

MSc Thesis in Management of Technology

Social Movements' impact on policy-making process for cycling

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Social Movements' impact on policy-making process for cycling

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Executive Summary

Nowadays cycling rates in most European cities are increasing, while many governments are looking for ways to integrate cycling into the daily lives of citizens not only as a leisure activity but also as an official means of transport. At the same time, a large part of the population itself aims to influence decision-makers and urban planners to make cities more sustainable and to actually adopt pro-cycling policies. This section of the population that desires a policy change often forms social movements that aim to make their demands heard and make substantial improvements. Such social movements are known from the past for their influential contribution to various burning issues such as gender equality, ecology, environmental protection, sustainability and many others. Various researchers have shown that social movements and advocacy groups present different compositions and work to promote change by targeting public opinion, the political arena, or both. However, the existing literature and previous research on their contribution to the promotion of cycling in the policy making process are quite limited. Therefore, this research sought an answer to the question:

How do social movements influence the successful adoption or implementation of a favorable/positive cycling policy?

Through a literature study on the theory of social movements together with the principles of the Multiple Streams Model by Kingdon, a theoretical framework is developed to better hypothesize how policy adoption and implementation works and how movements can influence it. Indeed, the report revisits Kingdon's concept with a particular focus on social movements and their various activities in the policy making process. The key components of the MSF are the problem stream, the politics stream, the policy stream, the window of opportunity and the policy entrepreneur. Using this model in conjunction with social movement theory, three hypotheses have been developed and tested for the three cases. The comparative case study approach is used to allow a deeper understanding of the impact of social movements on the development of positive cycling policies and the events behind the adoption of the cycling policies in three European capitals where there is evidence of social activism are extensively analyzed. These were the cities of Amsterdam, Stockholm and Dublin. The main data sources were articles, scientific papers, local newspapers, magazines and blogs along with transcripts of interviews. Besides, through semi-structured online interviews, the perspectives of relevant stakeholders in the three cities, such as members of social movements and experts in the field of policy-making and policy analysis were investigated. The next step after collecting all the necessary data was the content and narrative analysis, in order to connect the cases in a meaningful way but also to identify common patterns. Conclusively, the findings from the three cases were compared and contrasted based on their differences and similarities in the strategy followed by the social movements, the emergence and constitution of their groups and generally their effectiveness in achieving favorable changes for cyclists. Overall, the report argues that by determining the role of movements within the streams there is an added value to the explanatory power of the context.

Influencing the problem stream and seeking public support is a prerequisite for strengthening social movements, while they tend to use methods such as indicators and focusing events to determine the perception of the problem in the society. Identifying the problems and highlighting them to the public may be secondary if the movements themselves, due to their composition, know how to negotiate with decision makers directly. This is because social movements and advocacy organizations also aim to

influence government agencies, especially when there is no political will for change or when they have the right means to approach them in terms of power and knowledge. The need for active negotiation with the political stream increases when there are strong policy opponents influencing the board in the background. These rivals often come from the automotive industry as they have conflicting interests with cycling policies that tend to undermine car dominance. Lastly, regarding the policy stream and proposals for change that usually come from the community of policy experts, it is not impossible for movements to contribute even to this stream, if they have the necessary knowledge and expertise to do so. Otherwise, seeking for interaction with experts in the field can help activists to get realistic policy proposals that can be used in their discussions with the decision makers.

Furthermore, when there is a clearly defined problem, politicians are willing to adopt a realistic political solution, and a policy entrepreneur couples these streams at a window of opportunity, the result may be in favor of activists. A noticeable finding was that social movements themselves can also play the role of the policy entrepreneur and articulate the three streams. As Kingdon suggested, social movements can invest their efforts to closely collaborate with the decision makers and push for their interests. At the same time, they can also work towards influencing the three streams in different ways and emphasizing on different aspects depending on the composition of their teams, the timing of their appearance and the legal framework of the country.

There may also be some other important parameters such as scale of the city, the funding availability, the shape of old inner cities or the existence of historic centers that can facilitate the movements' success in influencing a pro-cycling policy adoption. Despite the importance of these contextual parameters, this study shows that success lies in the hierarchy of cycling, arguing that whenever there is a will, a realistic way can be found. After all, social movements, in order to achieve the best result and be mostly effective, they should be aware of their strengths that are directly related to their knowledge of the cycling policy-making process, their size and passion. In this way, they can choose the right strategy to follow and influence the political scene. Besides, for people who wish to promote cycling and sustainable way of travelling it is crucial to find others with a common view, because although every voice matters, when these voices become collective, they are more likely to be heard and taken seriously by the decision-makers. Finally, policymakers need to be more open to dialogue with such groups, as they represent a legitimate part of society and can bring issues that ordinary people cannot include on the political agenda. Ultimately, actively listening and constructively discussing activists' demands in a friendly environment -always under a realistic point of view- can also be beneficial to their political future

In conclusion, the knowledge gathered through this report on the ways in which movements can bring about policy change has to do with the political status and legal framework of each country. It is therefore worth noting that, as this study focused on democratic capitals, this may have an impact on the generalizability of results for countries with very different policy frameworks.

Preface

This report represents the conclusion of my master's thesis and also qualifies me for my master's degree in the MSc Management of Technology program at Delft University of Technology Faculty of Technology, Policy and Management. Now that this academic journey is over, I feel grateful for all the knowledge and learning experience I gained along the way, but I especially feel thankful for all the support I have received over the past months.

