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Transferring cycling policies

The benefits and barriers for the city state of Berlin

Master Thesis
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Colophon

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Preface

Dear reader,

Hereby I present you my master thesis on the benefits and barriers of bicycle policy transfer for policymakers in Berlin. For me, this master thesis forms the final act for the master program Environmental and Infrastructure Planning at the University of Groningen. Therewith, it marks the end of my six-year study period in Groningen.

During my study period, I have developed an interest in sustainable mobility and the means to accomplish this, both from a policy as well as a behavioural perspective. As I have lived for all my student life in Groningen, I was used to looking at sustainable mobility issues from a Dutch perspective. By going on an exchange for the last few months of my study period and writing my master thesis in Berlin I hoped to broaden my scope with regard to sustainable mobility. In the end, I was not able to move to Berlin due to the outbreak of the corona virus. However, I am glad that I could continue my research on the same topic, as it allowed me to learn a lot about the differences in bicycle strategies between cities in the Netherlands and Berlin, about the barriers with regard to improving bicycle conditions in Berlin, and about the role that policy transfer plays for bicycle planning in Berlin. I hope that my thesis will broaden your view as well, especially for the readers used to the Dutch context. Furthermore, I hope that my thesis will offer useful insights and recommendations for policymakers in the field of bicycle planning, not only in Berlin but also in other cities.

I would like to express my gratitude to those without whom I could not have completed this thesis. First of all, I would like to thank my supervisor, dr. Christian Lamker, for providing constructive feedback on earlier versions of my thesis. His enthusiasm about my research topic motivated me to continue the process and keep improving myself. Moreover, his knowledge really helped me to gain a better understanding of the German (transport) context. Furthermore, without the willingness of my interviewees to participate, I would not have been able to do this research. I am grateful that they were willing to share their opinion, experience, and knowledge with me. Despite their engagement in the developments that currently take place in Berlin with regard to the corona crisis, they made time to participate in this research. Finally, I would like to thank my family and friends for supporting me during my study and the process of writing this research.

For now, I hope you enjoy reading my master thesis!

Veronique Rietman

Groningen, 8th of July 2020

Abstract

Since the parliamentary elections of 2016, the bicycle is one of the core focus points of transport planning in Berlin. As the inclusion of the bicycle in mobility laws is new for Berlin (even for the whole of Germany), searching abroad for best practices seems an attractive form of policymaking. This research explores the extent to which the benefits of policy transfer determine the choice of policymakers in Berlin to participate in the policy transfer process. Moreover, it explores in what way the barriers experienced in the policy transfer process influence the outcome. Bicycle policymaking in Berlin is characterized by a co-creation process between the local government and organizations such as Changing Cities (a civil organization) and ADFC (the German bicycle association). Empirical data was gathered through semi-structured interviews with policymakers and other actors related to policymaking in Berlin. This study demonstrates that evidence-based policymaking that policy transfer offers is experienced as the benefit that is most decisive in the decision whether to participate in policy transfer. Apart from that, there are several barriers that influence the outcome of policy transfer. This research found out that barriers related to the actual *transferring* of a policy do influence the outcome of the policy transfer to a greater extent than barriers experienced while *searching* for suitable policies to transfer. This study is concluded with recommendations for policymakers on how to deal with those barriers.

Keywords: *policy transfer, policy transfer process, benefits, barriers, cycling policies, sustainable mobility.*

Index

Colophon	i
Preface	ii
Abstract	iii
Index.....	iv
List of figures, tables, and boxes	vii
Figures	vii
Tables.....	vii
Boxes.....	vii
List of abbreviations.....	viii
1. Introduction.....	1
1.1 Background.....	1
1.1.1 Cycling in Berlin	1
1.1.2 Benefits of cycling	1
1.1.3 Policy transfer in Berlin	2
1.2 Scientific and societal relevance	3
1.3 Research objective and research questions	4
1.4 Thesis outline	4
2. Theoretical framework	6
2.1 Policy transfer and similar terms.....	6
2.2 The process of policy transfer.....	8
2.2.1 Dissatisfaction	8
2.2.2 Searching for satisfaction.....	9
2.2.3 Defining what to transfer	10
2.2.4 Comparative research	11
2.2.5 Implementation and evaluation.....	12
2.2.6 Actors involved	12
2.3 Benefits of policy transfer.....	13
2.4 Barriers in the process.....	14

2.4.1	Barriers in searching phase	14
2.4.2	Barriers in the transferring phase.....	15
2.5	Conceptual model	16
3.	Methodology.....	18
3.1	Research methods	18
3.2	Data collection	19
3.2.1	Literature review	20
3.2.2	Policy analysis	20
3.3.3	Interviews.....	21
3.3	Data analysis.....	23
3.4	Ethical considerations	24
4.	The Berlin context	25
4.1	The political context.....	25
4.2	Cycling in Berlin	26
5.	Results	31
5.1	Policy transfer process	31
5.1.1	Dissatisfaction with status quo	31
5.1.2	Searching for satisfaction	32
5.1.3	Defining what to transfer	34
5.1.4	Comparative research.....	35
5.1.5	Implementation and evaluation	36
5.1.6	Actors involved	36
5.1.7	Discussing the policy transfer process.....	37
5.2	Benefits of policy transfer	38
5.2.1	Discussing the benefits.....	39
5.3	Barriers in the process	40
5.3.1	Barriers in searching phase	40
5.3.2	Barriers in transferring phase.....	41
5.3.3	Discussing the barriers.....	42

6. Discussion	44
6.1 Reflection on policy transfer	44
6.2 Implications of the corona crisis	44
7. Conclusion	46
7.1 The Berlin cycling context	46
7.2 The policy transfer process	46
7.3 Benefits of policy transfer	47
7.4 Barriers in the process	48
7.5 Influence of benefits and barriers on policy transfer process	48
7.6 Recommendations for policymakers	49
7.7 Reflection	51
7.8 Future research.....	52
References	54
Appendix I – policy transfer and similar terms	58
Policy diffusion	58
Lesson drawing	58
Policy transfer	58
Policy convergence.....	58
Policy translation	59
Appendix II – Literature coding scheme	60
Appendix III – Interview guides	62
Exploratory interviews	62
Interviews with practitioners	64
Appendix IV – Coding scheme.....	66
Appendix V – Informed consent	68

List of figures, tables, and boxes

Figures

Figure 2.1 Conceptual model

Figure 3.1 Research strategy

Tables

Table 2.1 Policy transfer and similar terms

Table 3.1 Documents used for the policy analysis

Table 3.2 Overview of interviewees

Boxes

Box 4.1 The 10 Goals of the Volksentscheid Fahrrad

Box 4.2 The main bicycle goals from the Mobility Act

List of abbreviations

ADAC	Allgemeiner Deutscher Automobil-Club
ADFC	Allgemeiner Deutscher Fahrrad-Club
BUND	Bund für Umwelt und Naturschutz Deutschland
BVG	Berliner Verkehrsbetriebe

1. Introduction

1.1 Background

1.1.1 Cycling in Berlin

Over the last decades, issues related to car use have become more urgent in Berlin (Senate Department for the Environment, Transport and Climate Protection, 2017). By addressing the pressing problems related to car use in Berlin, a big civil initiative movement influenced the political discussions about transport (Volksentscheid Fahrrad, 2020). Since the shift of the local political landscape towards a predominantly green spectrum as a result of the parliamentary elections in 2016, increasing the share of environment-friendly modes has been one of the main objectives for transport planning of the Berlin senate (Senate Department for the Environment, Transport and Climate Protection, 2017).

Cycling is a frequently proposed environment-friendly transportation alternative. It is proven that for small distances in urban areas cycling can be faster than other transportation modes (Heinen et al., 2010). The bicycle has become increasingly visible in the streets of Berlin. From 2004 to 2012, the bicycle traffic has grown with 50% (Senate Department for the Environment, Transport and Climate Protection, 2017). In contrast to this increase in bicycle trips, the bicycle infrastructure has been lagging behind for many years, leading to an unsafe perception of cycling among citizens, according to the civil initiative *Volksentscheid Fahrrad* (bicycle referendum; Volksentscheid Fahrrad, 2020). Under pressure of this civil initiative, the in 2016 newly formed senate department committed itself to improve the cycling circumstances in the coming years in order to increase the share of cyclists (Von Schneidemesser & Stasiak, 2019).

1.1.2 Benefits of cycling

Realising a higher share of cyclists is relevant for the city state of Berlin for several reasons. Firstly, as explained, cycling is seen as a sustainable transportation mode, and therefore it contributes to the objective of the city state of Berlin to enhance the environment-friendly transportation modes. Secondly, bicycles have a more positive influence on the liveability of a city than cars. Not just because of the low degree of noise disturbance and air pollution, but also because of the difference in space that both vehicles take up (Heinen et al., 2010; Federal Ministry of Transport, Building and Urban Development, 2012). Thirdly, an increase in the share of cyclists makes cycling safer. The bigger the share of bicycles on the road, the more visible cyclists are, and the more other road users will adjust to them (Heinen et al., 2010). This is an important factor for the city state of Berlin since the share of cyclists as accident victims has grown from 29% to 32% in the time frame of 2008-2013 (Senate Department for the Environment, Transport and Climate Protection, 2017). Lastly, investments in cycling

infrastructure are not as expensive as investments in most other types of infrastructure (e.g. car infrastructure and public transportation; Börjesson & Eliasson, 2012).

Furthermore, from an individual's perspective, better cycling policies and more investments in the cycling infrastructure are of importance. Next to the notion that cycling in urban areas can be faster than other means of transport, cycling is a relatively cheap means of transport (Heinen et al., 2010) and it has significant health benefits (Lawlor et al., 2003).

1.1.3 Policy transfer in Berlin

Compared to Berlin, several German and international cities are more experienced in implementing bicycle policies (Senate Department for Urban Development and the Environment, 2013). The city state of Berlin has expressed their intentions to learn from or adopt successful examples from other cities (Senate Department for Urban Development and the Environment, 2013). Learning from other cities is a frequently used strategy for improving policies. A widely acknowledged concept that explains this principle is *policy transfer*. Dolowitz and Marsh (1996) refer to policy transfer as a process in which knowledge about a policy in one context is used in the development of policies in another context. Hence, policy transfer does not describe the literal copying of a certain policy, but it does describe the process of mutating policy ideas from one place to another (Stone, 2012).

Policy transfer offers several benefits. For instance, policy transfer contributes to more evidence-based policies by offering policymakers the option to adopt successful policies from elsewhere instead of 'reinventing the wheel' on their own (Timms, 2011; Marsden & Stead, 2011). However, several barriers can be faced in the policy transfer process that influence the outcome. For example, the search for other policies is constrained by time and financial resources of governments (Marsden et al., 2009; Dolowitz & Marsh, 1996). Also, later in the process, contextual differences can be underestimated, which can cause a failed transfer (De Jong, 2004).

Altogether, policy transfer offers many benefits provided that it is carried out considering the barriers. Following the arguments provided by Dolowitz & Marsh (1996), most voluntary policy transfers arise from a dissatisfaction with the status quo. For the city state of Berlin, this dissatisfaction is generated by the shift in political values, and the increasing societal awareness and organization (Senate Department for the Environment, Transport and Climate Protection, 2017; Volksentscheid Fahrrad, 2020). Although a lot of progress has been made since the last senate elections, the general idea of including cycling in an integral mobility strategy is new for the city state of Berlin. Therefore, a logical step would be to search for and learn from successful examples of other cities that have experience with that. In fact, the city state of Berlin did already acknowledge that other cities have successful examples within their

cycling policy (Senate Department for Urban Development and the Environment, 2013). Learning from other cities can be beneficial for the city state of Berlin. This study explores to what extent the city state of Berlin experiences benefits to policy transfer and what barriers are faced in the policy transfer process.

1.2 Scientific and societal relevance

The policy transfer concept originates from political studies and is mostly studied in relation to public policies (Stone, 2012; Dolowitz & Marsh, 1996). Authors argue that policy transfer has gained relevance over the last decades, as means of communication have become easier (Dolowitz & Marsh, 2000; Benson & Jordan, 2011). However, the introduction of policy transfer within transport studies is relatively new (Marsden & Stead, 2011). According to Marsden & Stead (2011), policy transfer is a relevant concept for transport studies since transport policies have much in common with other parts of public policy. The provision of transportation means is often seen as a public good, and the development of transport policies can be as political as the development of other public policies. As a response to the knowledge gap with regard to policy transfer within transport studies, calls have been made to examine the process of policy transfer within transport policies more thoroughly (Marsden & Stead, 2011).

Previous research on the relevance of policy transfer, within transport studies but also in general, was mainly focused on trans-national policy transfers (Dolowitz & Marsh, 1996; Stone, 2012; Marsden & Stead, 2011; Stead et al., 2008). To clarify, Timms (2011) does state that organizations such as the European Union are mainly interested in policy transfers between countries. Contrasting, research about the policy transfer process of smaller scale organizations such as local governments seems underexposed, even though it has benefits compared to international policy transfer. For instance, transferring large scale policies is tricky as it can result in a lack of public acceptability (Marsden et al., 2009). Instead, transferring smaller scale policies seems more accepted. Therefore, this study contributes to the research gap regarding transfers of smaller scale policies.

Next to contributing scientifically to a broader view of policy transfer within transport policies, this study contains societal relevance as it helps policymakers to make better informed decisions concerning the policy transfer possibilities. As stated previously, scientific research on policy transfer is predominantly focused on policy transfer between nations. However, practice indicates that policy transfer on a smaller scale, or more specifically, between cities, does occur (e.g. USE, 2019; Timms, 2011). This study can offer new perspectives for policymakers regarding the opportunities and barriers for policy transfers between cities within the cycling context.

Furthermore, this study fits perfectly in the timeline of cycling developments that Berlin is experiencing right now. Although the city state of Berlin already started with structural investments in cycling infrastructure around the beginning of the century, real progress has only been made since the last senate elections (Senate Department for the Environment, Transport and Climate Protection, 2017). A combination of a societal pressure and a change in political believes has led to a serious commitment of the senate to improve the cycling circumstances. As this is something that has not been done before on such a serious note in Berlin, looking abroad for useful policies might offer opportunities for the city state. The results of this study offer support for the city state of Berlin by exploring the benefits and the barriers of transferring cycling policies that have to be considered. Moreover, this study provides recommendations for Berlin policymakers to address the barriers.

1.3 Research objective and research questions

Several cycling developments of the recent years have steered the city state of Berlin towards engaging in policy transfer. Engaging in policy transfer can be beneficial for policymakers for several reasons, even though the outcome is influenced by barriers experienced in the process. The aim of this study is to *explore to what extent the benefits of policy transfer determine the choice of policymakers in Berlin to participate in the policy transfer process and to explore in what way the barriers experienced in the policy transfer process influence the outcome.*

Following the research objective, the main research question to be answered is:

To what extent do the benefits of policy transfer determine the choice of policymakers to participate in the policy transfer process and how do barriers experienced in the policy transfer process influence the outcome?

The main research question will be answered with the use of the following sub-questions:

- *What does the context of cycling policies in Berlin look like?*
- *What does the policy transfer process look like for cycling policies in Berlin?*
- *What benefits of policy transfer do policymakers in Berlin experience?*
- *What barriers do policymakers in Berlin face in the policy transfer process?*

1.4 Thesis outline

The remainder of this research is structured as follows. Chapter 2 provides a literature review by discussing policy transfer and similar terms, the policy transfer process, and the benefits and barriers of policy transfer that literature provides. Deriving from this, a conceptual model is presented that combines the elements of the theoretical framework. Chapter 3 discusses the methodology used for this research. Chapter 4 provides insight into the political context of

Berlin and the developments regarding cycling policies in Berlin. Chapter 5 describes and discusses the results of the empirical research. Apart from that, chapter 6 provides a more general discussion on the concept of policy transfer. Finally, chapter 7 answers the research questions and gives insight into recommendations for policymakers, the limitations of this study, and recommendations for further research.

2. Theoretical framework

This chapter reviews the literature regarding policy transfer. After discussing the concept of policy transfer, this chapter elaborates upon the policy transfer process. Next, the benefits and barriers are discussed. Lastly, this chapter presents a conceptual model where the elements discussed in this chapter are combined.

