitations. Policies suggest solutions without concrete examples of gender mainstreaming actively facilitating climate action goals. Additionally, the role of emotions and norms, as observed during interviews, significantly influenced the research outcomes. These subjective factors stress the complexity of implementing gender-responsive policies and highlight the need for ongoing dialogue and consideration of emotional and normative dimensions in policy-making. Yet, despite these limitations, this thesis makes a valuable contribution to the literature by empirically illustrating the potential synergies between gender-responsive and climate-responsive mobility policies in Vienna. It offers practical strategies for other cities aiming to enhance urban mobility and sustainability while promoting gender equity.

Future research should continue to explore these intersections across diverse urban contexts to build a more comprehensive understanding of how gender-responsive policies can drive sustainable urban development. Therein, future research could explore several promising avenues. Comparative case studies in other cities can help determine how gender-responsive mobility policies could be applied in different urban contexts, providing a broader understanding of effective strategies to use feminist mobility policy. Additionally, applying the findings of this thesis to other urban settings can reveal insights into replicability and adaptability. Apart from that, it would be significant to investigate the decentralized decision making of Vienna, as indicated in the interviews. Focusing on local governance at the district level, can further clarify the roles cities play in integrating gender and climate objectives. This urban studies approach can offer a deeper

analysis of local politics and their impact on policy implementation in terms of gendered and climate mobility policy and bottom-up approaches.

Lastly, drawing from this thesis' results, recommendations are outlined. This research has demonstrated that the implementation of gender-responsive policy making in the mobility sector can effectively push for climate goals. This intersection presents a valuable opportunity to use the potential of feminist policy making. Vienna, with its proven track record in gender mainstreaming, offers a relevant model that could be replicated in other cities. However, it is crucial to acknowledge and address potential challenges such as ideological resistance and bureaucratic obstacles. Learning from Vienna's holistic and inclusive projects, which extend beyond gendered concerns, is crucial. These projects demonstrate the effectiveness of creating just, equitable, and climate-friendly urban mobility solutions, which adopts a holistic approach that integrates gender. Therefore, it is recommended that cities adopt comprehensive strategies integrating gender perspectives into mobility planning, ensuring inclusivity for various social groups to maximize the impact on climate action and urban gender equity.



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## Appendix

### ***Interview Guide***

Example (Interview guides were slightly adapted to the role and expertise, though all followed the same themes)

1. What does an ecologically sustainable and socially just transportation system mean to you?
  - How does it incorporate social justice?
  - What is its contribution to climate protection?
2. Is Vienna on the right path to achieving a successful mobility transition?
  - Where do you currently see strengths and weaknesses in Vienna's mobility system?
3. What role do gender aspects play in the planning and implementation of sustainable mobility solutions (e.g., active mobility, car reduction)?
  - Is the gender aspect something you consider in your work? Is it important to you?
  - Where do you see the connection between gender and climate justice in urban spaces?
4. Have you ever experienced a feminist approach, such as gender mainstreaming, being an obstacle to sustainability? If not, could it contribute positively?