The completion of this academic research could not have been accomplished without the guidance, help and passion of some people. Foremost, I would like to express my sincere gratitude to my supervision committee for their patience, motivation and continuous support during the months that I have been working on my research. Their eagerness to help together with their constructive feedback and insightful comments substantially helped to understand the subject of social movements' influence in the policy making process. In particular, the chairman Wijnand Veeneman and the second supervisor Marten Kroesen have always been there with useful advice to guide my thesis. I would like to recognize the invaluable assistance that you all provided during my study. A special big thanks belongs to my daily supervisor Nihit Goyal for his great support as he has always been my first point of contact for the research and encouraged me in this writing trip. I would also like to pay my special regards to all the participants in the interviews who devoted part of their time to contribute to my academic work with their knowledge and expertise. Maartje van Putten, Marjolein de Lange, Bert van Wee, Ulf Eriksson, Klas Elm, Vanessa Stery, Stephen McManus, Joan O'Connell, Emil Rensvala and Emilia Sternberg: you all definitely enlightened my research.

Finally, I owe much to my family, friends and husband for their support, empathy and understanding over the past months that have been challenging while dealing with both the pandemic and the difficulties of the research process. I would not have achieved anything without you not only at this step of my academic career but in my whole life. I will always be grateful and blessed for your presence in my life. Last but not least, I wish to express my deepest gratitude to my baby girl who is on her way and has been my best study buddy.

Chapter 1 Introduction

1.1 Cycling in Europe

Cycling, also known as biking or bicycling, is a very popular leisure activity and, in many cases, an alternative means of transportation, especially for short distances. It is considered as a low cost, very easy and healthy alternative to other means of transport, such as cars and motorbikes for daily commuting. In addition, cycling provides many benefits compared to motor vehicles, from an environmental, health, financial and practical point of view. This is because it has no CO₂ emissions, it is a good opportunity for daily physical exercise, the financial cost is much lower and parking much easier. Besides, it is an environmentally friendly way for travelling and acceptable in socio-cultural terms (Egmond, 2011)

In recent years, a new broader assessment of the importance of cycling adds new emphasis to the basic importance of cycling as a cheap and affordable means of transport, mainly suitable for short trips, contributing to the enjoyment of the trip and to the mental and physical health of the riders (Mcclintock, 2002). The European Union has formally recognized the significance of cycling as a practical way of urban transport that generates considerable benefits to the environment, economy and health (European Conference of the Ministers of Transport, 2014). Cycling rates in most European countries are increasing, thus showing that the bicycle is being gradually established as a major means of transport for the daily needs of citizens. Indeed, Table 1 shows the bicycle share in all journeys for inhabitants per European country, and also presents some important details for many cities.

The Netherlands	27%	The top municipalities score between 35% and 40%; cities with the lowest bicycle use rate between 15% and 20%
Denmark	19%	The differences among the larger cities are relatively small: in general at the level of 20% of all trips
Germany	10%	The western federal states have a higher average bicycle use, especially Nordrhein-Westfalen. Several cities with bicycle shares between 20% and 30%
Austria	9%	Top: Graz (14%) and Salzburg (19%)
Switzerland	9%	Several cities at a higher level, like Bern (15%), Basel (17%) and especially Winterthur (approx. 20%)
Belgium	8%	Many cities in Flanders approach 15%. Top: Bruges - almost 20%
Sweden	7%	Cities: 10%. Extremes: Lund and Malmö 20%. The small city of Västerås: 33%
Italy	5%	A few striking exceptions, especially in the Po Plains, with places like Parma (over 15%) and Ferrara (around 30%). Another top-city: Florence (over 20%)
France	5%	Top: Strasbourg 12% and Avignon 10%
Ireland	3%	Virtually no upward extremes (Dublin 5% at most)
Czech Republic	3%	A few cities with some degree of bicycle use (Ostrava, Olomouc and České Budejovice, between 5% and 10%) and some with an even higher bicycle use (Prostejov 20%)
Great Britain	2%	Some isolated cities with a much higher degree of bicycle use (York and Hull 11%, Oxford and especially Cambridge nearing 20%)

Table 1: Bicycle share in all journeys in European countries (Ministerie van Verkeer en Waterstaat, 2019)

It should be emphasized that the European Union has played a key growing role in promoting cycling. More specifically, it provides funding for purposes such as transnational and cross-border cycling projects through its EU funding Interreg. The European Cycling Federation has already established a system of various cycling routes throughout Europe, while the European Union helps to fund shortages of intercity cycling links and cycling facilities in underdeveloped areas (Pucher, & Buehler, 2008).

In many of the developed countries, cycling policy has evolved in recent years from being just a regional issue, with cycling being considered as a marginal means of transport, which undoubtedly must be taken into account when prioritizing other means, especially the car. The role of cycling is now considered much more serious in many official circles with the growing importance of links between transportation policy and subjects such as climate change, sustainable development, health, air quality and social exclusion.

Promoting bicycle use offers many benefits to both public policy and individuals. Some of these benefits are reduced traffic congestion, savings on road costs, reduced parking problems and cost savings on parking and maintenance, better and fairer transportation options (especially for the non-driving segment of the population, including children and the elderly), and also a great variety of social and environmental benefits (Litman, 2010). Moreover, cycling can help achieve more sustainable communities, especially when supported by planning policies to reduce expansion and develop higher density, compact communities with shorter average travel distances and more facilities within an easier cycling and walking distance (Mcclintock, 2002).