2.1 Policy transfer and similar terms

The concept of policy transfer has been widely discussed in academic literature in the past decades, originally within the fields of political science and international relations (Stone, 2012). While ideas of policies traveling across space and time have been around for more than half a century now, Dolowitz & Marsh (1996) have set the stage at the end of the nineties with their article ‘Who Learns What from Whom: a Review of the Policy Transfer Literature’. Ever since, research into policy transfer underwent exponential growth (Benson & Jordan, 2011). Up until today, nearly every article on policy transfer or related concepts does refer to Dolowitz & Marsh (1996) – both on a positive and a critical note.

Although research into policy transfer has grown substantially in the past decades, a growth in the occurrence of policy transfer in practice remains disputed by scholars. Proponents claim that the rapid growth of means of communication since the Second World War facilitated a growth in the occurrence of policy transfer (e.g. Dolowitz & Marsh, 2000). Nevertheless, according to critics, clear measures to assess whether the occurrence of policy transfer has increased are missing, due to the broad scope of the concept (e.g. James & Lodge, 2003).

The following definition of Dolowitz & Marsh (1996) is used universally: policy transfer is “a process in which knowledge about policies, administrative arrangements, institutions etc. in one time and/or place is used in the development of policies, administrative arrangements and institutions in another time and/or place” (Dolowitz & Marsh, 1996, p. 344). Although this definition distinguishes between transfers across time and transfers across place, most articles only describe the latter form of policy transfer (James & Lodge, 2003). For pragmatical reasons, the focus of this research is on policy transfer across space as well.

Dolowitz & Marsh (1996) distinguish between voluntary policy transfers, indirect coercive policy transfers, and direct coercive policy transfers. These three distinctions can be related to each other on a continuum – running from voluntary to direct coercive transfers (Dolowitz & Marsh, 2000). Most policy transfers have both voluntary and coercive characteristics; hence they take place somewhere on this continuum, in between the two extremes. Direct coercive forms of transfer mostly occur on an international scale, under pressure of disproportional power relations, or with the involvement of supra-national organizations (Dolowitz & Marsh,

1996; Dolowitz & Marsh, 2000; Benson & Jordan, 2011). In the case of cycling policies in Berlin, there are no powerful supra-national organizations involved. Therefore, this research is focused on the voluntary side of policy transfers.

Most literature with regard to policy transfer is focused on transfers between countries (Dolowitz & Marsh, 1996; Rose, 1991; Stone, 2012). This emphasis is explainable as the concept of policy transfer originates from political science and international relations. Besides, most coercive transfers occur between nations (Dolowitz & Marsh, 1996). Nonetheless, authors do acknowledge that policy transfer occurs on a smaller scale as well (Stone, 2012; Dolowitz & Marsh, 2000). In fact, policy transfers within the transport sector most often occur on a city level (Marsden & Stead, 2011; Timms, 2011). As the focus of this research is on transport policy transfers on a city scale as well, the focus of the theoretical framework is on city governments.

Next to policy transfer, a lot of similar concepts have been developed over the years. Those concepts have been summarized in Table 2.1. A broader description of those concepts is attached in Appendix I. Despite the criticism on policy transfer and the development of new, more comprehensive terms as alternatives, policy transfer is still the most widely acknowledged term within these studies. Furthermore, criticism on policy transfer is mostly related to early studies of policy transfer. Nowadays, aspects such as the complexity of the context are more acknowledged within policy transfer studies. For the sake of consistency, the term policy transfer is used in this study, not referring to the definition described in early studies but to a more encompassing definition of policy transfer.

<i>Concept</i>	<i>Description</i>	<i>Authors</i>
<i>Policy diffusion</i>	Emphasis on the patterns of policy diffusion; criticised because of the ignorance of the process of policy transfer itself.	Rose (1991); Dolowitz & Marsh, 1996); Dolowitz & Marsh (2000); Benson & Jordan (2011); Dobbin et al. (2007).
<i>Lesson drawing</i>	Emphasis on the voluntary part of policy transfers; implicit assumption that all transfers are voluntary and rational.	Rose (1991); Dolowitz & Marsh, 1996); Dolowitz & Marsh (2000); Benson & Jordan (2011); Dobbin et al. (2007); James & Lodge (2003).
<i>Policy transfer</i>	Focused on the process of policy transfer; encompasses both voluntary and coercive transfers.	All authors.

<i>Policy convergence</i>	Emphasis on the alignment of policies influenced by global developments or the pressure of supra-national organizations.	Stone (2012); Benson & Jordan (2011).
<i>Policy translation</i>	A criticism on policy transfer; focuses on the complexity of the context and the disturbances within the process of policy transfer.	Stone (2012).

Table 2.1 | Policy transfer and similar terms

2.2 The process of policy transfer

This section describes the process of a policy transfer – starting with a dissatisfaction with the status quo, and mostly ending with an evaluation. Whereas the section is organized in clear consecutive steps, which may indicate that the process is linear and rational, the footnote has to be made that this is far from true in practice. Although Rose (1991) attempts to describe the process in straight-forward steps, he does emphasize that there are limits to the execution of those steps in practice (James & Lodge, 2003). Also, Dolowitz & Marsh (1996) state that the process of policy transfer is messy, and that different streams need to cross at the right moment for a policy to transfer in a good manner. Nevertheless, as an attempt to get an understanding of how such a process would ideally look like, this section is structured in five steps describing the process. The last part, section 2.2.6, describes the actors involved in the process.

Usually, a donor party as well as a recipient party is involved in the policy transfer process (Dolowitz & Marsh, 1996). While from the donor’s perspective there are specific strategies and processes prior to and in a policy transfer process as well, the focus of this section is on the process from a recipient’s perspective, defined by the scope of the research.

2.2.1 Dissatisfaction

In voluntary policy transfers, the primary driving force is some form of dissatisfaction with the status quo, perceived by politicians (Dolowitz & Marsh, 1996). Rose (1991) distinguishes three factors that can generate dissatisfaction. Firstly, dissatisfaction can be generated by perceived uncertainty. This uncertainty is for instance caused by lagging behind in the use of technological developments. Secondly, dissatisfaction can be generated by changes in the policy environment. This means that policies stay unaltered, but the effect of a policy becomes negative. Thirdly, dissatisfaction can be generated by changes in political values. Often these changes in values are a result of elections. When the status quo within a city government is disrupted, policymakers will first try to solve the problem with their own knowledge. Only

when their own knowledge is not sufficient, policymakers will search for satisfaction across time and space.

2.2.2 Searching for satisfaction

In the search for satisfaction, the city government's own past is the first place to look at (Rose, 1991). Nonetheless, when there is a change in the policy environment, or when the city government is confronted with a new problem, looking at the past is not sufficient. Then, according to Rose (1991), policymakers have two alternatives. Speculating how a new programme would work in the future is the first and searching across space is the second alternative. The benefits of searching across space and eventually engaging in a policy transfer (as opposed to speculating, in this case) are described in section 2.3.

In searching across space, policymakers can search for lessons at different governmental levels within a country (Dolowitz & Marsh, 2000). For example, policymakers from local governments are not restricted to search for lessons at other local governments, as they can also look at regional or national governments. Nevertheless, policymakers from a certain governmental level do most often look for policies at other organizations within the same level, simply because governmental organizations within a certain level are similarly structured and deal with similar issues (De Jong & Geerlings, 2005).

Factors such as language, culture, system, proximity, and economic structure determine the search for a policy solution (De Jong & Geerlings, 2005). Marsden & Stead (2011) found in their case study that most policymakers are biased towards their local or regional neighbours in their search. Often the assumption is made that policy transfer is most likely to succeed between similar cities (De Jong & Geerlings, 2005). According to De Jong (2004), this view is problematic, as in transfers between similar cities the contextual differences are underestimated.

Many authors acknowledge that policymakers act within the confines of bounded rationality (Dolowitz & Marsh, 2000; Dobbin et al., 2007; Timms, 2011; Marsden & Stead, 2011). According to Marsden et al. (2012) and Monios (2017), policymakers are nowadays confronted with an information overload in their search for a suitable policy elsewhere. On top of that, policymakers are constrained by time and budget (Marsden et al., 2009). As policymakers lack the cognitive capacity to filter the available information properly within time and budget constraints (Dobbin et al., 2007), they tend to be biased towards cities that they identify with (Rose, 1991).

Due to this overload of information, peer to peer contacts and policy networks are the most frequently used sources of information within the transport sector (Marsden et al., 2009). Instead of conducting literature analyses, policymakers mostly gain information by the 'word

of mouth' (Bray et al., 2011). However, in some cases general literature is used or universities and research organizations provide information (Marsden et al., 2009; Timms, 2011).

2.2.3 Defining what to transfer

According to Dolowitz & Marsh (2000, p.12), there are eight objects that can be transferred: “policy goals, policy content, policy instruments, policy programs, institutions, ideologies, ideas and attitudes, and negative lessons”. In this enumeration, they make a clear distinction between policies and programs, where policies are seen as broad statements of intention, used to demarcate the direction, and programs are seen as concrete means of implementing those policies (Dolowitz & Marsh, 2000). Monios (2017) adds that higher level policy goals often remain unchanged, while the means to reach those goals are generally transferred. For example, the goal to reduce the emissions remains the same, while the means to reach that goal can be exchanged among governments. Stead et al. (2008) affirm that focusing on achievable, practical implementations is more fruitful than focusing on large-scale reforms, taking into mind the limited amount of resources and the public resistance.

Institutions, defined as ‘the rules of the game’, are divided in formal and informal institutions (De Jong, 2004). Whereas formal institutions encompass the legal and official rules, the informal institutions consist of cultural values and norms. When transplanting institutions, a tension arises between formal and informal institutions (De Jong, 2004). In most cases, only the formal institutions are transferred, assuming that informal institutions will gradually adjust to the new situation. However, according to De Jong (2004), it is exactly those informal institutions that should be studied carefully by policymakers, as the norms and values determine the success of a policy.

While policymakers often look for best practices at other cities, negative lessons can be transferred as well (Dolowitz & Marsh, 1996). In this case, policymakers learn what not to do from mistakes of other cities. Negative lessons do obviously not result in implementation by the recipient. In most cases, negative lessons are transferred by personal contact rather than through formal reports (Timms, 2011), as making a negative lesson available for third parties results in negative promotion of the donor city.

Dolowitz & Marsh (2000) distinguish between four gradations of policy transfer: copying, emulation, hybridization, and inspiration. The most straightforward degree of policy transfer is copying. By copying a policy, the policy as a whole is getting adopted into a new setting, without any changes. This turns out to be hard in practice as the institutional and contextual variables of the donor and recipient organization need to be equal (Rose, 1991). Emulation happens when a whole policy is transferred while taking different contextual circumstances into account (Rose, 1991). The former and the latter forms of policy transfer are seen as ‘hard’

forms of transfer and are particularly used for coercive transfers (Benson & Jordan, 2011). De Jong & Geerlings (2005) warn that the more a policy is literally transferred into a new context, the greater the chance of resistance will be. With hybridization, elements from different policies are combined into a new policy that suits the recipient city. If different best practices are combined into a new policy, policy transfer can lead to innovation (Rose, 1991). Inspiration is seen as studying familiar issues in an unfamiliar setting (Dolowitz & Marsh, 1996). Inspiration can also lead to innovation, as ideas about a problem are enriched with fresh information. Benson & Jordan (2011) stress that other forms of transfer such as non-transfer, failed transfer and the transfer of negative lessons need to be considered as well.

2.2.4 Comparative research

Rose (1991) stresses the importance of a comparative research in the form of a prospective evaluation. A prospective evaluation “combines empirical evidence about how and why a programme works in country X, with hypotheses about its likely success or failure in country Y” (Rose, 1991, p. 23). The advantage of an ex ante evaluation is that it reduces the uncertainty about the functionality of a policy before the policy is transferred. This way, theoretically, potential failures of a policy are detected in advance and conditions that are of importance for making a policy succeed are determined. Nevertheless, it seems unfeasible to incorporate all elements of the complex context of environment X and environment Y into such a systematic evaluation method. Therefore, in practice, this method can only be used to get an indication of the possible success or failure of a certain policy in a new context. However, as described previously, early research on policy transfer processes is disputed for being too rational, as case studies turn out that the process of policy transfer is often determined by bounded rationality of policymakers. A multiple case study conducted by Marsden et al. (2012) confirms this, and besides, they even conclude that research processes of policy transfers were often steered by preferred outcomes.

Even if the research process is biased, policymakers need to be aware of contextual differences in order to make a policy transfer succeed. As stated earlier, especially in transfers between similar countries, contextual differences are often underestimated (De Jong, 2004). Benson & Jordan (2011) make a distinction between contextual factors from the donor side and contextual factors from the recipient side. On the donor side, the “wider social and policy context” can reduce the transferability of a policy (Benson & Jordan, 2011, p. 372). On the recipient side, contextual factors such as path dependency of policies, the density of institutional structures, and the political context play a role in the transferability. Besides, research needs to be conducted into the institutional situation of the donor city and the adjustments that need to be made in the recipient city (Benson & Jordan, 2011). As stressed earlier, it is of great importance to do this for formal as well as informal institutions.

In the research process, external parties such as consultants do often play a role (Marsden et al., 2009). In most cases, this concerns private companies that are experienced in policy transfer research. Policymakers ask consultants to conduct a comparative research and to advice on the implementation of the policy in the new context. Also, the involvement of consultants in the policy transfer process might lead to biased outcomes, as policy advice differs per consultancy party and policymakers can decide which consultancy party to involve.

2.2.5 Implementation and evaluation

After a thorough research on the contextual factors of both systems and on how to bridge these differences, the implementation phase starts. The implementation of a transferred policy is underexposed in literature. The previously described steps of the process of policy transfer are obviously the most interesting for policy transfer researchers, as those steps do significantly differ from other forms of policymaking. Once the previously described steps are carried out properly, the implementation phase is relatable to the implementation of regular policies. Therefore, this study will not elaborate on the implementation either.

For the evaluation, the prior motivations of policymakers are important (Dolowitz & Marsh, 2000), as not all lessons learned from other contexts have to result in new policies. Authors state that it is hard to say if policy transfer often leads to an improvement of the situation, as there is a scientific gap in the evaluation of the success or failure of policy transfers (Marsden & Stead, 2011; Dobbin et al., 2007). According to Stone (2012), failed policy transfers are often not well documented, which makes it hard to evaluate what went wrong in those cases. The literature does not provide methods for how to conduct an evaluation of policy transfers, but the previous arguments do demonstrate the relevance of evaluation.

2.2.6 Actors involved

In general, many different actors or parties can be involved in policy transfer. Dolowitz & Marsh (2000) distinguish between nine types of actors that can be involved, namely: elected officials, political parties, bureaucrats or civil servants, pressure groups, policy entrepreneurs or experts, supra-national institutions, consultants, think tanks, and transnational corporations. Marsden & Stead (2011) found that local officials play the largest role in policy transfers between local governments in the transport sector. Nonetheless, different actors can be involved in different phases of a policy transfer. Marsden et al. (2009) confirm that local officials are the most important actors in policy transfers within the transport sector, although they did find that consultants and private suppliers have often been involved in the research phase because of their experience with policy transfers. Supra-national organizations can also be involved in voluntary transfers. Timms (2011) noted in his research on urban transport policy transfers between European cities that the European Union played a central role in those by funding the transfers and bringing actors from different cities together.

2.3 Benefits of policy transfer

Policy transfer offers several benefits for policymakers. First, and most obvious, policy transfer contributes to more evidence-based policymaking by offering policymakers the chance to adopt successful policies from elsewhere instead of ‘reinventing the wheel’ on their own (Timms, 2011). Cities in the industrialized world face similar challenges (Bray et al., 2011), so it would be beneficial for cities to learn from best practices that address those challenges (Timms, 2011). According to Marsden & Stead (2011, p. 499), there is a common belief in Europe and the United States that “policy solutions already exist and simply need to be implemented more widely”. Policy transfer allows policymakers to learn from those solutions and implement them in other contexts, as cities do not always have the in-house expertise to tackle problems on their own (Marsden & Stead, 2011).