Due to the mainly local, short-distance trips made by bike, policies and programs to promote safe and convenient cycling usually take place at the regional level. Cycling training together with other safety and promotional activities are usually carried out locally, even if they have a mandate and funding from higher levels. At the intermediate level, states, regions, and municipal governments provide additional policy guidance, coordination, and financial resources along with some direct design and construction of cycling facilities that serve rural areas or connect different municipalities. Central government involvement in cycling has been more recent, evolving gradually since around 1980 and providing general objectives, design guidelines, research support, coordination and funds (Pucher, & Buehler, 2008). Many European countries such as the Netherlands, Denmark, Germany and Sweden have set formal national cycling plans and policies with the general aim of increasing cycling levels for day-to-day travel, while improving cycling safety. National policy is generally defined as a broad course of action or statements of guidance adopted by the government at national level to achieve national goals (Dictionary of Military and Associated Terms, 2005). These national master plans include various strategies and means to achieve these dual objectives, such as better lane, path and intersection design, proper bike-parking facilities, integration with public transport and cycling safety and awareness campaigns.

While talking about creating policies, it is also reasonable to highlight that despite the general tendency of the countries to adopt a cycling policy at the local level, this depends to a large extent on the governance method in each country. Executive and legislative power is concentrated centrally in the upper echelons in countries characterized by centralized governments, as opposed to decentralized ones that distribute more to various lower-level governments, such as municipal and regional councils. This can therefore affect the flexibility and possibility of cities to adequately define and implement local cycling plans, as it is difficult to deviate from the national guideline either positively or negatively. The

level of governance centralization and the way in which politics “works” in countries is a major parameter that influences policy making process, and thus will be taken into account in the research.

1.2 Motivation for conducting the research

This section will analyze the underlying motivation for choosing to proceed with this research on social movements impact on formulating cycling policies. In addition, the problem statement will be presented, along with the research questions that the research intends to address.

Looking at the country of the Netherlands, it seems that the Dutch population has successfully recognized all the benefits associated with cycling, as it is considered to be the most successful cycling nation in the world. The great deviation of the Netherlands from the general European cycling pattern was clear around 1970 (Stoffers, 2012). However, the “bicycling turn” in the Netherlands that occurred around the 1970s is neither self-evident nor a natural change. Indeed, based on the historical data, the working hypothesis is that the social movement “Stop de kindermoord” played a key role in initiating change in transport and urban policy in the Netherlands, along with a number of other events and factors of this period. This triggers the interest to examine the role of the social movement in policy change, and particularly in the field of cycling. To achieve so, two other European cities with similar characteristics will be chosen in order to perform a comparative analysis among them, and better understand the ways in which social movements influence policy making processes and lead to successful-or not- results.

Social movements in general can be considered as collective enterprises to create a new order of life, organized by a large group of people that may involve individuals, organizations or both. They have their beginning in a state of turmoil, and draw their motor power on the one side from dissatisfaction with the existing form of life, and on the other side from the desires and hopes for a new plan or living system (Blumer, 1995). Movements increasingly coordinate efforts with a growing number of public interest organizations, voluntary associations, advocacy or activism groups and non-governmental organizations as well. Among other things, some of the main issues that the movements have focused on so far are feminist progress, the elimination of racism, gender equality and many other issues related to environmental awareness. The promotion of cycling is one of the environmental issues highlighted by social movements in many countries in the past, such as the Netherlands, with the aim of promoting a more sustainable way of traveling, always in safe conditions. It is well-known that social movements can actually have an impact on the public policy making process, while they primarily aim to bring about changes in public attitude and political behavior (Yearley, 2013). However, what has not yet been fully explored is the ways and strategies by which movements achieve policy change. Therefore, this research aims to identify the means and ways in which social movements can influence the policy-making process and how they manage to raise issues in the public and political arena.

1.2.1 Problem statement

Based on the scholars that have already examined the case of the Netherlands, social movements were one major factor for the switch into cycling. However, it is not explicitly clarified how this actually happened, and which were the strategic actions of social movements that particularly triggered this policy change. Thus, a better understanding of how the social movement in the Netherlands occurred, in which way they triggered a pro-cycling policy adoption to happen, and also what are the exact factors

that lead to policy change, would provide more insight on the correlation between social movement and policy processes.

1.2.2 Research Objective

The study will synthesize research on social movement theory with that of the MSF to develop an integrated framework for analysis. The objective that this research aims to achieve is to contribute to the literature an explanation theory on how social movements affect legislative policy, especially in the field of cycling policy.

1.2.3 Academic Relevance and research contribution based on the MOT criteria

As the cycling rates increase, the wider technological and business sector becomes more interested in this particular place. Besides, giant companies have already started talking about topics such as Cycling Digital Transformation, while according to Cycling Industries Europe Bike has been selected as one of the 10 technological trends for the year 2020. Simply put, it is becoming increasingly clear that cycling technology can be a great opportunity with many implications for businesses. For this reason, it is important to investigate how social movements can influence technological innovation and diffusion, particularly in the case of cycling. Lastly, the report will use the Multiple Streams Framework which had been introduced in the MOT1452 Course Inter- and intra- organizational decision making to familiarize students with how decisions are made in practice, what decision-makers really do, and why they do it that way.

1.3 Research Questions

In order to accomplish the main goal of the proposed thesis, a major research question is required. In addition to the basic research question, some sub-questions can contribute to the research as their answers will provide fundamental information needed to meet the research objective. Below, the research question is presented, together with the sub-questions and some further explanation.

1.3.1 Main Research Question

- How do social movements influence the successful adoption or implementation of a favorable/positive cycling policy?