Second, and related to the previous point, policy transfer leads to more efficient policymaking from the recipient’s perspective. Learning from elsewhere is often seen by policymakers as a quick, cheap, and simple means to improve policies (Marsden & Stead, 2011; Dolowitz & Marsh, 2000). This indicates that solutions from elsewhere can be copied easily into another context, which is not always the case. Nevertheless, by engaging in a policy transfer, newcomer costs can be avoided, resulting in cheaper and more time-efficient policymaking (Stead et al., 2008).

Third, policy transfer can be used as a means to stimulate innovation. As explained previously, policy transfer generates innovation when elements from different policies from elsewhere are combined into a new policy (Rose, 1991). Also, more general, fresh ideas from elsewhere about the means to address a problem can lead to innovation (Rose, 1991).

Fourth, in practice, policy transfer is seen as a means to legitimize political actions (Marsden et al., 2009). Marsden & Stead (2011) found that within the field of transport, one of the main reasons of policymakers to engage in policy transfer was to legitimize policy goals set by the local government. By adopting a policy similar to elsewhere, policymakers avoid the responsibility to defend the approach (Bray et al., 2011). Related to this, referring to a best practice elsewhere is helpful in generating support (De Jong & Geerlings, 2005). This can be of value especially in times of elections.

Fifth, a reason for local transport policymakers in Europe to carry out a policy transfer is the increasing amount of European Union funds that is dedicated for this purpose (Timms, 2011). Policy transfers motivated by European Union funds lie in between voluntary and indirect coercive forms of policy transfer since policymakers are not obliged to participate in a policy transfer, but they get influenced by getting a reward if they do participate. There are also other (supra-)national organizations that offer funds for policy transfers, because for instance

national organizations have a stake in ensuring that policies in different cities are more or less on a same level (Stead et al., 2008).

2.4 Barriers in the process

Next to the benefits, there are several barriers that influence the process of policy transfer. In practice, policymakers will not face all of the below mentioned barriers in every policy transfer process. In fact, some barriers can even influence policymakers' choices within the process unnoticed. The manner of dealing with the barriers that policymakers face will define the result of the policy transfer. In some cases, a barrier can even lead to a termination of the policy transfer process. The barriers are divided into two types: barriers experienced in the searching phase and barriers experienced in the transferring phase. To clarify, the searching phase contains the first three steps of the policy transfer process: the dissatisfaction with the status quo, the search for satisfaction, and defining what to transfer. The transferring phase contains the last two steps in the transferring process, namely the comparative research, and the implementation and evaluation. Both types of barriers are discussed below.

2.4.1 Barriers in searching phase

There are several barriers that can bother the searching phase of policy transfer. Firstly, the barrier of bounded rationality can determine the search area. As described previously, policymakers lack the cognitive capability to make rational choices, and therefore, they tend to search for solutions at familiar cities in the searching process (e.g. Marsden & Stead, 2011). On top of that, policymakers tend to steer the process towards preferred outcomes (Marsden et al., 2012).

Secondly, the searching process is dependent on the amount and quality of available information. With the rise of the Internet, the 'world of information' became more complex (Timms, 2011). Multiple authors concluded from their case studies that the overload of available information is problematic in the search for a suitable solution elsewhere (Monios, 2017; Marsden et al., 2009). Besides, the quality and reliability of the information is hard to verify (Monios, 2017). As a result of that, and related to the biased view of policymakers, the search for information is often unsystematic and ad hoc (Marsden et al., 2009). Also, in most cases, only best practices are documented, while fails of policy implementation are not available (Stone, 2012).

Thirdly, and related to the previous argument, language issues can form a barrier in policy transfer (Timms, 2011). This barrier can particularly obstruct the process of international policy transfers. Besides, Marsden et al. (2009) found that policy literature is often not focused on policymakers, as it is too extensive and technical.

Fourthly, the search process is constrained by time and financial resources of city governments and the policymakers themselves (Marsden et al., 2009; Dolowitz & Marsh, 1996). The size of the city government does often determine the time and financial resources, where bigger governments have more possibilities than smaller ones (Marsden et al., 2009). Related to this, the amount of available funding can constrain the financial resources of a government (Marsden et al., 2009).

Fifthly, in the search for suitable policies to adopt, policymakers can disagree in what is desirable (Rose, 1991). This will lead to uncertainty about the preferences of the city government and can obstruct the policy transfer.

2.4.2 Barriers in the transferring phase

Next to the searching phase, there are several barriers with regard to the transferring phase. Firstly, the complexity of a policy determines the transferability (Dolowitz & Marsh, 1996; Marsden & Stead, 2011). Factors that indicate the complexity of a policy are 1) the amount of goals of a policy, 2) the complexity of the problem, 3) the directness of the relationship between the problem and the 'solution', 4) the amount of side effects of a policy, 5) the access to information about a policy, and 6) the predictiveness of outcomes of a policy (Dolowitz & Marsh, 1996).

Secondly, the lack of a political continuity can make a policy transfer fail (Stead et al., 2012). There can arise a gap between (transferred) policies and the implementation or institutionalization of those policies (Stead et al., 2008). Changes in political values, as a result of elections, can obstruct the political continuity with regard to policy transfers.

Thirdly, the context of both the donor country and the recipient country has to be taken into account, because as Peck (2011, p.3) argues: "context matters, in the sense that policy regimes and landscapes are more than empty spaces across which borrowing and learning takes place". As described in section 2.2.5, neglecting the contextual factors on the donor's and recipient's side can make a policy transfer fail (Benson & Jordan, 2011). Especially for transfers between similar countries, this barrier is often underestimated (De Jong, 2004). The context of a country, region or city is dependent of the formal and informal institutions. As explained, informal institutions are often neglected in the policy transfer process, resulting in a barrier in the implementation of a policy (De Jong, 2004).

Fourthly, public resistance can constrain the transfer process (Marsden et al., 2009). Often it is especially the fear for public resistance that can obstruct the policy implementation. One reason for this can be the scale of the policy that is being transferred (Stead et al., 2012). A large-scale institutional reform is not likely to receive much public support. Instead, smaller policy goals seem more accepted.

2.5 Conceptual model

In order to determine the relationships between all the above described aspects related to policy transfer, a conceptual model is created and presented in Figure 2.1. The model represents only a schematic, simplified view of the process in practice, as the process is rather messy and iterative. In blue, the different (combined) steps of the process of policy transfer are distinguished. As explained earlier, a voluntary policy transfer normally starts with a dissatisfaction with the status quo, meaning that a policy in a certain context (in this case, context A) is no longer sufficient for dealing with the issues within that context. If this is the case, and if there is no in-house expertise for dealing with this issue, policymakers can first decide to look at the past of the organization. If the organization has no experience with the problem at stake, policymakers can either start speculating, or search across space for solutions in other contexts. However, the former option is often seen as an ungrounded method.

Policymakers will start to search across space when the benefits of transferring a policy (presented as the green arrow) do outweigh the benefits of other policymaking approaches (i.e. with in-house expertise or speculating). Policy transfer is beneficial as it is evidence-based, efficient, innovative, it can be used as legitimization, and there is an increasing amount of funds dedicated to policy transfer.

The next step would be to search for suitable policies in other contexts. As policymakers are rationally bounded, they will look for policies at city governments with a similar language, culture, economic situation, and institutional setting. Also, policymakers need to define *what* it is that has to be transferred and the *degree* of transfer. In this part of the process, barriers with regard to the searching of policies play a role. The bounded rationality of policymakers, the overload of information, language issues, financial and time constraints, and a disagreement about the suitability of policies can influence or even obstruct the policy transfer process. The manner of dealing with the faced barriers defines the result of the searching phase. For instance, neglecting a barrier can lead to a suboptimal result. In some cases, the policy transfer process can even be terminated by a barrier. On top of that, some barriers can influence the searching phase unnoticed, as policymakers might not be aware of those barriers.

Depending on the outcomes of the searching phase, policymakers will move over to the comparing phase. Here, policymakers will compare the preferred 'best practice' (Policy X) in the other context (context B), determined from the searching phase, with what the policy would look like in their own context. Within this step, the differences in contexts and institutional settings of both governments will be compared. Based on this, all the steps required for the transferring itself will be determined. Afterwards, policymakers will move over to the transferring & evaluating phase, which means that the policy can be transferred from context

B to context A. The implementation process is similar to the implementation of ‘regular’ policies. Evaluation is an important step that requires attention after the implementation of a policy. Barriers with regard to transferring determine the success or failure of a policy transfer. Barriers such as the complexity of a policy, the lack of political continuity, contextual differences, and public resistance are of major importance in these phases of the process.

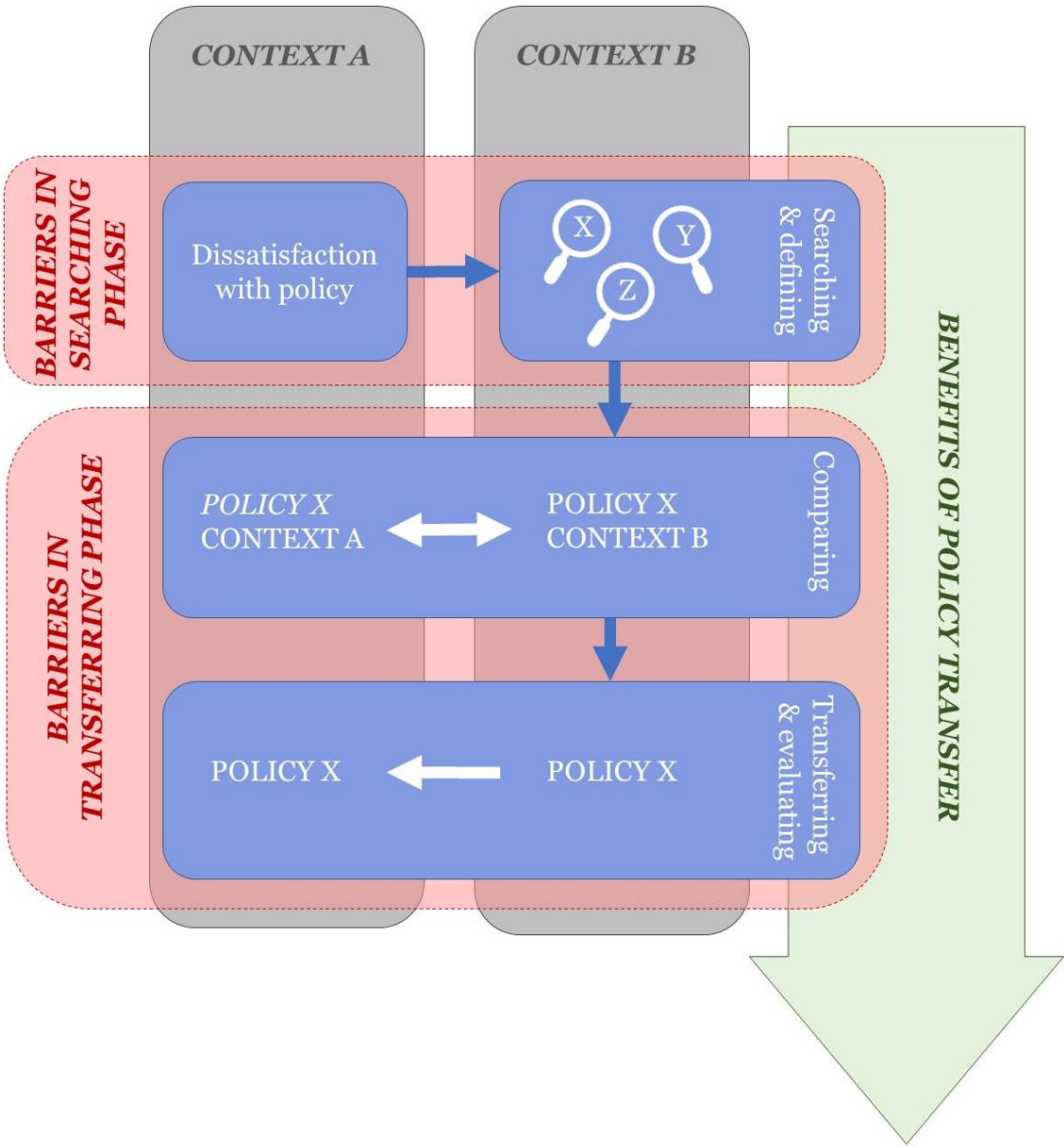


Figure 2.1 | Conceptual model

3. Methodology

This chapter elaborates upon the research methods used in this study. Furthermore, this chapter discusses the data collection and data analysis processes of this research. Lastly, the ethical considerations of this study are discussed.

3.1 Research methods

This research is of explorative nature since it aims to acquire an understanding of the role of policy transfer in the context of cycling policies, a combination that has been studied rarely. A *qualitative* approach suits this aim because of its focus on the reconstruction of the complexity of a phenomenon into a comprehensive picture (Flick, 2015). This allows to get a deeper understanding of a relation in a not well-established context of research. As demonstrated in the theoretical framework, researchers emphasize the complex and irrational nature of policy transfer. Therefore, a qualitative research method seems adequate. Clifford et al. (2010) do indeed argue that qualitative research offers the possibility to explore subjective, messy, irrational, and contradictory processes driven by human behaviour. A disadvantage of a qualitative approach is that the results of this research are generalizable to a minimal extent, as the outcomes are context-specific (Flick, 2015). A quantitative approach that does offer a broader generalizability has been considered but seems less appropriate as it does not leave space for subjective narratives (Clifford et al., 2010). Moreover, earlier quantitative studies on policy transfer have been criticized for not considering the multiplicity of the policy transfer process and only focusing on the general patterns instead (Stone, 2012).

In order to understand the role that policy transfer plays in cycling policies in practice, a *case study* is conducted. According to Simons (2009, p.21), a case study is “an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, policy, institution, program or system in a ‘real life’ context”. The iterative and irrational processes of a policy transfer ask for a case study as research approach. Moreover, a case study offers the possibility to study the politically and culturally dependent nature of policy transfer in a specific context. This helps to create an in-depth knowledge of the phenomenon in that specific context. A case study – as a strategy within the qualitative research spectrum – provides context-specific results that are not directly generalizable (Flick, 2015). However, as Flyvbjerg (2006, p.227) explains, “that knowledge cannot be generalized does not mean that it cannot enter into the collective process of knowledge accumulation in a given field or in a society”. An additional perspective on the complex process of policy transfer will only contribute to a more comprehensive picture of policy transfer processes, leading to a better understanding of it.

Moreover, Flyvbjerg (2006) stresses that the case selection determines the generalizability of the outcomes.

Several underlying reasons made the city state of Berlin an appropriate case for this research. First, as a requirement, the case (seen as a city government) should have pronounced ambitions to improve cycling policies. Otherwise, a city would have no reasons to learn from other cities with regard to cycling. As discussed in the previous chapter, the city state of Berlin has clear ambitions for the coming years with regard to cycling (Senate for Urban Development and the Environment, 2013). Moreover, learning from best practices in other cities is even mentioned several times as a strategy for improving cycling policies in Berlin. Second, Berlin can be seen as an extreme case, as the degree of involvement of civil initiatives in bicycle policymaking is seen as unique (Von Schneidemesser & Stasiak, 2019). Flyvbjerg (2006) defines an extreme case as an unusual example that is rich in information because of the unique combination of actors and mechanisms that are activated. Indeed, the co-creating nature of bicycle policymaking between the senate, the districts, and civil initiatives (Von Schneidemesser & Stasiak, 2019), especially in relation to the size of the city, makes Berlin an unusual and interesting case to study. Third, from a pragmatical perspective, the sufficient amount of policy documents available in English does contribute to a thorough analysis.

3.2 Data collection

For the data collection, the research strategy provided in Figure 3.1 is used. Primary data is gathered through interviews. Prior to that, a literature review is conducted in order to obtain a greater knowledge about the concept policy transfer, and the benefits and barriers offered by literature. Furthermore, specific information about the cycling policies in Berlin is gathered through a policy analysis. The literature review and the policy analysis are related to each other as the case defines the scope for the literature review (i.e. the focus on city governments and the focus on cycling) *and* the results of the literature review are applied to the policy analysis (i.e. by applying the policy transfer framework to the context of cycling in Berlin). Both the literature review and the policy analysis served as an input for the interviews, the former one as the structure for the questions and the latter one as contextual background information. The output of the interviews does refer back to the policy analysis to some extent, as the interviews did provide new useful documents or other information sources for the policy analysis. The interviews are the direct input for the results of this research, defined by the policy context and tested against the literature framework.

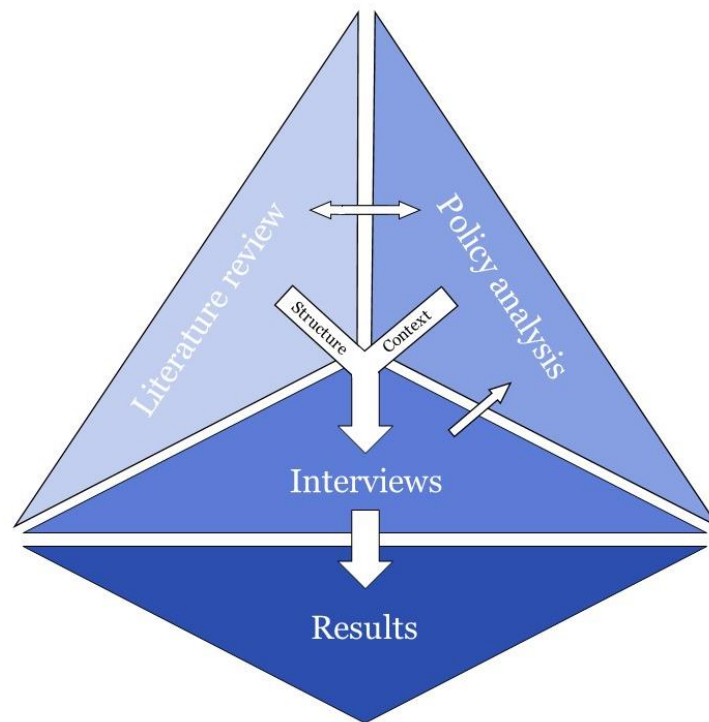


Figure 3.1 | Research strategy

3.2.1 Literature review

For the theoretical framework, scientific literature has been reviewed and discussed. The review process was structured by first determining relevant concepts and relevant steps in the policy transfer process, clarified in Appendix II. Next, relevant articles were selected and roughly divided into two groups: first, ‘general’ articles about policy transfer, and second, articles discussing policy transfer within the transport or spatial planning sector. For the general literature about policy transfer, the article of Dolowitz & Marsh (1996) played a key role, albeit on a negative or a positive note. This article and following articles were mainly useful for defining policy transfer and related concepts and for understanding the policy transfer process. Nonetheless, since most of those articles were written from a political science and international relations perspective, they did not offer any specific information about how the policy transfer process within the transport sector would look like. Articles specified on transport or spatial planning consisted mostly of case studies. This group of articles was mainly useful for getting a more specified image of the policy transfer process within the transport sector and identifying the benefits and barriers. All articles were coded based on the codes provided in Appendix II.

3.2.2 Policy analysis

A policy analysis has been conducted in order to gain more insight into the political context of Berlin and the developments with regard to cycling policies. This is especially useful as

background information for the interviews. The policy analysis consisted of two components. First, information about the political situation in Berlin was gathered. For this component, most information was gathered through official governmental websites like www.berlin.de. Also, some scientific articles were useful as they gave a clear explanation of the political context of Berlin (sometimes compared with other cities). Furthermore, websites of civil initiatives or independent organizations were consulted to gain insight into their role within Berlin politics. Second, policies and strategies with regard to cycling were analysed. This analysis was mainly focused on three documents, as those were the only relevant document that were found. Table 3.1 provides an overview of the documents with a short description.

<i>Name</i>	<i>Year</i>	<i>Description</i>
<i>New Cycling Strategy for Berlin</i>	2013	The in 2013 established cycling strategy of Berlin. In the document, the goals for the coming years and the means to reach those goals are presented.
<i>Mobility in the City: Berlin Traffic in Figures</i>	2017	A document in which Berlin’s transport system between 2013 and 2016 is analysed. One chapter is dedicated to cycling.
<i>Berliner Mobilitätsgesetz</i>	2018	In the Mobility Act, the senate department for the Environment, Transport and Climate Change defined a legal framework for the transport transition. The act has particularly specified the role of the bicycle (which has not been done in the whole of Germany before). The act describes several Berlin-wide measures to focus on the coming years. The implementation of those measures is currently in a starting phase and has to be finished by 2030.

Table 3.1 | Documents used for the policy analysis

3.3.3 Interviews

Semi-structured interviews have been conducted as a manner of primary data gathering. This form of interviewing allows the researcher to have conversations with people, but in a self-conscious and partially structured manner (Longhurst, 2010). This way, the scope of the research stays covered (Flick, 2015). On the other hand, this type of interviewing allows participants to add subjects important to them, that have not been considered by the researcher (Flick, 2015). Moreover, it allows participants to respond freely and extensively and to feel comfortable because of the informal nature (Longhurst, 2010).

For conducting the interviews, a face-to-face method is most appropriate as the researcher is able to observe non-verbal communication and to clarify ambiguities and necessary points in detail (Khan, 2014). Unfortunately, the data collection period did overlap with the outbreak of

the coronavirus in Europe (from March 2020 onwards). As the researcher got urgently advised not to organize face-to-face meetings, in line with national measures¹, the alternative was to conduct interviews through video calling. Advantages of interviewing through video calling are that interviewees can be more flexible in making room in their schedule for an interview (i.e. interviewees are not restricted to working hours and there is no need to check the availability of a meeting room at the work location) and interviewees can participate in the interview from a comfortable environment as they are restricted to working from home as well (Longhurst, 2010). The implications of the coronavirus on the results of this study are discussed in the reflection of this research (section 7.7).

The interviews can be divided into two types: interviews of explorative nature and interviews with practitioners. The exploratory interviews are conducted to gain more knowledge on the cycling context of Berlin, as an alternative for the lack of personal experience of the researcher, as the planned stay in Berlin got cancelled due to the coronavirus. The interviews with practitioners serve as the main data collection components to answer the research question. Practitioners are those, who are or were involved in the development or implementation of cycling policies in Berlin. Table 3.2 provides an overview of the interviewees. From now on, interviewees will be referred to by the number provided in the left column of Table 3.2.

<i>Nr.</i>	<i>Organization</i>	<i>Function</i>	<i>Relevance</i>	<i>Date</i>
<i>E-1</i>	Technische Universität Berlin	Employee at the Chair of Integrated Transport Planning	Responsible for cycling related research, mostly focused on Berlin.	16-04-2020
<i>E-2</i>	Dutch Embassy in Berlin	Mobility and Environment Advisor	Responsible for among others the knowledge exchange of mobility related issues between the Netherlands and Germany.	22-04-2020
<i>E-3</i>	ADFC	Employee of the Berlin department	Responsible for the communication of the Berlin department, cycling events and demonstrations.	23-04-2020
<i>P-1</i>	Changing Cities/Volksentsch eid Fahrrad	Board member of Changing Cities, the organization behind	Involved in Changing Cities since the bicycle referendum, involved in the negotiations of	01-05-2020 &

¹ For information about the Dutch measures to control the coronavirus, see <https://www.government.nl/latest/news/2020/03/23/stricter-measures-to-control-coronavirus>.

		Volkstsentscheid Fahrrad	the Mobility Act and involved in policy transfers.	03-06- 2020 ²
<i>P-2</i>	Senate Department for the Environment, Transport and Climate Change	Employee at the coordination office for cycling	Responsible for the administrative organizational level – in order to make the administrative process of implementing a cycling strategy faster.	12-05- 2020
<i>P-3</i>	Senate Department for the Environment, Transport and Climate Change	Former state secretary of the senate department (2016-2018).	Involved in the negotiations of the Mobility Act. Worked at both the state and the district level.	18-05- 2020
<i>P-4</i>	Senate Department for the Environment, Transport and Climate Change	Former head of the transport division at the senate department (2014- 2017).	Responsible for transport strategies; involved in international city networks.	04-06- 2020
<i>P-5</i>	ADFC	Scientific researcher for transport planning	Involved in a project on identifying best practices in cities and researching how it would fit in the German context.	09-06- 2020

Table 3.2 | Overview of interviewees

The coding scheme used for the literature review served as a base for the interview guides. Besides, questions about the cycling context in Berlin are included. Two interview guides have been used: one for the exploratory interviews and one for the interviews with practitioners. The two interview guides are provided in Appendix III.

3.3 Data analysis

In order to analyse the interview data, all interviews were recorded. This allows the researcher to focus on the questions and the conversation during the interview. Besides, it made it possible to transcribe the gathered data (Longhorst, 2010). The transcriptions provide insights into the general message of every interview. For the analysis of the data, the software program Atlas.TI was used, where the transcriptions serve as the raw data input. Next, the transcriptions of every

² A second interview was planned with this interviewee to gain additional information on his involvement in policy transfer.

interview were coded. By coding the data, categories and patterns can be identified and new connections between different subjects can be made (Cope, 2010).

For this research, a predefined set of codes is used. Beforehand, concepts from the theoretical framework were used to structure this coding scheme. These codes relate to the interview questions, which are structured according to the theoretical framework. Nonetheless, where needed, codes were added or refined during the coding process. Using a predefined structure but allowing for some flexibility contributes to a coding scheme that fits the data best, so the data can be analysed more precisely (Cope, 2010). Appendix IV provides the codes used in this research.

3.4 Ethical considerations

Especially for researches using forms of primary data collection, research ethics should be considered. Participants should be treated with respect, not only during the interview, but also before and afterwards (Hay, 2010). Participation in a research should be on a voluntary basis and participants should be well-informed about the purpose of the interview (Flick, 2015). Accordingly, participants of this research were provided with an informed consent form. This form covers the aim of the research, anonymity and data protection issues and a request for recording the interview. In addition, all participants were informed beforehand about the outline of the interview.

Treating participants respectfully during the interview was pursued by giving participants the ability to speak freely. Also, it is important to show interest by letting participants introduce themselves and letting them talk about their organization and projects they work on. Besides, respect was shown by sticking to the time restrictions, if applicable.

After the interview, the participants were given the possibility to check the transcripts of their own interview, in order to check if everything had been understood correctly by the interviewer. Also, the final version of this research will be shared with the participants in order to stimulate knowledge sharing.

A remaining ethical principle is that researchers should strive for integrity and objectivity, and avoid being biased (Flick, 2015). The research deals with this by combining different methods of data collection. Moreover, by interviewing practitioners with different backgrounds, different perspectives on policy transfer are incorporated, resulting in a comprehensive view on the research topic. Furthermore, as the orientation on the context of the case is provided by experts (by conducting orientational interviews) and policy documents instead of personal experience, there is little room left for self-interpretation. Lastly, the results of this research are not biased by specific interests as the research is not written on behalf of an organization.

4. The Berlin context

In this chapter, the political context of the city state of Berlin is explained, followed by the developments regarding cycling policies. This chapter addresses the first secondary question, which is: ‘*What does the context of cycling policies in Berlin look like?*’.

4.1 The political context

In Germany, power is divided between the federal government and the states (or *Länder*; Silvestrini et al., 2010). Berlin is one of three city states in Germany, among the 16 states in total. Hence, Berlin is both a German state and a municipality, which means that one government is responsible for state-level policies as well as local policies (Rode, 2019). To redistribute some of the tasks of the city state government, the 12 districts of Berlin have responsibilities on a local level. Nevertheless, the district administrations always have to act on behalf of the city state of Berlin (Rode, 2019).

A total of ten senate departments contain the executive power of the city state of Berlin. The senate department for Urban Development and the Environment used to be the responsible senate for transport matters (Silvestrini et al, 2010). After the senate elections of 2016, that senate department was divided into the senate department for Urban Development and Housing, and the senate department for the Environment, Transport and Climate Protection, the latter one being responsible for transport policies (Senate Department for the Environment, Transport and Climate Protection, 2020).

While local planning, the delivery of services and the implementation of local policies are the main responsibilities of Berlin’s districts, the city state is responsible for policymaking and planning on a state level (Rode, 2019). For cycling this means that the senate department for the Environment, Transport and Climate Protection is responsible for policymaking, coordinating, and the funding of cycling projects, while the districts are responsible for the planning and implementation of measures on a local level (P-1). Besides, the senate department is responsible for the traffic flow on the main road network, while the condition of the main streets and both the traffic flow and the condition of the secondary streets belongs to the districts (P-2). The districts are always the one carrying out building projects on streets (P-1). Every district has to have one designated person responsible for the coordination of cycling measures, and at least two employees that are fulltime working on cycling issues. This division in responsibilities is explicitly included in Berlin’s new Mobility Act (Senate Department for the Environment, Transport and Climate Protection, 2018). Although this requirement would in theory lead to an equally divided prioritization of bicycle planning per district, it turns out that in practice the prioritization of bicycle planning really diverges per district. For instance,

districts such as Mitte, Friedrichshain-Kreuzberg, and Neukölln are more progressive in the development of cycling infrastructure than other districts (E-1; P-3). According to interviewee P-1, it really depends on the location, the socio-economic characteristics, and the population of a district how people in a district perceive mobility. For example, “*people that live in a central district might have less needs to travel greater distances than people that live in other districts*” (P-1). The needs of the people are reflected in the prioritization of the district government.

Interviewee P-3 adds to this that there are even more (state-owned) companies responsible for infrastructural matters: “*All the pipes are managed by different companies, for example, water, electricity, gas etc. The lighting and traffic lights are managed by another company. And then there’s BVG (Berliner Verkehrsbetriebe; Berlin’s public transport company) who are responsible for bus lanes and transport stations entrances. There are among 10 responsible parties. That is why implementation can take so long in Berlin: because all of those parties are responsible for infrastructure that is located on or under surface. That has to be aligned with each other. You cannot just build a cycle lane when there is a water pipe underneath. This means that you basically have to rebuild the whole city in order to build a bicycle infrastructure network*” (P-3).

4.2 Cycling in Berlin

As Lanzendorf & Busch-Geertsema (2014) state, cycling policies in Germany used to be limited to medium size university cities with a compact city structure, like Münster, Erlangen, or Freiburg. The last 20 years, cycling policies gained relevance in bigger German cities as well, as environmental issues became more pressing (Pucher & Buehler, 2007). For Berlin, investments in cycling started in 2004, driven by the objective of the Berlin senate to increase the modal share of cycling from 10% in 2004 to 15% in 2010 (Lanzendorf & Busch-Geertsema, 2014). Before this, transport policies were car-centred (P-3). The cycling strategy that followed was an integral part of Berlin’s overall sustainable mobility plan (Senate Department for Urban Development and the Environment, 2013). Due to financial problems of the city state of Berlin at that time, cycling improvements were restricted to cheap solutions like dedicating car lanes to the bicycle (P-4). However, as almost all interviewees confirm, nothing really changed in the years following (E-1; E-3; P-1; P-3).

The bad cycling conditions initiated a movement among citizens in Berlin. A group of proactive citizens united themselves around the end of 2015 and published a bill based on ten demands for better cycling conditions (see Box 4.1; Von Schneidemesser & Stasiak, 2019). The initiative aimed not only to improve the situation for cyclists, but also to make cycling attractive for people using other modalities. Under the name *Volksentscheid Fahrrad* (cycling referendum), the initiative used the instrument of direct democracy by completing the steps toward a referendum (P-1). In three and a half weeks, they collected 100.000 signatures, five times more than required (E-3). This demonstrated the relevance of the topic; it were not only engaged cyclists that wanted to see a change: *“We saw that discussing this issue in public, and giving it a more prominent place in public discourse, people came to think about it more, and by actively thinking about it, they came to the conclusion that they agreed with all of this and support the bill. So sure, there was, and still is, an opposition that is against these changes, but the majority is for the content of the law”* (P-1).

1. 350 km of new cycle streets (where cyclists have the right of way).
2. 2 meter wide safe cycling infrastructure on every main road.
3. 75 dangerous intersections ‘neutralized’ per year.
4. Transparent and efficient infrastructure repair.
5. 200.000 bicycle parking spots at transit stations and streets.
6. 50 Green Waves for busses, cyclists, and pedestrians.
7. 100 km Bicycle highways for commuters.
8. Bicycle police units and Special unit for bicycle theft.
9. More Bicycle Infrastructure Planners in city/district administration and a central office for coordination of cycling.
10. Use public relations for accommodating a higher modal share of cycling.