To begin with, it is fundamental to set a working definition in the term “positive cycling policy”, as it will be extensively used in the research and it should be explicitly provided in the beginning of the report. When looking at the social movement and policy change, it is significant to detect the variables that have an effect on the correlation between policy and movements. Therefore, one sub research question would concentrate on the variables that influence the impact of social movement on policy changes, and which of them should be considered in the context of this research. Furthermore, as the Multiple Streams Framework will be used to develop an integrated framework for analysis, it is important to identify the role of the social movements within the elements of this framework.

Multiple streams framework (MSF) was firstly introduced by Kingdon to explain agenda dynamics, and it is generally considered as a powerful tool to understand policy processes, especially agenda-setting (Kingdon, 2003). However, it has also been employed to examine policy adoption and implementation

as well (Fowler, 2020). MSF can indicate the influence of structure, agency, and chance during a policy diffusion and also explain how and when a policy entrepreneurship might contribute to accelerate the process. These were the major reasons that led to the choice of it.

At this point, it should be mentioned that a first attempt to develop the most educated hypotheses based on the literature review so far will be presented at the next chapter. Thus, whether these hypotheses are valid would be another question to answer.

1.3.2 Sub-research questions

- What are social movements, and how are they defined?
- How can positive cycling policy be defined?
- What are the variables that influence the effect of social movement into policy processes, and which of these variables are relevant in the context of policy change and therefore should be included in this research? *The answer will be given by using the Multiple Streams Framework, in order to indicate the role of social movement within the framework.*
- What was the role of social movement within the analysis of Multiple Streams Framework?
- How did social movements influence the development of cycling policies in cities (in the Netherlands/ Europe)?

1.4 Comparative case study research

The methodology that will be followed for this research is the comparative case study design. This research setting refers to the selection of several cases with similar characteristics in order to develop a more in-depth understanding of the phenomena than a single case can provide. It also involves the analysis and synthesis of the similarities, differences and patterns across the cases, in order to better emphasize and generalize casual questions (Gustafsson, 2017).

Examining the advantages of the methodology, it enables the analysis of data in each situation and also in different situations, as opposed to the choice of a single case study (Yin, 2009). Moreover, comparative case analysis provides space for a better understanding of similarities and differences between cases, and thus enables the researcher to enrich the literature with significant influences from the investigation of these differences and similarities (Baxter & Jack, 2008).

However, we should not overlook the underlying disadvantages of the method. This could be the increased level of effort required to analyze all cases equally, which can be very time consuming. Another disadvantage is related to the lack of rigor of the cases while they are being selected which may decrease the generalization of the results. In addition, the analysis of many case studies could expand the amount of data and the level of detail, which may increase the difficulty of handling all research materials (Sekaran & Bougie, 2016).

1.4.1 Case studies

The report analyzes three different but very much comparative cases that have been chosen based on an extensive selection procedure. These cases are Amsterdam, Dublin and Stockholm. All of them are European capital cities, with similar financial and geomorphological characteristics, they have established pro-cycling policies in the past and the literature indicates the existence of various social

movements fighting for better cycling conditions. The point of difference among the three lies in the scale of the pro-cycling policies adoption and implementation.

1.4.2 Structure of the report

The structure of the papers is as follows: in the first chapter the research objective and research questions are proposed, an initial literature review will be then presented and the theoretical framework will be described. Thirdly the research design will be analyzed together with emphasizing on the data collection and analysis methods. After that the narrative analysis of each case together with the cross case comparison will take place, and the report will conclude with the discussion and conclusions of the research.

Chapter 2 Theoretical framework- Connecting social movement theory and MSF

2.1 Multiple Streams Framework (MSF)

The Multiple Streams Framework (MSF) is a theoretical framework found by Kingdon in his book *Agendas, Alternatives, and Public Policies*, which is used to analyze and understand the policy process by assuming that there are three separate and independent streams; the problems, policies and politics. MSF has been extensively used in the political sciences to analyze the reasons and the ways by which governmental policies have been adopted, in other words to explain the decision-making process. MSF's ability to explain much of the policy process and therefore contribute to other theories can be considered a strong point, while it can explain the role of key elements: "institutions, networks, socio-economic processes, choices and ideas" (John, 2003).

2.1.1 Problem Stream

Starting with the problem stream it is worth mentioning that problems do not simply exist but are defined by people, and before they become problems they are just conditions. Thus, the question according to Kingdon is the following: "how does a given condition get defined as a problem for which government action is an appropriate remedy?" (Kingdon & Stano 1984, 17-18). In fact, people tend to define conditions as problems by comparing current conditions with their values of more ideal situations, by contrasting their own performance with that of other countries, or by categorizing the issue in one particular category rather than to another (Kingdon 2003, 110-113). On the question of who is the one who states the definition of a problem, Kingdon mentions that activists and policy-entrepreneurs play a vital role in bringing "problems to the public and governmental attention" (Kingdon 2003, 115). In other words, an issue can be perceived differently based on the different ways of stating it, but also on the basis of the one who mentions it.

2.1.2 Policy Stream

The policy stream refers to the alternative strategies or potential solutions that can be applied to the problem typically suggested by experts in the field (Kingdon, 2003). Kingdon describes policy solutions in "a policy primeval soup", referring to the process by which a policy community constituted by scholars, practitioners, and governmental agents proposes and evaluates potential solutions based on certain criteria aiming to address the problem. The form of the suggestions varies, and many means of persuasion are being used, such as media exposure and the speeches (Kingdon, 2003). In the end, it is the community of experts that discusses, studies and proposes solutions.