Box 4.1 | The 10 Goals of the Volksentscheid Fahrrad (Von Schneidemesser & Stasiak, 2019)

The initiative was mainly driven by the unsafe cycling environment of Berlin (E-3). According to Von Schneidemesser & Stasiak (2019), the senate department only considered objective safety in building traffic infrastructure, while feelings of subjective safety were disregarded. If cycling would feel safer, more people would experience the benefits that cycling offers, for instance related to the climate, quality of life, and the financial aspect (P-1). Next to that, emerging discourses about the concept *Verkehrswende* engaged the civil society (E-1). The term *Verkehrswende* describes the mobility transition towards sustainable forms of mobility (Herberg et al., 2020). Comparable to the energy transition, *Verkehrswende* is a term that arose in a bottom-up tendency from the civil society, as transport-related issues such as pollution affect the wellbeing of every individual (Hochfeld et al., 2017). These national

discourses, together with both the transport problems that were experienced to a larger extent in a concentrated city such as Berlin, and the lack of political continuity regarding cycling investments in the last years, set the stage for a bottom-up movement through the *Volksentscheid Fahrrad*.

The cycling referendum took place in the same year as the parliamentary elections. These elections caused a political shift from a liberal-conservative to a left-wing and progressive spectrum (Berlin.de, 2016). While the focus of the parliament between 2011 and 2016 was mainly on recovering from the economic crisis, the new parliament (consisting of SPD, *Bündnis 90/Die Grünen*, and *Die Linke*) has a stronger focus on sustainability. That shift in focus led to the installation of the Senate Department for the Environment, Transport and Climate Change (Senate Department for the Environment, Transport and Climate Change, 2020). The newly formed coalition declared that it would accept the demands mentioned in the bill published by *Volksentscheid Fahrrad* and integrate it into a new mobility law (P-3).

Two years later, the senate department published a new Mobility Act, with a particular focus on sustainable forms of transport (Senate Department for the Environment, Transport and Climate Change, 2018). The Berlin Mobility Act is a result of a unique co-creative process between the Berlin senate and Changing Cities (the formal organization behind *Volksentscheid Fahrrad*), as well as ADFC (Allgemeiner Deutscher Fahrrad Club), and BUND (Bund für Umwelt und Naturschutz Deutschland) (P-3). The act consists of two main parts: one focused on public transport systems and the other focused on bicycle transport (Von Schneidmesser & Stasiak, 2019). The latter one was derived from the bill composed by *Volksentscheid Fahrrad*. The cycling strategies from 2004 onwards formed a basis for the Mobility Act (P-4). There is one important difference between the goals published by *Volksentscheid Fahrrad* and the bicycle goals on the Mobility Act. While the goals on the bill published by *Volksentscheid Fahrrad* contain concrete quantities attached to every goal, the quantities in the Mobility Act are absent in the most cases (Von Schneidmesser & Stasiak, 2019). The main goals of the bicycle part of the Mobility Act are provided in Box 4.2. The Berlin senate and the districts have time to implement the goals from the Mobility Act until 2030 (P-2).

1. There should be at least 100 km of high speed cycle connections, with a minimal length of 5 km per high speed cycle connection.
2. All main roads of Berlin should have a cycle lane separated from motorized traffic that is wide enough to overtake.
3. Next to the main roads, the cycle network should consist of cycle paths on secondary roads.

4. All one-way streets should be checked on the possibility to allow bicycle traffic in the opposite direction.
5. In the first three years after the entry into force of the Mobility Act, at least 30% of the most dangerous intersections have to be changed into safer intersections. The selection of the intersections is based on road accident statistics.
6. After each serious accident at an intersection, the body responsible for traffic safety should immediately check whether measures can be taken in the short, medium and long term to avoid further accidents.
7. The intersections on secondary streets have to be designed in such a way that all traffic participants can have a good visual contact and that speed limits are maintained.
8. The safety perception of cyclists at intersections should be researched every five years.
9. The state of the facilities of the Berlin cycle network have to be surveyed regularly.
10. Defects that endanger cyclists significantly have to be eliminated as soon as possible.
11. By 2025, there have to be set up 50.000 bicycle parking spaces at public transport stations and 50.000 bicycle parking spaces in public spaces, in particular near social or cultural institutions.
12. Train stations with an important regional function or other important public transport stations need to have bicycle parking garages and bicycle stations within five years after the entry into force of the law.
13. Bicycle parking facilities should be checked regularly to make sure that they can be used. Destroyed bicycles should be removed.
14. The local bicycle lanes should be under supervision of the local police of every district. The police should be focused on investigating the causes of accidents and violation and leading a dialogue about subjective safety of non-motorized traffic.
15. The senate department responsible for transport needs to have a coordination office for cycling.
16. Every district needs to have one person responsible for the coordination of cycling matters and two full-time employees working on the planning and implementation of district level measures.
17. The state of Berlin has to improve traffic safety across all transport modes through public relations and campaigns.

Box 4.2 | The main bicycle goals from the Mobility Act (Senate Department for the Environment, Transport and Climate Change, 2018)

Volksentscheid Fahrrad did manage to pressure the senate to set up an unprecedented co-creation process which led to a bicycle law embedded in the Mobility Act (P-1; P-6). Both the co-creation between the state government and civil society, and the development of a law focused on the bicycle has not happened before in Germany (Von Schneidemesser & Stasiak, 2019). A combination of the concentration of environmental problems and the deficient condition of bicycle facilities made Berlin the setting for a co-creative bicycle planning process. Ever since, the bottom-up involvement in cycling policies spilled over to many other German cities (E-1; E-3). By now, the Berlin case inspired civil society movements in approximately 30 other German cities to organize a bicycle referendum (Herberg et al., 2020).

5. Results

This chapter elaborates upon the results of the empirical data collection and analysis. The structure of the chapter is similar to the theoretical framework: first, the data on the policy transfer process is discussed, and afterwards, the chapter elaborates upon the experienced benefits and barriers. This chapter addresses the second, third, and fourth secondary questions, which are: *‘What does the policy transfer process look like for cycling policies in Berlin?’*, *‘What benefits of policy transfer do policymakers in Berlin experience?’*, and *‘What barriers do policymakers in Berlin face in the policy transfer process?’*. At the end of each section, the results presented in that section are critically discussed and compared with the findings from theory.

First of all, all interviewees confirm that policy transfer with regard to cycling policies does occur on a regular basis in Berlin. However, the type of policy transfer, the actors involved, and the outcome of policy transfer differ. Conferences were mostly useful for inspiration for and feedback on strategic goals and policies (P-3; P-4), while organizations such as Changing Cities and ADFC contributed in policy transfer by introducing specific concepts from elsewhere to the Berlin government, such as protected bike lanes or protected intersections (E-3; P-1; P-2). The different types of policies that are being transferred and the different actors involved are discussed more extensively in the sections below.

5.1 Policy transfer process

As the theoretical framework indicates, the policy transfer process can be divided into five steps. This section elaborates upon the results regarding the policy transfer process in Berlin per step. The last part of the section describes the actors involved in the process.

5.1.1 Dissatisfaction with status quo

According to theory, the policy transfer process starts with a dissatisfaction with the status quo, perceived by politicians or policymakers. This can be generated from either a perceived uncertainty, changes in the policy environment or changes in the political values. For the period from 2016 onwards, a major trigger of the dissatisfaction with the status quo of cycling were the parliamentary elections of 2016 (E-1). Through these elections, the parliament shifted from a liberal-conservative focus to a left-wing and progressive focus, and therewith, the political values shifted. The new parliament emphasizes environmental matters, and therefore, sustainable means of transportation such as cycling did become more relevant (E-1). As the share of cycling had increased and the former cycling strategies did not respond adequately on that increase, the new parliament felt a dissatisfaction (P-3).

On the other hand, changes in the society played a key role in the developing dissatisfaction perceived by politicians. As Chapter 4 explains extensively, proactive Berlin citizens united themselves into a movement, resulting in a referendum for cycling, in order to pressurize the local government (E-2). As this referendum was held in the same year as the above described elections, the elections were influenced by the societal movement (E-1).

The previously mentioned dissatisfaction is a general dissatisfaction that resulted in a series of policy transfers, with the overall goal to improve bicycle conditions. However, every single policy transfer, for example the transfer of a protected intersections concept, is generated by a more specific dissatisfaction, for example the dissatisfaction with the safety of cyclists at intersections (P-5).

The above described developments demonstrate a clear relation between the causes of dissatisfaction and the actual dissatisfaction, corresponding with the theory. The first step to undertake when a dissatisfaction is determined, is to look at the past of the city state itself. Although the city state of Berlin has taken major steps since its first cycling investments around 2004, the city state has no extensive history in developing and implementing cycling strategies. The cycling strategies developed in the early 2000s formed a good strategic basis for the Mobility Act of 2018, but as the financial resources have grown and the goals have become more ambitious, this base was not enough (P-4). In that case, it becomes attractive for policymakers to search for satisfaction *across space*, as defined by literature – or in other words, to search for policies at other cities.

5.1.2 Searching for satisfaction

The interviewees indicate that the search for ideas is often restricted to the Netherlands and Denmark – countries that are internationally known for their cycling culture (P-1; P-3). *“The role models are always Copenhagen and Amsterdam”* (P-3). The fact that there are countries that are known for their best practices makes bicycle policy transfers different from policy transfers in other fields. Within the transport sector, public transport policy transfers would already have a different diffusion pattern than bicycle policy transfers. Of course, some cities will have more developed public transport systems than others, but the differences are not as outstanding as with cycling. On top of that, countries such as the Netherlands and Denmark see their bicycle culture as an export product, so organizations there are eager to help cities with the development of bicycle strategies (E-2; P-3). Furthermore, the distance between cities as Copenhagen or Amsterdam and Berlin is a big advantage for Berlin, according to interviewee P-1: *“I think that the policy transfer is most effective, if you have examples close to home. So it would be more difficult, although there are some interesting examples certainly in, I don’t know, Taiwan or Chinese cities, in terms of sustainable mobility structure. But the context is so different. [...] That’s why we ended up using examples from the Netherlands and from*

Denmark a lot” (P-1). This interviewee does refer to the legal contextual differences. Interviewee P-3 adds to this that cultural differences and differences in planning systems play a role as well. Apart from this, it helps that colleagues from the Netherlands and Denmark often understand and speak German to some extent (P-5).

Next to that, some interviewees emphasize the importance of networks for finding policies (P-3; P-4). The senate department for the Environment, Transport and Climate Protection is engaged in two city networks: one specifically focused on sustainable mobility and transport in big cities and the other one focused on metropolitan cities in general (P-4). Both city networks are led by a board consisting of members from the different cities engaged in the networks. According to interviewee P-3, cities that are not connected to Berlin through one of the networks are harder to reach in terms of policy learning. A benefit of the involvement of Berlin in international city networks is that metropolitan cities involved in those networks are more comparable to Berlin in size than all other German cities (P-3). Of all German cities, Hamburg is most comparable to Berlin in size and political structure (P-2). Other than that, Berlin does only use German cities to search for specific small scale bicycle concepts, such as a bicycle parking house in Münster (P-3).

Both of the networks organize conferences on a regular basis. Interviewee P-4 describes the added value of those conferences for policy learning: *“Input is mostly coming from the cities, from experiences. It is not a public event, so we can talk very open, and also learn from our mistakes, not only present how great things we are doing. It’s about learning from each other.”* (P-4). As interviewee P-4 explains, using networks for policy transfer is mainly beneficial because of the safe environment where not only best practices, but also shortfalls can be shared.

Exceptional for Berlin is that (civil) organizations such as Changing Cities and ADFC are involved in the bicycle policymaking process since the success of the bicycle referendum. Those civil organizations even have a big role in the policy transfer process, and therewith, they bring innovation to the public administration: *“The civil society in general is way more connected internationally than the public administration is. The public administration is focused on very strict rules and laws. [...] The civil society doesn’t care about the question how to implement it on a legal way. [...] I think that civil society brings a lot of innovation into these discussions, and into public administration”* (P-2). According to interviewees P-1 and P-5, there are several criteria that Changing Cities and ADFC use that determine the search for policies elsewhere. The search area is firstly defined by distance. As described earlier, this has to do with the legal and cultural context that has to be similar to the German one, according to P-5. Next, the goals with regard to cycling in Berlin play a role in defining suitable cities to search (as perceived by the organization that is searching). As interviewee P-1 explains, the

goal of Changing Cities is to make cycling possible and accessible for as many people as possible that don't yet cycle regularly. That differs fundamentally with the goal to make cycling better for the people that already cycle, for example. As the strategies to reach the one goal differ from the strategies to reach the other, it is important to search for cities that were successful in realizing the same goal as you want to realize (P-5).

5.1.3 Defining what to transfer

The next step in the process is to define *what* to transfer and *to what degree* to transfer. Regarding *what* to transfer, the interviewees indicate that there are examples of both policy transfers on the strategic level as policy transfers of concrete concepts. Next to that, negative lessons are transferred in some cases. On a strategic level, Berlin underwent a shift in cycling paradigms several years ago (P-2). Before the referendum, the overall transport strategy was one of mixed traffic, with for example cars and bicycles using the same street space. Then, the senate shifted towards a paradigm of separated traffic, especially on main roads. This shift was strongly influenced by policies of cities in the Netherlands and Denmark (P-2). Besides that, Berlin used lessons from the development of the Alliance for Cycling Agreement of Hamburg in the development of its own Mobility Act in 2018 (P-3).

Next, Berlin has transferred concrete bicycle concepts developed in other cities. For example, since the shift in paradigms towards a more separated traffic system, Berlin has looked into protected bike lane designs, originating from Chicago and Seattle (P-2). Besides, Changing Cities is currently discussing Dutch designs of protected bicycle intersections with the senate (P-1).

Lastly, negative lessons are transferred as well. Transferring negative lessons means learning from other cities about what not to do. These types of transfer do obviously not result in an implementation. As noted earlier, transferring negative lessons happens particularly in safe environments such as conferences, or at least between cities engaged in the same network, as cities are not eager to promote their failures openly (P-4).

Regarding *to what degree* to transfer, theory distinguishes four levels: copying, emulation, hybridization, and inspiration. An analysis of the examples given by the interviewees does suggest that concrete designs are often more literally copied from other cities, while strategic policies of other cities are often used as a form of inspiration. This can be illustrated by, first, an example of a policy transfer of a concrete design: *"When it comes to design, these protected bike lanes that we are now building here, with the bollards and the coloured street, this is definitely an idea that popped up first in the US, I guess Chicago and Seattle. We were just copying it on the design level"* (P-2). Second, in the following example, the interviewee is talking about policy transfers on a strategic level: *"So what I already mentioned earlier, you*

have to look very closely, what are the learnings that fit into your own strategy. It's not just copy and paste, that doesn't work" (P-4). Theory states that the 'harder' forms of policy transfer, such as copying, are often restricted to coercive forms of policy transfer. However, this study found that for bicycle policy transfer, harder forms of policy transfer are used for concepts such as protected bike lanes, even though those transfers are voluntary.

5.1.4 Comparative research

As a method for comparative research, theory suggests prospective evaluation, explained as hypothesizing what a policy would look like in context A, based on the evidence of what it looks like in context B. In practice, it turns out that there is not one concrete method that is used. One problem is that there is a lack of data when it comes to cycling infrastructure in Berlin (P-2). To illustrate, there are only 20 points in the city where cycling data is collected, while there are over 300 points for the car (P-2). This makes it already difficult to visualize current cycling patterns on a macro level, let alone the effect of a new policy on the cycling patterns in a specific area. This is problematic, as a comparison based on numbers is a suitable method to calculate the expected effect of a policy, compared to the effect of a policy in another city (P-4).

To research to what extent a policy fits into the Berlin context, Changing Cities organizes workshops with the government (P-1). Here, they go through the policy and plan on how it will look in the Berlin context. In the end, it is the government's responsibility to reflect on how a new policy fits into the existing strategies. Therefore, according to interviewee P-4, it is important that the government researches this and requests information about the policy at the city government where the policy comes from. That city has additional views on how they implemented the policy. Interviewee P-4 states that such a critical reflection is sometimes missing in Berlin: *"What we're having in Berlin, the discussion is not much reflected. It should be more detailed, and more talking about the pros and cons. [...] I think that's happening not as much as it could"* (P-4). According to that interviewee, policymakers should do better research on how the policy is embedded in the legal and cultural context in the other city and how it would fit into the cycling strategies of Berlin.