2.1.3 Politics Stream

The politics stream consists of socio-political aspects such as public mood, pressure campaigns and ideological divisions in parliament (Kingdon, 2003). Changes in elected officials and administrators together with ideological issues that may occur in region or nation level, can have a strong impact on the policy agenda (Giese, 2020). The ideological issues on a national level are described as "national mood" by Kingdon, meaning that these issues are more related to local perceptions and data interpretations rather than to strong facts.

2.1.4 Window of opportunity

The fleeting opportunities when there is a problem that has sufficiently attracted the attention of policymakers, a policy solution that is feasible to follow and a politics that are open to change, can be defined as policy windows- which is the fifth element of the MSF (Fowler, 2020). A policy adoption is very likely to happen during these policy windows, although the success cannot be guaranteed (Avery, 2004). Kingdon (2001) acknowledged significant inaction in the public policy process, but he argued that "the process is fluid enough that there are many opportunities to advocate change". These opportunities are in other words the policy windows and they may be unpredictable in timing and duration.

Although Kingdon focused only to one country, time period and two policy areas, MSF concepts can be considered as "universal" and flexible to apply in other cases to almost any place, time or policy (Cairney & Jones, 2016). Thus, it can be applied also in other time periods to explain and analyze the events that occurred and lead into a particular policy adoption. MSF seems to have become more relevant and appropriate than ever for policy analysis in advanced democracies in the early 21st century (Zohlnhöfer, Herweg & Rüb, 2015).

2.1.5 Policy Entrepreneurs

In MSF, a key role is played by policy entrepreneurs which is another component of the framework. Policy entrepreneurs act as change agents, by articulating and combining these three streams into a proposal during a policy window (De Wals, Espinoza-Moya & Béland, 2019). More specifically, they aim to couple streams together by framing and re-framing the perceptions of the three streams in a way that satisfies the policymakers' problematic preferences (Fowler, 2020). According to Kingdon (1995), policy entrepreneurs can be located in many places and in different streams. They could be inside or outside the government, in either elected or appointed positions, in interest groups or research organizations. Moreover, Kingdon argued that policy-entrepreneurs represent a separate political class which differs from typical elected politicians, typical appointed officials, typical interest group leaders, and so on, who engage in collaborative efforts to promote policy innovations. They have three basic properties: they are persistent, they know how to negotiate; and finally they are heard and recognized for their experience, leadership, or strategic position as decision makers. They must also be prepared to take action to promote their ideas at appropriate times. Finally, political strategies can only be effectively deployed by people- the potential policy entrepreneurs- possessing specific attributes and skills that are described in Table 2.

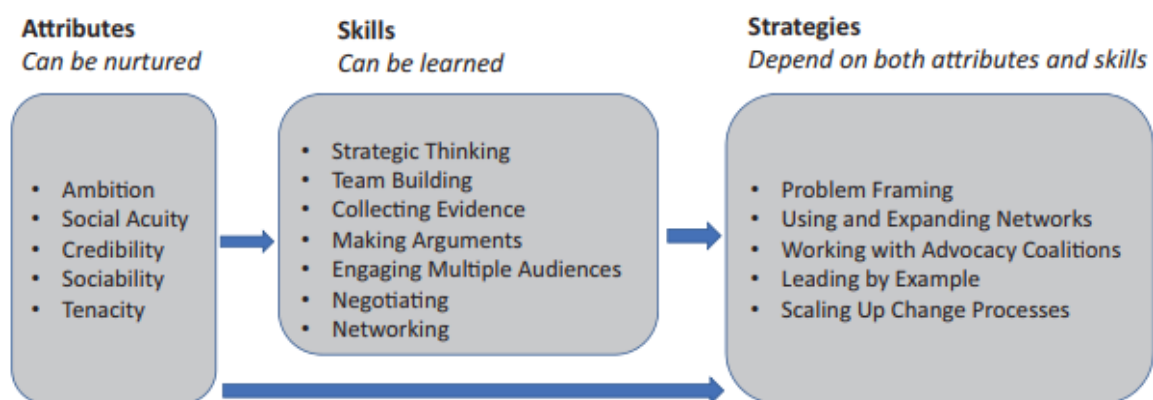


Table 2. Common attitudes, skills, and strategies of policy entrepreneurs (Mintrom, 2019).

2.2 Social Movements

Allocating a single definition to social movements is not an easy task. It is not just a stable political party or interest group with regular access to political power and political elites, nor is it a massively organized elusive trend, but it is somewhere in between (Bromley et al 1999). Social movements, then, can be seen as organized but informal social entities involved in external, goal-oriented institutional conflicts (Christiansen, 1999). In general, they can be broadly defined as informal networks of interaction, based on shared social beliefs and a sense of solidarity, evoked by controversial issues and expressed by various forms of protest (Della & Mattoni, 2015). According to (Giugni & Passy, 1998) social movements are usually more successful in open, democratic societies in which social mobility and social change are accepted concepts.

Social movements politicize communities, connect people, and promote personal loyalties aiming to create a more democratic society (Meyer 2003), and they emerge as a synthesis of the following three elements: 1) a continuous, organized public effort that submits collective demands to the target authorities, in short a campaign. 2) use of combinations of the following forms of political action, the creation of clubs, public meetings, vigilance, rallies, demonstrations, rallies, statements to and in the public media and sports. 3) WUNC public representatives: worthiness, unity, numbers and commitment (Tilly & Wood, 2020).

People decide to join social movements as they would like to change public policies. This can be proven by the increased growth of movement activity over the past decades, when people started protesting on the streets for various purposes such as the rights of various groups of interest, environmental issues and others. Thus, it should be explicitly mentioned that social movements have the actual potential to bring about significant changes in politics. This can happen by forcing government authorities to adopt or implement new innovative policies (Giugni & Passy, 1998). Moreover, the success or the failure of social movements is highly correlated with the policy changing itself, as this is what social activists themselves emphasize, and it can be evaluated in terms of policy change, process change or value change (Rochon & Mazmanian, 1993).

According to the literature, there are two main facilitating factors for social movements and these are public opinion - targeting the public space, and political alliances- targeting the political arenas. Firstly, social movements aim to "consensus mobilization", which means raising public concern and awareness of critical issues. Indeed, they directly cause structural and cultural societal changes by influencing people's attitudes and behavior. Besides, they address public opinion to find support, as these movements increase their legitimacy in the political arena when they have increased followers. Furthermore, the second goal of the social movement and facilitating factor refers to the so-called power holders. In particular, they have close interactions with government agencies in order to force them to restructure existing policies or even the political system itself. This is because the people who make up social movements are usually actors without formal authority or any access to institutional arenas, and therefore have to mobilize political allies in order to achieve their policy goals (Klanderman, 1988).

Social movements' lifecycles were firstly divided in four stages, known as "social ferment," "popular excitement," "formalization," and "institutionalization" (Blumer, 1995). These terminologies have been refined but keep the underlying subject relatively stable by other scholars, and today these four stages are known as: Emergence, Coalescence, Bureaucratization and Decline (Christiansen, 2009). These

stages are briefly discussed below, to get a better understanding on how social movements form, develop, solidify, and decline.

Starting with the first stage of the social movement life cycle -the emergence-, it can be also perceived as the stage of “social ferment”, while the movements are in a very early phase with little organization (De la Porta & Mattoni, 2015). The future movements' participants may be dissatisfied with a policy or social situation, but they have not yet taken action to express their grievances, or if they do, it is mainly at individual level rather than collective action. In other words, these potential members of the social movements act as agitators, warning the society about significant topics. In addition, there may be an increase in media coverage of adverse conditions or unpopular policies that contributes to a more general sense of resentment and dissatisfaction (Christiansen, 2009).

Here, it is worth noting that in order to reach the next stage and achieve broad mobilization, it is not enough for people to complain to each other about a general injustice, but it is fundamental to come together and move on to the next level. At the second stage of the life cycle, the unorganized sense of dissatisfaction starts becoming a more clearly defined sense of discontent, and the first queries about what causes the unease and who or what is responsible begin to emerge. Individuals participate in the mass behavior, while the unrest is no longer individual but becomes much more collective, exoteric and overt (Hopper, 1950). As the movement becomes more strategic, mass demonstrations and protests may arise to show their power and also to state clear demands.

The third stage is called bureaucratization or alternatively formalization with high levels of strategic organization and coalition (De la Porta & Mattoni, 2015). At this stage, social movements have had some success in raising awareness of the need for a coordinated strategy, and their political power is higher compared to the previous phases, as they may have more regular access to political elites. Therefore, social movements can no longer rely on mass rallies or inspirational leaders to advance their goals and build constituencies, but must rely on trained staff to perform key functions (Christiansen, 2009).

The final stage of the social movement life cycle is called decline, or “institutionalization.” There are four different ways in which social movements can decline, and these are repression, co-optation, success and failure (Bromley et al., 1999). These ways are briefly described below:

- Repression occurs when political authorities use measures to control and destroy social movements or to justify attacks on them, declaring them as dangerous to public order.
- Co-optation occurs when the leaders of the movement come to relate more with authorities rather than with the social movement constituents, by integrating into the system and taking on its values, instead of the social movement's values.
- Some social movements are successful just because they are successful, and they finally manage to meet their initial goals. Smaller and localized movements with very specific goals are often more likely to succeed.
- Failure of social movements usually occurs due to organizational or strategic failings common and is mainly related to factionalism and encapsulation.

It is important to consider the four stages of a social movement's lifecycle, as they can help the participants to assess the effectiveness of the strategies they are using. For example, in the coalescence stage they need to advance to the next level of development and can be anticipated, in order to increase their power and influence (Christiansen, 2009).

2.3 Social movements and policy making process

The output of the literature review of the previous paragraphs can serve as input for the analysis of the case studies. In the following section, the report will map the specific theoretical framework that will guide the analysis of the cycling policy decision making process in Amsterdam, Dublin and Stockholm. This framework combines the MSF key components as described by Kingdon with the social movements theory in order to better assess the way in which social movements affect the legislative policy and to properly explain how they can successfully influence a policy change to happen. Three working hypotheses are presented which will be then tested in the next chapter.

The ways in which movements make a difference are complex, covert and take much longer to emerge from the news coverage of a single demonstration or even an entire protest campaign (Meyer, 2003). They can affect local communities in various ways, some of which are intended and some others are unpredictable. Assessing the extent of their influence is complex as their impact also partially depends on the characteristics of the community in which it is embedded (McVeigh, Neblett & Shafiq, 2006).