Another suggestion to test the effect of a transferred policy is to implement it temporarily on a small scale as a pilot project (P-4). However, that's something that was hard to realize due to the Berlin legal framework and the time consuming processes related to that. Interviewee P-4 illustrates this with an example: *"I had invited Gehl Architects from Copenhagen in 2015 to Berlin to do some workshops. [...] We tried with some stakeholders to develop solutions for two different areas. It were really simple ideas, to start first with temporarily used parking space, to ask shop owners and other people if they are interested to use a parking space for six weeks in a different way. It took three and a half years to realize three or four of these parking spaces. That shows how difficult it is in Germany to implement ideas for temporarily*

use in public space. That was disappointing, also for me” (P-4). However, as interviewee P-5 mentions, the German traffic code has undergone a reform recently, and has now a clause included that makes small scale pilots of half a year possible. According to interviewee P-5, Germany still doesn’t have a trying out culture, but at least the legal framework is there now.

5.1.5 Implementation and evaluation

Interviewees confirm that the implementation of a transferred policy is essentially similar to the implementation of a ‘regular’ policy. However, in Berlin, the implementation of only a simple cycling measure is a time consuming process, due to the legal framework. *“We now need about 3 to 4 years to paint a lane on the street, because the decision circles and circles and the planning goes on and on and on. It makes it way more complex”* (P-2). This has partly to do with the structure of the German public administration system in general, and partly with the tension between the established status of the car and the upcoming role of the bicycle (E-2; P-3). The reform of the German traffic code brings opportunities for an accelerated procedure of implementing temporary small scale projects.

For the evaluation, the earlier mentioned problem regarding the lack of cycling data applies as well. Next to the cycling counting points, a big survey conducted every 4 or 5 years provides data on cycling (P-2). However, this data is only focused on general patterns on the macro level. *“So how can we implement different kinds of infrastructure and measure the success compared to [the city where the policy is from]? On a scientific level, we can’t. We are just missing the data”* (P-2).

5.1.6 Actors involved

Interviewee P-3 describes the following actors involved in bicycle policy transfer in Berlin: *“The senate department, the parliament, industry and trade organizations, ADFC, Changing Cities, Deutsche Städtetag, ADAC, and BVG”* (P-3). The involvement of the districts in policy transfer really differs per district and per person working on cycling matters at the district, according to interviewee P-3. If one of the districts is involved in policy transfer, it mostly comes to transferring concrete concepts instead of strategies.

According to some interviewees, consultancy firms are in some cases involved in order to conduct comparative research and advice on the implementation (P-5). However, divergent from theory, (civil) organizations such as Changing Cities and ADFC are closely involved in policy transfers as well (P-1; P-5). Civil organizations bring up ideas from elsewhere in the debate and organize meetings to discuss those ideas and work out plans eventually, taking over a part of the policy transfer process (P-1). Because of their focus on other cities that Berlin can learn from with regard to cycling, civil organizations partly serve as a replacement for the senate’s involvement in networks. Interviewee P-4 mentions that although the senate is still

formally involved in both networks, it seems to focus more on itself since the last elections, neglecting the exchange through the network. The tight cooperation between the government and the organizations and the pressure that those organizations put on the senate might be a reason for this change in focus. However, interviewee P-4 stresses the importance of those networks, because even if the civil organizations are useful in bringing up new ideas, it is the government's task to reflect on that. A city network is a useful platform for this, as metropole cities experience the same type of problems (P-4).

5.1.7 Discussing the policy transfer process

The policy transfer process was divided into five elements in the theoretical framework. Whereas this stepwise division does suggest that policymakers consciously run through the process step by step for every policy to be transferred, this is definitely not the case in practice. The division of the process in a framework of five steps made it possible to capture elements of the process mentioned by the interviewees and align that with the frame. However, interviewees did not see the process as a clear-cut series of steps. In fact, it turned out that policy transfer processes are iterative, overlapping, and influenced by many actors, and thus, complex. In the case of cycling in Berlin, different policy transfer processes can be carried out simultaneously. In some cases, concrete concepts are transferred and implemented, but in other cases, it is only visits that are planned or conferences that are attended, not directly leading to something. This research was mainly focused on the processes of (soon to be) transferred policies, as those are tangible processes that can be captured best. Interviewees did mention that learning from and exchanging information with other cities happens on a regular basis, but as discussed before, such soft forms of policy transfer are harder to research, as policymakers are not always aware of it.

An interesting finding of this research is that next to the traditional actors, as described by e.g. Dolowitz & Marsh (2000), civil society does engage in policy transfer as well, whether in an organized form or not. The involvement of (civil) organizations might be predominantly relevant for policy transfers on a local scale, as changes in the local environment concern the civil society most directly. It is hard to say to what extent other cities facilitate processes of co-creation to the same extent as Berlin does, but in Berlin the cooperation between the civil society and the government definitely stimulated the policy transfer process. Paradoxically, the collaboration of the government with a bottom-up movement did contribute to an internationally-oriented focus of Berlin. On the other hand, the focus of the senate of Berlin on those organizations had consequences for the relation of Berlin with its networks, according to interviewee P-4. A balance between using civil organizations for inspiration on innovative ideas from elsewhere and using the city network for reflecting these ideas and discussing differences in contexts seems adequate. Although the organization of civil needs is a process that has to

develop from a bottom-up tendency, the political spectrum can encourage this by leaving more space for co-creation processes.

5.2 Benefits of policy transfer

The interviewees experience several benefits of policy transfer. Corresponding with the theory, the first and foremost benefit of policy transfer that interviewees mention is the evidence-based nature of policy transfer. Interviewee P-1 explains it as follows: *“Some [improvements] are already practiced and used in other cities. So we can look at them how they are doing that, use their experience, not to reinvent the wheel again. The more good examples you have, the better your position is. [...] We have the opportunity to choose ‘yeah, well, this example is better’, and then put together policy demands or policy ideas based upon the best of practice”* (P-1). Interestingly, he finds that the more effective examples a city has to look up to, the better the position of the city is in terms of learning, instead of framing a city in the position of lagging behind. Furthermore, the evidence-based nature of policy transfer makes policy goals more realistic and achievable because there is evidence that it can be realized (P-1; P-3; P-5). Setting goals that other cities have successfully accomplished gives policymakers reasons to believe that it can be accomplished in Berlin as well.

Second, some interviewees mention benefits of policy transfer related to efficiency. Although efficiency itself was never mentioned as a benefit, interviewees indicate that not having to undergo the same mistakes as other cities is beneficial: *“I think it’s so valuable to learn from something that was already implemented. To learn from their mistakes. It will save you a lot of time and a lot of hassle. I see only benefits”* (P-5). Learning from other cities’ mistakes puts the recipient city in a better starting position.

Third, interviewees acknowledge the benefits that policy transfer has for transferring innovation. In theory, authors state that innovation is generated when parts of several policies from elsewhere lead to a new policy. Interestingly, interviewees explained benefits related to innovation as innovative ideas that are invented in other cities and that can be transferred to Berlin: *“One benefit of policy transfer is that it brings innovation. If you have never seen a bicycle parking house [referring to Münster], then it will probably take 50 years longer before people in Berlin will think of that as well”* (P-3). Interviewee P-2 adds to this that exchange of ideas is important because smaller cities often have innovative approaches. As noted earlier, the innovative role in Berlin is fulfilled by the civil society, as they are more connected to the international discussions (P-2). Innovation on a local scale happens when the ideas of civil organization, inspired by international discussions, are brought into the political debate.

Fourth, the legitimization of political actions is mentioned as another benefit of policy transfer. However, it has to be noted that this benefit is closely related to the benefit regarding the evidence-based nature (the first benefit in this section). The difference is that in the case of the first benefit, the *evidence* that a policy works is beneficial on its own. In this case, the evidence that a policy works is beneficial because it can be *used* as a political argument, as explained by interviewee P-2: “*Legitimization is a very important factor. We saw how cycling increased, in the example of London, in the moment that they had proper infrastructure. We don’t have to discuss it again, because we have the example of London. That’s a very strong argument*” (P-2).

Fifth, one of the interviewees notes that policy transfer helps him to broaden his view on transport planning. This is not a benefit of the actual *transferring* of a policy, but mostly of the *policy learning* that happens at conferences for instance. Interviewee P-4 explains how contact with other cities contributed to a broader perspective on the role of the bicycle in the transport system: “*What I’ve also learned, and I think where Berlin is maybe in some ways further than some other cities, is that transport policy is more than just concentrating on one transport mode. [...] Copenhagen has, compared to Berlin, public transport where still much has to be improved. You need an integrated view on transport, on all modes. This is also something of which you need to take care of, which measures are also contributing to a more multi-modal city like Berlin, compared to a city which is concentrated maybe only on public transport or only on cycling*” (P-4). Here, the comparison of the transport system of Berlin with the transport system of other cities helped the interviewee to get an understanding of the difference in cycling measures per city.

5.2.1 Discussing the benefits

While theory provides five benefits without a clear order in importance, this case study shows that the evidence-based nature of a policy is the main benefit that policymakers experience. Interestingly, policymakers in Berlin look mostly at Amsterdam and Copenhagen, which they see as the role models in the cycling field (P-3), while other cities might be more comparable to Berlin in size and in realization of bicycle policies. According to interviewee P-1, focusing on countries as the Netherlands and Denmark is useful for setting goals for cycling, because the evidence shows that it is possible to achieve those goals.

Although in theory the different benefits are distinguished clearly, in practice it turns out that benefits are more entangled. The evidence-based nature of policy transfer is mentioned as foremost benefit of policy transfer. However, this benefit is related to both the benefit concerning the efficiency and the benefit concerning the legitimization. Implementing transferred policies is efficient *because* it is evidence-based. Because of the experience another city has with a policy, the steps to implement a policy in Berlin and the mistakes that need to

be considered will be clearer. Furthermore, a policy from elsewhere can only be used as a means of legitimization *because* another city has experience with that policy. A remark that has not become clear from theory, but that is found out through empirical analysis, is that both the efficiency and the legitimization of transferred policies are explicable through the evidence-based nature of policy transfer. Moreover, it seems like the evidence-based nature of policy transfer is a benefit that plays a crucial role in the decision to engage in policy transfer (in contrast to other forms of policymaking), while both the advantages regarding the efficiency and the legitimization are rather secondary benefits.

Contrasting with theory, none of the interviewees indicated that funding played a direct role in policy transfers of bicycle policies. Although the federal funding that came available this year for cycling stimulates the improvement of bicycle conditions in Berlin (P-5), that funding is not specifically meant for policy transfer, and so, it does not play a role in the decision to participate in a policy transfer (in comparison to other forms of policymaking) or not.

5.3 Barriers in the process

Although policy transfer has many benefits, the interviewees mentioned several barriers that need to be considered in the policy transfer process. Similar to the theoretical framework, the barriers are divided into barriers that play a role in the searching phase and barriers that play a role in the transferring phase.

5.3.1 Barriers in searching phase

The analysis of the empirical data resulted in three barriers that influence the searching phase of policy transfer. To clarify, the searching phase contains the first three steps of the policy transfer process: the dissatisfaction with the status quo, the search for satisfaction, and defining what to transfer. The first barrier in the searching phase is the barrier of bounded rationality. While most barriers are noticed by policymakers themselves, this barrier is not, as it describes the limited rationality of policymakers themselves. This rationally bounded nature is visible in the evident focus of policymakers in Berlin on countries as the Netherlands and Denmark. Although this focus is explainable because of the internationally acknowledged bicycle culture of the Netherlands and Denmark, their policies do not necessarily have to fit the best within the Berlin bicycle strategy. Policies of other cities that are more comparable in size and are more on the same page in realizing cycling infrastructure might fit better in the Berlin context. While the senate seems to be predominantly influenced by the developments in the Netherlands and Denmark, both Changing Cities and ADFC seem to be more objective in the search for examples. Both organizations use clear criteria, described in section 5.1.2, to determine the search area (P-1; P-5).

Second, as interviewees mention, there is too much information online about cycling examples from all over the world (P-3). Related to this, ADFC found out that bicycle transport concepts, such as protected intersections, may be easy to find online, but that there is a lack of technical know-how on how to implement such a concept. *“For example, if I say, let’s build protected intersections, à la Dutch. Then, people will say, ok, let’s do it, but how? [...] The transfer is not only about the idea but about the technical know-how”* (P-5). So, on the one hand, interviewees state that there is an information overload on successful cycling policies and concepts, but on the other hand, that information does not provide specifications of how to implement it.

Third, time and financial resources define the searching process. While the city state of Berlin had huge problems concerning budget years ago, the financial situation got better in the last five years (P-4). However, the available time and money still plays a role in the process: *“We decide what would be the best situation [in defining what to transfer], considering things like space limitations, but also considering things like finances, how much money do we have and what do we want to dedicate to this”* (P-1). This barrier is not one that obstructs the process, but it rather demarcates the scope of the searching process.

5.3.2 Barriers in transferring phase

Interviewees noted four barriers that played a role in the transferring phase. The transferring phase contains the last two steps in the transferring process, namely the comparative research, and the implementation and evaluation. First, the *difference* in contexts between the donor city and Berlin forms a barrier. Here, it is not only the legal contexts that play a role, but also the cultural contexts and planning contexts. As noted earlier, it is important to consider those contextual differences. However, it turns out that policymakers find it hard to compare the Berlin context to a context that is legally, culturally, and planning-wise very different to the Berlin one (P-1; P-3). As a consequence, interviewees mention that Berlin is mostly focused on best practices in Europe, or in a few cases in North-America (P-1; P-2). However, as interviewee P-2 mentions, even in policy transfers within Germany, there are state-level structures that need to be considered. So, in every case of policy transfer, the difference in contexts forms a barrier and the manner of dealing with that barrier is very decisive for the outcome.

Second, the *specific* context of cycling policies in Berlin plays a role. Also in this case, the context does include legal, cultural, and planning aspects. Berlin has known a planning culture with a strong focus on the role of the car. The economic dependency of Germany on the car industry gives the car a powerful position in transport planning (E-2; P-3). According to interviewee P-2, it is difficult to designate space for cycling purposes: *“[The traffic code] is very strict when you want to reduce space for car traffic. You can’t just do that”* (P-2). On top of that, cycling brings extra difficulties because cycling policies are relatively new in Berlin.

Interviewee P-1 compares bicycle discussions to public transport discussions: *“If we say that we want to support public transport, then we want to have more public transport projects. There’s already a lot of knowledge on how to do that. Of course, it might be conflicting with each other, but I think that [the debate] will be on a higher level than the debate we have for separate cycling infrastructure”* (P-1). Because of this not fully established position of the bicycle, there are less legal possibilities to implement bicycle infrastructure than for other modalities.

Third, the fear for public resistance determines the willingness to implement a policy. This barrier is predominantly experienced by the district level, as that is the responsible level for implementation of transport policies (P-3). As interviewee P-5 states, people have a natural rejection to change, especially *“if you don’t have a culture of trying out new things, with people that are very conservative and see a lot of barriers”* (P-5). Public resistance is especially relevant for cycling, because on the one hand, of course people would like to see an improvement in the cycling infrastructure, but on the other hand, it is unlikely that people want to give up their own parking space for that (E-3). The implementation of bicycle infrastructure or facilities can lead to resistance among citizens.

Fourth, the fear for public resistance amongst politicians can lead to a lack of political will. As interviewee P-5 explains: *“Decisionmakers can be really sceptical because they think there will be a political price they have to pay”* (P-5). This barrier is not focused on participating in policy transfer in general, but rather on adopting new cycling policies in particular. Interviewee P-1 adds to this: *“A common argument is ‘Berlin is not Copenhagen’, or ‘Germany is not the Netherlands’. ‘We are a bigger country, or a bigger city, so it’s different here”* (P-1). Interestingly, policymakers use the barrier regarding the difference in contexts here as an argument for not engaging in policy transfer.