In an interdependent setting, external influence due to social movements can either directly or indirectly influence policy-making. The problem stream can be altered in several ways. Social communities or even politicians can determine key roles in shaping debates surrounding whether problems are worthy of attention or policies are acceptable (Fowler, 2020). Social movements can be such communities, presenting the ability to influence the problem stream. Social movements that, as described above, are a form of organized activism, which can contribute to the perception of the problem and influence public opinion, but also the political arena. They can influence society, and also bring attention to an issue that is considered as important, according to their interests. Although almost an infinite number of problems could be considered in the problem stream, social movements can engage in a diagnostic framing way in which certain problems can be reported and considered important by major stakeholders (Ritter, Hughes, Lancaster, & Hoppe, 2018). Because of the popularity of their arguments, or more often than not the power of their support, they can persuade the authorities to reconsider and possibly change their policy preferences (Meyer, 2003).

It is worth stating the definition of Amenta, Caren, Chiarello and Su (2010) for social movements as actors or organizations that seek to change power deficits and carry out social transformations through the state by mobilizing common citizens to take political action. Movements can be influential in the agenda-setting phase of policy-making, where mobilization may help an issue gain recognition, or shift views about what is politically feasible (Johnson, Agnone & McCarthy, 2010). Mobilization can result in the strengthening of internal solidarity and identities, the creation of anti-civilizations, the shift of the public's attitude towards a given issue and so on (Giugni, McAdam & Tilly, 1999). Indeed, the activists that participate in these movements have the power to influence corporate social responsibility, organizational change, and legislative policy making (Bosi, Giugni & Uba, 2016).

2.3.1 Developing Hypothesis 1

The relationship between social mobilization and policy change tends to be very complex. The mobilization on critical issues is seldom carried out by a single group, but rather a different range of actors with different interests. These actors usually utilize a variety of strategies and tactics to bring about change, such as political disobedience, lobbying, public education or boycotts (Taylor & Van Dyke, 2004). Although we tend to think only about the most visible symbols that social movements use such as the large scale protests, social mobilization is a very broad concept which involves many forms of tactics to engender change (Piggot, 2018).

As described in the life cycle of social movements, at the stage of emergence, social movements and their participants act as agitators. These agitators aim to raise public awareness and strengthen the sense of discontent among the general population (Christiansen, 2009). Following the definition of Amenta, Caren, Chiarello and Su (2010) social movements are constituted by actors and organizations that aim to change power deficits and to carry out social transformations through the state by mobilizing regular citizens for sustained political action. Thus, activists aim to raise public awareness of the significant events that are taking place, as this is an intermediate step to reach out to government agencies. Indeed, in some cases they intentionally try to shape public opinion by framing the issues, in order to affect policy (McAdam, & Tarrow, 1997). After all, the public is subject to vast numbers of attempts at persuasion, and some of these successful persuasion attempts are accountable for significant changes in public opinion that lead to policy change (Burstein, 1998). In the past, many researchers have highlighted the relationship between public opinion and politics, noting that, especially when political issues are taken seriously by the general public, a clear and visible change in public opinion forces authorities to adapt their policies (Burstein et al. 1995, Costain & Majstorovic, 1994).

Looking at social movements that occurred in the past, the public has often been a major target of social movement activity and the literature findings indicate that shifts in public opinion very often result from such activities (Banaszak & Ondercin, 2016). Social movements turn to public opinion in order to make it an ally, as they can benefit greatly from their support and increase their legitimacy as political actors in front of the political authorities (Giugni, McAdam, & Tilly, 1999). Indeed, they provide informational clues to the public, and/or frame issues in particular ways, and consequently these actions help public opinion to align with particular political positions (Zaller, 1992). To achieve so they follow different tactics based on the conjuncture. It is a fact that the Government often tends to neglect or ignore public opinion when the public does not pay sufficient attention to important issues (Jones, 1994), and this is one of the reasons why social movements strive to activate the public.

Many scholars argue that the most effective tactic of social movements is their ability to create innovative and disruptive tactics, as this is their most powerful resource to achieve their goals (Piven & Cloward, 2012, McAdam & Tarrow, 1997). Especially when the society is more vulnerable or receptive to challenges, it is more likely for the disruption technique to work (Giugni, McAdam & Tilly 1999). In simple words, when society as a whole is already divided over fundamental issues and there is a general dissatisfaction or instability, it is very likely that individuals will pay attention to issues that those who present them create a disruption around them. The purpose of this disruption creation is to pursue the public opinion about a situation that according to social movements activists is problematic.

Hypothesis 1: *Social movements tend to define a certain condition as a problem or frame a particular policy issue (problem stream in MSF), and then influence the public opinion in order to attract governmental attention and achieve policy change.*

2.3.2 Developing Hypothesis 2

The long-term goal for people involved in social movements is to manage to change public policies. In order to have a substantial impact on public policy, social movements need the support of strong political allies who take up their claims in the institutional arenas (Tarrow 1994). To achieve this, they tend to keep close interaction with government agents that have the power and authority to intervene in the policy-making process. Indeed, the long-term view of social movements on the policy process has a potential influence arising from incorporation into current governance mechanisms (Rochon & Mazmanian, 1993). A series of studies underline the importance of the political environment within the context of social movement success (Barkan 1984, Goldstone 1980, Kitschelt 1986). As it was analyzed in the previous section, in the stage of bureaucratization they have higher political power, which means greater access to political elites. This political elite constitutes the group of powerful people who hold the ability to determine the political changes within a society.

Social movements can influence policy, but this is also correlated with the electoral competition and often limited by the ability of legislators and citizens to pay attention to many issues simultaneously (Giugni, McAdam & Tilly, 1999). However, although movements may fail to totally alter particular policies, they can still have a significant effect in the policy process by gaining attention from the governmental power-holders (ibid.), and consequently play a role in shaping future decisions. For example, they can gain access to valuable resources such as social networks and organizational infrastructure that can enable future movements to succeed (McAdam, 2003). Another benefit regardless of movements' final success or not, is their ability to shift the political discourse in such a way that moderate alternatives to the policies promoted by the movement gain further attraction (Schifeling & Hoffman, 2019).