5.3.3 Discussing the barriers

The most important barriers that policymakers in Berlin experience for bicycle policy transfer are the barriers experienced in the transferring phase. First, it is important to take both the context of the donor city and the context of the recipient city into account, as underestimating contextual differences leads to a suboptimal outcome. Second, the Berlin context makes it extremely complicated to implement concepts that have not been implemented before. This has consequences for bicycle policy transfer, as bicycle policies are relatively new for Berlin and Germany in general, which means that transferred policies from foreign cities are almost per definition new, and therefore, hard to implement. Third, there is a tension between cycling and car use. While many people are in favour of the development of bicycle policies and infrastructure, they do not want it to have consequences for their own car privileges. As public resistance might lead to a loss of face for politicians, there is in some cases a lack of political

will to address cycling issues, and therefore also to engage in policy transfer. As demonstrated, most barriers are strongly entangled, with one barrier having consequences for the other, implicating the complex nature of this case.

The difference between the barrier regarding the difference in contexts (the first barrier of the transferring phase) and the barrier regarding the specific context of Berlin (the second barrier of the transferring phase) is that the former one is generalizable to policy transfers in general, while the latter one is applicable specifically for Berlin. Interestingly, the case-specific barriers play a crucial role in the policy transfer process for Berlin, while those type of barriers have not been mentioned by theory. A reason for this could be the fact that literature on policy transfer of transport policies is not yet well-established. It is hard to indicate the role that case-specific barriers play in policy transfer in general, but the fact that the context of this case is so crucial is in line with the recent notions on policy transfer to move beyond the paradigm of seeing policy transfer as a rather simplistic process in order to address the complexity of the contexts.

Several barriers gained from theory do not play a role in Berlin. For example, the language issue has not been mentioned by interviewees. This might have to do with the modern and progressive nature and the international focus of Berlin as a capital (P-5). Furthermore, the lack of political continuity does not play a role in this case as cycling in Berlin is undergoing an increasing importance since the first investments. Following theory, a lack of political continuity does only play a role if a change in political values would lead to a shift in focus from the bicycle to other transport modes.

6. Discussion

This chapter reflects on the concept of policy transfer and the extent to which the concept is suitable for transport policymaking. Apart from this, the chapter addresses the recent developments by discussing the implications of the corona crisis on bicycle planning in Berlin.

6.1 Reflection on policy transfer

A frequently mentioned critique on policy transfer is related to the vagueness of the term. To clarify, according to James & Lodge (2003), the broad definition of the term makes it impossible to measure an increase in its occurrence. Indeed, the more technology develops, the thinner the line becomes between policy transfer and other forms of policymaking. Rose (1991) declares that even inspiration is a form of policy transfer, but how can policymakers determine whether a policy is to some extent inspired by a policy from elsewhere or not? Aren't local governments in a globalizing world constantly exposed to developments in other cities? This broad academical definition of policy transfer affects the view of policymakers on policy transfer. The empirical data analysis showed that interviewees identified not only transferred policies and concepts from elsewhere as policy transfer, but also the exchange of ideas on conferences – not resulting in an actual transfer. However, it should not be the goal of academical research to demarcate the concept only to the hard forms of policy transfer. Instead, research should focus on exploring the softer, less visible forms of policy transfer and the implications that globalization and technological developments cause on that.

The policy transfer concept, originating from political and international relations studies, has only been introduced to transport planning in the last decade (Marsden & Stead, 2011). Reflecting on the relevance of the policy transfer concept in transport planning, it can be stated that policymakers in the field of transport planning find policy transfer a suitable form of policymaking. Although the case of Berlin showed that transport planning can be heavily influenced by path dependency and political preferences, transport planning is a discipline that is relevant in every city. Nowadays, many cities in the industrialized world have a similar goal to work towards a more sustainable future, where a mobility transition plays a crucial role. This similarity in goals triggers city governments to take a look at the strategies of other cities to reach those goals. Policy transfer offers a means for policymaking in the transport field to learn from other cities.

6.2 Implications of the corona crisis

As noted before, the data gathering of this research is conducted during the outbreak period of the corona virus. The rapid spread of this virus required governments of all over the world to

respond adequately in a short time frame. As citizens of European countries were strictly advised, if not obliged, to stay home as much as possible, travel patterns changed drastically, sometimes from one day to the other (Dickson, 2020). Car use decreased as employees in many sectors were asked to work from home, and the use of public transport decreased because of the risk of getting infected or infecting others. As most people restricted their travel behaviour to short trips to the supermarket, the relevance of the bicycle as transport mode increased in cities all over Europe. In Berlin, the increasing number of bicycle trips led to a rapid set up of kilometres of pop-up bike lanes. In several districts of the city, old bike lanes are painted to make them more visible or new ones are set up that meet the social distancing measures (Batke, 2020). As interviewee P-3 notes, it is mostly the bike lanes that were in the process to be developed in the near future that are popping up accelerated. It seems like Berlin used its adaptive capacity as a reaction on the crisis to speed up the bureaucratic and time consuming processes of implementation. It is now clear for politicians and the public administrations that an accelerated process of developing bicycle policies and infrastructure in Berlin is possible. Moreover, it shows citizens what living in a less car-focused and more bike-friendly city looks like, hopefully changing their perceptions on transport and the role that it has on the quality of the city. Hopefully, these new insights will result in both more political will to actively improve the bicycle conditions from the top-down perspective and less public resistance against dedicating car space to the bicycle from the bottom-up perspective.

On a more specific note, the developments with regard to the corona crisis also have an impact on *policy transfer* of bicycle policies. Not only Berlin, but all European cities, if not all cities worldwide, are struggling with how to react on the societal changes that the corona crisis led to. As all cities with the same size as Berlin are in the same process, experimenting and finding out how to adapt transport systems, they might as well learn from each other. In fact, the district Friedrichshain-Kreuzberg developed an implementation guide for pop-up bike lanes that is already used in other districts in Berlin and that is meant for other cities to use as well (E-3). Besides, one of the networks that Berlin is engaged in did organize an online conference to discuss the implications of the corona crisis on the mobility behaviour and transport systems of all the cities involved and to exchange strategies to respond to this (P-4). Hopefully, this global crisis will unite cities all over the world even more to make them more aware of the similarities in challenges that all cities face, in order to advance learning from each other's best practices and shortfalls.

7. Conclusion

In the first section of this chapter, the research is concluded. The first four sections answer all the secondary questions. Then, the fifth one answers the main research question. In the following section, policymakers are recommended on how to address the barriers. Then, the reflection of this research process is discussed. Lastly, recommendations for future research are given.

7.1 The Berlin cycling context

For a long time, transport policies in Berlin were car-centred. As part of the new sustainable mobility plan, the city state of Berlin started with structural investments in cycling in 2004. Due to problems concerning the finances of Berlin at that time, cycling improvements were restricted to cheap solutions such as dedicating car lanes to the bicycle. However, interviewees acknowledged that in fact nothing changed in the years following. The dissatisfaction with the cycling conditions initiated a movement among citizens. By the end of 2015, Volksentscheid Fahrrad (cycling referendum) was established, driven by the unsafe cycling environment of Berlin. The actual referendum took place in the same year as the parliamentary elections. The newly formed predominantly left-wing and progressively oriented coalition declared that it would accept the demands imposed by Volksentscheid Fahrrad. Two years later, the senate department published a new Mobility Act, in which a new bicycle law was embedded. Volksentscheid Fahrrad pressured the senate into an unprecedented co-creative process between the Berlin senate and the organizations Changing Cities, ADFC, and BUND. Both the co-creation between the state government and civil society, united through organizations, and the development of a law focused on the bicycle were new for Germany.

7.2 The policy transfer process

The policy transfer process is divided into five steps. Although interviewees did not mention these exact steps, the parts of the process they described fit into this framework. First, the trigger for policymakers to engage in policy transfer is a perceived dissatisfaction with the status quo. For the city of Berlin, this dissatisfaction was generated partly through a change in political values because of the elections of 2016, and partly through changes in the society.

Second, policymakers start searching for satisfaction. Policymakers in Berlin are often attracted to cities in the Netherlands and Denmark in this search for satisfaction. Not only because of the worldwide acknowledgment that those countries have with regard to cycling, but also because of the proximity of those countries to Berlin. Besides, conferences intended

for city networks are used to exchange information on policies. Cities involved in those networks are more comparable to Berlin in size. Furthermore, organizations such as Changing Cities and ADFC bring up examples for policy solutions in the debate. Those organizations define their search area for suitable policies by distance and by similarity in cycling goals.

The third step in the process is to define *what* to transfer and *to what degree*. When it comes to *what* to transfer, it really differs per case. It can be policies, strategies, concepts, designs, or even negative lessons. Comparing that to the *degree* of transfer, it turns out that concrete designs or concepts are more literally copied from other cities, with adjustments to make it fit into the legal framework, while for strategies or policies, ideas from other cities are often used for inspiration.

Fourth, policymakers compare the original context of the policy to the Berlin context, in order to make the policy transferrable. Changing Cities organizes workshops with the local government where the extent to which a policy will fit in the Berlin context is researched. However, this step could be more reflective. Discussing the context with city governments involved in the networks could add an extra dimension to this.

Fifth, the policy can be transferred and implemented. The implementation of a transferred policy is in essentially similar to the implementation of other policies. In Berlin, the implementation is a time consuming process, due to the bureaucratic nature of the legal framework. With a recent reform of the traffic code, implementing temporary pilots should be less time consuming. Evaluation of the implemented policy is hard due to a lack of bicycle data.

7.3 Benefits of policy transfer

Policymakers in Berlin experience five benefits of policy transfer. First, policy transfer is beneficial because of its evidence-based nature. This allows policymakers in Berlin to set achievable goals and to learn from the success of another city. Second, policy transfer is seen as more efficient than other forms of policymaking. Policymakers can save time and have a better starting position by learning from other cities' mistakes. Third, policy transfer brings innovation for Berlin. Organizations as Changing Cities connect policymakers in Berlin to innovative ideas brought up in international discourses. Fourth, policies from elsewhere are used for legitimization of political actions. The evidence that a policy works somewhere else can be used as a political argument to convince people that it will work in Berlin as well. Fifth, exchanging ideas on bicycle policies is useful for a broadened and more grounded view on transport planning.

7.4 Barriers in the process

The experienced barriers are divided into barriers experienced in the searching phase and barriers experienced in the transferring phase. Three barriers are experienced in the searching phase. First, policymakers are rationally bounded, predominantly towards examples in the Netherlands and Denmark. As research from ADFC turned out, cities as Barcelona, London and Stockholm do also have relevant bicycle policies and concepts for the German context. Second, policymakers experience an overload of information about cycling examples, while there is a lack of information on the implementation of those examples. Third, time and financial resources restrict the searching process. Although Berlin does not experience financial problems anymore, the financial resources and the time available for improving one specific policy do still determine the scope of the searching process.

Four barriers were identified for the transferring phase. First, the difference in legal, cultural and planning contexts of both the donor city and Berlin plays a role in the transferring phase. To address this barrier, policymakers in Berlin are mostly focused on European countries with similar legal structures and cultures. Second, the car-focused planning culture of Germany forms a barrier for Berlin in the transferring phase. Because of the car industry, transport planning has been strongly focused on the car. On top of that, debates about the bicycle are relatively new and the role of the bicycle is not yet as established as the role of other modalities. Third, policymakers experience a fear for public resistance against giving up car space for the bicycle. Fourth, there can be a lack of political will to improve the cycling situation, because politicians are afraid that there is a political price they have to pay for that, often related to public resistance. This barrier is mostly experienced by interviewees from the organizations Changing Cities and ADFC.

7.5 Influence of benefits and barriers on policy transfer process

This study has demonstrated that while policymakers experience several benefits of policymaking, the evidence-based nature is the most distinctive factor between policy transfer and other forms of policymaking. Therefore, the evidence that policy transfer offers is the benefit that determines the choice of policymakers to participate in policy transfers the most. An important factor here is that there are enough examples in other cities that Berlin can learn from. However, the distinction between this benefit and the other benefits was framed too strong in theory, while in practice, the benefits are more related to each other. As elaborated upon in the discussion, the benefits concerning efficiency and legitimization are resulting from experiencing the evidence-based nature of policy transfer. Therefore, both the benefits concerning efficiency and legitimization are secondary benefits that are not decisive in the

choice to participate in policy transfer, but that are experienced later. Also, for transferring innovation, the evidence that a policy works in another city is crucial. Policymakers do not choose to participate in policy transfer because they desire to be innovative. They choose to participate because there is no appropriate solution in their own city, but there *are* innovative policies in other cities that offer an appropriate solution for the problem in Berlin, transferring innovation to Berlin. For softer forms of policy transfer, forms where policymakers look at other cities just to learn and not with the immediate intention to transfer, broadening the view of policymakers on transport planning plays a role as well. But also here, the view of policymakers will be mainly influenced by evidence-based examples of policies in other cities.

Once the choice has been made to participate in policy transfer, several barriers are experienced that influence the outcome. This study has found out that the barriers experienced in the transferring phase influence the outcome to a greater extent than the barriers experienced in the searching phase. In the searching phase, the bounded rationality of policymakers, the available information and the available time and resources demarcate the scope for the searching phase. Therewith, those barriers steer policymakers towards policy examples that do not necessarily have to be the most rational solutions for the problem at stake. In that sense, the outcome could have been more optimal if those barriers would not have played a role. However, in the case of Berlin, the effects of the barriers experienced in the transferring phase are more severe than the effects of the barriers experienced in the searching phase. In fact, not addressing the barriers in the transferring phase can obstruct and stop the policy transfer process. The four barriers experienced in the transferring phase are all related to the context of Berlin, be it the legal context, the cultural context, the planning context, the public context, or the political context. The major role that context plays in the policy transfer process can be illustrated with the conflicting relation between the role of the car and the bicycle in Germany, affecting not only the cultural and planning context, but also the legal context by having less legal possibilities for implementing bicycle infrastructure than for cars, the public context by making people used to the enormous amount of space that cars take up, and the political context by making politicians fear for investing in the role of the bicycle instead of the car. The manner of dealing with those barriers is very decisive for the outcome.

7.6 Recommendations for policymakers

Based on the barriers identified in this study and the suggestions proposed by interviewees, this study proposes several recommendations for policymakers to deal with the barriers, leading to a better outcome. The recommendations are specifically based on the barriers experienced in Berlin. However, the recommendations are not only useful for policymakers in Berlin but can to a great extent be generalized for other city governments engaging in policy transfer as well.

- There is a need for *more data on cycling*. A more comprehensive database on cycling is useful for more thorough evaluations of implemented policies and new infrastructure. Moreover, by retrieving data from citizens, the needs of cyclers and people that want to cycle but do not feel confident enough to do so can be identified. It is important to identify those needs in order to pursue the goal of making cycling accessible for as many people as possible. This recommendation addresses 1) the barrier of time and financial resources, because the better the needs are identified, the better the scope for searching a policy solution can be demarcated, and the more focused policymakers can search in the time they have. Besides, it addresses 2) the barrier of the specific context of Berlin, because it creates more awareness of the difference in infrastructure, facilities, and policies available for the bicycle compared to the car. Furthermore, it addresses 3) the barrier of public resistance, because citizens would be more open to change if they feel like a policy is based on their needs. Although the lack of cycling data is a problem experienced specifically in Berlin, a sufficient level of cycling data is an important starting point for policy transfers in other cities as well.
- With the reform in the traffic code, policymakers can easier *implement a pilot* on a small scale. Policymakers should use this opportunity to try out how policies or concepts would work before implementing them on a large scale. Implementing a policy or a concept, for example a safer intersection concept, on a small scale in the real world gives a better indication of the advantages and disadvantages of the policy or concept than theoretical speculation does. Implementing pilots addresses the barrier related to the 1) specific context of Berlin, as the legal procedures make it easier now to try out a policy on a small scale in Berlin. Using this opportunity would be beneficial for 2) the time and financial resources available, as bypassing the bureaucratic procedures related to regular implementation saves time and costs. Furthermore, trying out pilots of policies leads to 3) less public resistance, as the policies are implemented temporary and on a small scale. If it turns out that a policy does not have the expected results, it can be reversed more easily. This will also affect the 4) lack of political will, as politicians will fear less for resistance. It is hard to say to what extent legal frameworks of other cities allow policymakers to implement temporary pilots in order to test out transport policies or concepts. However, this study recommends implementing pilots if the legal framework offers possibilities for this.
- *Participatory processes* are useful in identifying the needs of citizens on a local level. As one interviewee indicated (P-2), needs with regard to the bicycle differ significantly between inhabitants of different areas. Indeed, inhabitants of the inner city do in general have other travel patterns, and therewith, other needs than inhabitants of outer areas. Therefore, the needs with regard to cycling need to be identified on a local level. By

involving the citizens in the process, they might feel more included. Involving the opinion of citizens on a local scale will lead to 1) less public resistance. If there would be less fear for public resistance among policymakers, the 2) political will to improve cycling conditions could be enlarged. As it is likely that in other big cities the travel patterns and travel needs differ per area as well, this recommendation is generalizable for policy transfers in other big cities.

- Policymakers should be stronger connected to other cities through the *networks* they participate in. The connectedness with (civil) organizations is very important for the provision of the government with best practices from elsewhere, but the reflection of those best practices on the context of Berlin can be conducted more thoroughly, making use of the networks. In such environments, other cities are open to honest advice and to share their lessons. This would address the barrier of 1) bounded rationality, as more perspectives of other cities on how to transfer and implement a policy lead to a more grounded strategy. Besides, in such an environment, cities can 2) provide the technical know-how on how to implement a policy. Furthermore, 3) the difference in contexts of the donor city and Berlin can be researched and compared better if Berlin has a strong connection with the city concerned. The involvement in a city network focused on transport policies can also be recommended for other cities that want to engage in transport policy transfers.

7.7 Reflection

Several remarks can be made with regard to the reflection of this research process. Regarding the theoretical framework, it must be stated that the elements of the policy transfer process were framed rather static. Moreover, the distinction between the different steps was framed too strict, leaving little room for consideration that the steps may be overlapping. On the one hand, this was useful for conceptualizing the process, but on the other hand, this detracted from the complexities that play a role in policy transfer processes in practice.

For this research, a single case study is selected as research method. This allows for a thorough analysis to gain a deeper understanding of the situation in Berlin. This research method has been useful for this research because of the specific elements that distinguish the cycling context of Berlin. However, a single case study does leave little room for generalization. An advantage of this study is that it has gained a deeper understanding of the use of policy transfer in the case of cycling policies in Berlin. However, a drawback of this study is that it is hard to generalize the results of this study for policy transfer with regard to cycling in other cities. Additional research of comparative nature is needed for this.

The spread of the corona virus had an effect on the empirical data gathering of this research. Due to the virus, it was not possible to gain personal experience and get acquainted with the

context, as this research was initially part of a study exchange to Berlin. This lack of personal experience was substituted by exploratory interviews, which turned out to be useful. However, it would still have been valuable for the research to have an idea of the context of the case, especially because it is a context that the researcher is not familiar with. Furthermore, the data gathering process was time consuming. The engagement of policymakers in Berlin in the development of pop-up bicycle lanes during corona may have affected the ability of policymakers to participate in an interview for this research. Although it is obviously hard to say how willing interviewees would have been to participate in an interview if the corona crisis would not have played a role, it is remarkable that there were no policymakers on a district level that were able to participate. Especially because employees responsible for bicycle planning of every district were contacted. The lack of perspectives from a district level may have influenced the results, making them more applicable for the city state level.

The conduction of interviews through video calling did not seem to have direct implications on the results of the study. Most interviews have been conducted in English, one in Dutch, and one in German. Although the researcher is not a fluent German speaker, it was still regarded as useful to try to conduct the interview in German because of the additional perspective of that interview on the research. That interview is not transcribed but rather extensively summarized. Overall, the information gathered in the interviews was really useful. The manner of questioning about the process, the benefits and barriers was rather open. However, the answers of interviewees were aligned to the elements of the theoretical framework by asking if their answer could be seen as that particular element. Although deliberate attention was paid to not steering the interview towards a particular direction, there is a thin line between aligning the answers of the interviewees with the elements mentioned in theory and being suggestive. This could have influenced the thinking process of interviewees.

7.8 Future research

There are several recommendations for further research resulting from this study. First, further research is needed on the role that civil organizations play or *can* play in policy transfer. The case of Berlin illustrated a rather unique co-creation process between the government and (civil) organizations, at least, unique for the development of transport policies in Germany. In order to indicate the generalizability of this research, more research needs to be conducted on the involvement of civil organizations in policy transfer, within the field of transport planning but also apart from that.

Second, research is needed on the role of policy transfer in the energy transition. Although this research, and therewith the theoretical framework, was focused specifically on transport planning, an analysis of the literature used for this research indicates that there is a research

gap on the role of policy transfer in the energy transition. Similar to the transition towards sustainable forms of mobility, governments in Europe have to set strict measures to work towards sustainable forms of energy provision. As all governments are in that same process, learning from failures and successes of other governments could be useful in policymaking. Research is needed to determine to what extent policy transfer is used as a policymaking strategy in the energy sector and what role policy transfer *could* play.

Third, research is needed on the long term impacts that the Corona crisis will have on the transport sector *and* on policy transfer within the transport sector. As explained in the discussion, the corona crisis influenced travel behaviour on the short term. When the Corona crisis will be behind us, research is needed on the effects that it had on travel patterns in the long term, and on the way that governments responded to the change in that patterns, both with temporary solutions and with structural changes. This is particularly interesting in relation with the goals that governments have set before the crisis for the transition towards sustainable mobility. Besides, research is needed on the effect that the uncertain future in corona times had on the amount of information exchange and policy transfer within the transport sector.

Lastly, on a more general note, further research is needed on the role of policy transfer in planning and transport policies. This study did contribute to the research gap regarding policy transfer in transport policies and it acknowledges the relevance of policy transfer for planning and transport policies. The results of this study found a reason to assume that policy transfer in transport planning is experienced differently than policy transfer in other fields. For instance, while literature on policy transfer did only provide barriers on a general level, this study found that context-related barriers play a crucial role for transport policy transfers. Research is needed in order to further analyse the context-specific nature of policy transfer in the planning and transport field.

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Appendix I – policy transfer and similar terms

Policy diffusion

Policy diffusion, a concept developed in the US, is seen as the predecessor of policy transfer (Benson & Jordan, 2011). Research into policy diffusion is mostly focused on the *patterns* of policy transfer (Stone, 2012). While policy transfer research has a qualitative nature, policy diffusion research is focused on large ‘n’ analyses (Stone, 2012). This concept has been criticized for ignoring the multiplicity of the processes related to policy transfers and the lack of attention paid to the political interests involved in the process (Stone, 2012). Out of this criticism, the concept of lesson drawing was born (Benson & Jordan, 2011).

Lesson drawing

The concept of lesson drawing is focused on the voluntary part of policy transfer (Dolowitz & Marsh, 1996). As a predecessor of policy transfer, the concept of lesson drawing implicitly assumes that all policy transfer processes are voluntary and rational (Rose, 1991; Dolowitz & Marsh, 1996). As a criticism on this, Dolowitz & Marsh (1996) developed the term of policy transfer, to comprise both voluntary and coercive forms of transfer (Benson & Jordan, 2011).

Policy transfer

Dolowitz & Marsh (1996, p.344) describe policy transfer as “a process in which knowledge about policies, administrative arrangements, institutions etc. in one time and/or place is used in the development of policies, administrative arrangements and institutions in another time and/or place”. In contrast to policy diffusion, policy transfer is focused on the process. Responding to the criticism on lesson drawing, policy transfer is focused on voluntary as well as coercive transfers. In fact, Dolowitz & Marsh (2000) state that most policy transfers take place somewhere between both extremes. Early policy transfer studies still view policy transfer as a rather rational process (e.g. Dolowitz & Marsh, 1996).

Policy convergence

Academics studying policy convergence believe that policy transfer is driven by developments such as industrialization and globalization, resulting in an increased similarity and alignment of policies between countries (Stone, 2012). Supra-national organizations such as the European Union do often encourage or even determine such convergences of policies (Benson & Jordan, 2011).

Policy translation

Policy translation has been developed as a criticism on the linear nature of policy transfer. While early studies on policy transfer often described the transfer process as direct and rational between A and B, the policy translation theme is focused on the “interesting, and sometimes even surprising, disturbances” that can occur within the process (Stone, 2012, p. 5). According to Stone (2012), the complexity of the context is underexposed in policy transfer studies.

Appendix II – Literature coding scheme

<i>Group</i>	<i>Concept</i>	<i>Component</i>
<i>Policy transfer and similar terms</i>	Policy transfer	Definition
		Voluntary vs coercive
	Policy diffusion	Definition
	Lesson drawing	Definition
	Policy convergence	Definition
	Policy translation	Definition
<i>Policy transfer process</i>	Dissatisfaction with status quo	
	Searching for satisfaction	In past of organization
		Across space
		Governmental levels
		Looking for identification
	Transferring what?	Policies vs programs
		Institutions
		Negative lessons
	Degrees of policy transfer	Copying
		Emulation
		Hybridization
		Inspiration
	Comparative research	Prospective evaluation
		Contextual differences
	Implementation and evaluation	Implementation
		Evaluation
Actors involved	Local officials	
	Consultants and private suppliers	
	Supra-national organizations	
<i>Benefits of policy transfer</i>	Evidence-based policymaking	

	Efficient policymaking	
	Stimulate innovation	
	Legitimize political actions	
	Funding	
<i>Barriers of policy transfer</i>	Bounded rationality	
	Barriers in searching process	Information availability
		Language issues
		Resources
		Disagreement
	Barriers in transfer process	Complexity
		Political continuity
		Contextual barriers
		Public resistance

Appendix III – Interview guides

Exploratory interviews

Introduction (10 min)

- o. Thanking for their time / ask about recording / explaining structure of the interview / introducing myself and my research*
- 1. Can you tell a bit about yourself and your organization?
 - a. What is your function within your organization?
 - b. How is your organization structured?
- 2. Can you tell a bit about the projects you are working on?

Cycling (policies) in Berlin (15 min)

- 3. What are in your opinion the most important developments with regard to cycling in Berlin?
 - a. How does it relate to developments for other modes of transport?
 - b. What role do civil initiatives play in these developments?
 - c. What role does the *Verkehrswende* play in these developments?
 - d. What role do the senate elections of 2016 play in these developments?
 - e. What role does (funding from) the national government or the EU play in these developments?
- 4. How do the developments with regard to cycling in Berlin relate to the developments with regard to cycling in other German cities?
- 5. Who is, according to you, involved in the development and implementation of cycling policies in Berlin?
 - a. How are the responsibilities divided between those organizations?
 - b. What role does your organization play in the development of cycling policies?
- 6. What are, according to you, important factors that cycling policy in Berlin should focus on the coming years?

Policy transfer (10 min)

- 7. To what extent do you think that the city state of Berlin uses examples from elsewhere for the policymaking of cycling policies?
- 8. Do you know specific examples with regard to cycling policies that are being transferred to Berlin?
 - a. If so, what examples?
- 9. What role does your organization play in the policy transfer of cycling policies in Berlin?

10. What other parties are, in your opinion, involved in this?

Conclusion (5 min)

11. So, if I understood you correctly, ... (*summarise the most important points*).

12. Do you want to add something with regard to the interview?

13. Do you have any contacts that I should speak with for my research? (e.g. at the senate department/districts)

14. Is there something else that you would like to mention?

15. *Thanking the interviewee / asking about transcripts / asking if he/she would like to receive the final version of the thesis / contact me for further questions*

Interviews with practitioners

Introduction (5 min)

- o. Thanking for their time / ask about recording / explaining structure of the interview / introducing myself and my research*
- 1. Can you tell a bit about yourself and your organization?
 - a. What is your function within your organization?
 - b. How is your organization structured?

Cycling policies (10 min)

- 2. In what way are you involved in the development or implementation of cycling policies in Berlin?
- 3. What are the goals with regard to cycling that you are responsible for/that are important for your function?
- 4. What strategies do you use to reach those goals?
- 5. To what extent does your organization search for best practices in other cities?
- 6. What is your role in this process?

The policy transfer process (10 min)

- 7. What does the process of policy transfer, as far as you are involved, look like?
 - a. What is, according to you, the main reason to start searching for best practices?
 - b. Where do you search for best practices? Why there?
 - c. What do you transfer most often? (e.g. policies, programs, institutions, negative lessons?)
 - d. To what degree do you transfer a policy?
 - e. What type of research do you do in order to identify the effects of the implementation of a policy?
 - f. What does the implementation process of a transferred policy look like?
 - g. What does the evaluation of a transferred policy look like?
 - h. What actors are involved in the policy transfer process?

Benefits (5 min)

- 8. What benefits of policy transfer do you experience?
- 9. To what extent do those benefits influence the choice to engage in policy transfer?

Barriers (5 min)

- 10. What barriers of policy transfer do you experience in the searching phase?
- 11. What barriers of policy transfer do you experience in the transferring phase?

12. To what extent do those barriers influence the process?

Conclusion (5 min)

13. So, if I understood you correctly, ... (*summarise the most important points*).

14. Do you want to add something with regard to the interview?

15. Do you have any contacts that I should speak with for my research?

16. Is there something else that you would like to mention?

17. *Thanking the interviewee / informing about rest of the process / asking if he/she would like to receive the final version of the thesis*

Appendix IV – Coding scheme

<i>Theme</i>	<i>Code group</i>	<i>Code</i>
<i>Berlin context</i>	Political context	Division of responsibilities
		Political context
	Cycling in Berlin	Civil initiatives
		Drivers of civil initiatives
		Early cycling investments
		Elections
		Financial aspect
		Mobility Act
		Role of the car
		Uniqueness of Berlin
<i>Policy transfer process</i>	Dissatisfaction with status quo	Dissatisfaction
		Civil initiatives
		Early cycling investments
	Searching for satisfaction	Elections
		Civil initiatives involved in policy transfer
		Networks
		Searching
		Visits/events
	Defining what to transfer	Degree
		Negative lessons
		Policy transfer examples
		Protected intersections example
		Segregated bike lanes example
		What is being transferred?
	Comparative research	Comparative research
		Policy transfer context
	Implementation & evaluation	Implementation
		Evaluation
	Actors involved	Actors involved
		Civil initiatives involved in policy transfer
		Networks

		Visits/events
<i>Benefits</i>	Evidence-based	Evidence-based
	Efficiency	Efficiency
	Innovation	Innovation
	Legitimization	Legitimization
	Funding	Funding
		National/international
	Broadening perspectives	More perspectives
<i>Barriers</i>	Bounded rationality	Bounded rationality
	Information overload	Too much information
	Time and financial resources	Time and financial resources
	Difference in contexts	Context
		Policy transfer context
		Public administration
	Context of Berlin	Context
		Cycling is new
		Role of the car
	Lack of political will	Political will
Public resistance	Public resistance	
<i>Implications of Corona</i>	Implications of Corona	Corona

Appendix V – Informed consent

Dear ...,

First of all, thank you for your willingness to participate in my thesis research for the Master Environmental and Infrastructure Planning at the University of Groningen. In this study, the extent to which the city state of Berlin uses successful examples of other German or international cities in its cycling policies is being researched. The aim of the study is to identify benefits and barriers of the transferring process of cycling policies.

The aim of this interview is to gain more knowledge about the recent cycling developments in Berlin. This is helpful in understanding the context of the research case. The interview is semi-structured, which means that the interview questions are already predefined. Nevertheless, if needed, deviation from the interview questions is possible. The interview will take approximately 45 minutes.

Please tick the appropriate boxes:

Yes **No**

I have been informed about the purpose of the study, the purpose of the interview and the outline of the interview topics. I have been able to ask questions about the study and my questions have been answered to my satisfaction.

I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time.

I understand that taking part in this study involves:

- That the interview will be recorded (only audio).
- That the interview recording will be transcribed for the purpose of coding and analysing the data.
- That names and other personal information will be anonymized in the transcript.
- That the recordings and transcripts will only be accessible to the researcher of this study and will be deleted after finishing the study.
- That the interview answers will be treated confidentially and will only be used for the purpose of this research.

If you have any remaining questions, do not hesitate to contact me by email or by phone (for contact details, see my signature) or contact my supervisor, Dr. Christian Lamker (Assistant Professor for Sustainable Transformation & Regional Planning) at c.w.lamker@rug.nl.

Kind regards,

Veronique Rietman
v.a.j.rietman@student.rug.nl
+31622000361

Signature:

Name of participant

Signature

Date