Social movements can change not only the essence of politics, but also the way a policy is shaped. It is not uncommon for governments to create new institutions in order to follow up to social demands (Meyer, 2003). In addition, politicians can get credits for involving citizens in the policy making process following the so-called "political inclusion", as a way of shirking responsibility for unpopular decisions while gaining credit for statesmanship (Vaubel, 1986). Besides, it is very likely that political authorities may want to include challenging groups, such as social movements, in the policy process in order to support dissenting organizations for politics and help politicians monitor bureaucratic performance (Rochon & Mazmanian, 1993). However, it is true that not all issues raised for attention by inspirers inside or outside for policy adoption or impact are taken seriously. For example, actors in any political arena may attempt to use the issue framing as a means to position themselves favorably among their supporters or to divert attention from defeats in other fields. This can also be seen as an indication that the policy-making process is not as "rational" and technical as it sometimes turns out (Howlett, Ramesh & Perl, 2020).

It is also known that politicians easily get the most credit for solving problems with the least effort, following the "fire alarm oversight" mechanism (McCubbins & Schwartz, 1984). Legislators seek to enhance their political careers and meet the demands of challengers such as those from social movements, when they perceive them either as powerful or when they see social and cultural demand

signals for policy reform (Cornwall, King, Legerski, Dahlin, & Schiffman, 2007). Promoting their beliefs about good public policy is the main goal of politicians, but is seldom pursued when associated with the risk of electoral defeat. Thus, they tend to support policies with the potential to increase the number of votes they believe their actions will win or lose in the election (Giugni, McAdam & Tilly, 1999). In other words, while changing public opinion can be a good incentive for legislators as it reduces concession costs, it will only enable individual legislators to take action if they see it as beneficial to their electoral prospects (Amenta, 2014). To stir the politics stream, social movements attempt to influence the national or local mood by means of motivational framing that urges the public for a call to action (Sunio, Peckson & Ugay, 2021).

Hypothesis 2: *As social movements are powerless, they aim to influence governmental groups, which are represented by the interest groups in the political stream in the MSF, in order to trigger a change in public policy.*

2.3.3 Developing Hypothesis 3

While going forward, a key question is whether some aspects of social movement better account for its success. Klandermans (1984) argues that successful social movements are created by both the successful mobilization of resources and the development of political and economic alliances for the members. As discussed at length above, social movements are constituted by powerless members and the need of political actors' support in order to bring about policy change is great. Scholars such as (Tarrow, 1994 & Kriesi, 1995) have strongly pointed out the need for movements to get political support by powerful allies within the institutional arenas. However, while interacting with powerholders, challengers must also activate "third parties" in order to enter the bargaining arena and to succeed (Jenkins and Perrow 1977). Furthermore, social movements need public support, and more specifically the support of a favorable public opinion if they wish to achieve their claims (Costain & Majstorovic, 1994). In brief, movements need the help of various mediators and means such as common individuals, governmental and other third parties in order to force the political authorities to reconsider and modify their policies accordingly.

Reminding Kingdon's model structural components in policy processes, politics, problems, and policies independently stream until policy entrepreneurs couple them together during policy windows. This coupling of all the components is very likely to bring policy changes and also policy adoption to happen (Herweg & Zahariadis, 2018).

Firstly, problem streams are a combination of socio-economic and environmental conditions that exist in society. These conditions become problems when they are identified as "non-ideal" and attract the attention of policy makers by focusing on facts, comments or indicators (Fowler, 2020). This mainly happens when social movements point out certain situations as problematic and inappropriate. Second, politics streams include the political atmosphere and the competition between value-based decisions that include who should benefit, which issues should be prioritized, and how policy should be interpreted (Fowler, 2020). Politics streams are influenced by the members of the movements who try to attract their interest and influence the political atmosphere. Additionally, within this stream, advocacy movements can employ motivational framing to call to action, provoke, stir the national mood and call on the government to follow up (Sunio, Peckson & Ugay, 2021). Third, policy streams consist of a substance of ideas or potential solutions about what needs to be done about existing problems, and these ideas are usually generated by policy experts and disseminated through policy communities based on

technical or political expediency (Herweg, Zahariadis, & Zohlnhöfer, 2018). These possible solutions or in other words alternative strategies that can be applied to the issues are framed by experts who do not neglect what public opinion demands through various movements. Fourth, policy entrepreneurs aim to manipulate the policy streams to promote certain perspectives, while trying to convince decision and policymakers that a particular choice is politically acceptable to solve a major problem (Zahariadis, 2005). In the case of social movements, as policy entrepreneurs are likely to enact the intermitting “third parties” that help activists to access the bargaining arena and to succeed. Last but not least, the fleeting opportunities called political windows are those moments when the problem gets enough attention from policymakers, there is a viable policy solution and the politics is open to change.

Overall, all three policies, policies and problem streams affect the policy process and the extent of this depends on an interaction between the three. In fact, when policy entrepreneurs utilize these opportunities, policies can change and new policies might be adopted (Herweg et al 2018 & Kindgon, 1995).

Hypothesis 3: *Social movements are likely to be most effective, when all the conditions of MSF are satisfied and well aligned. In other words, all the three streams should be present, together with a policy entrepreneur and a window of opportunity.*

Finally, Table 3 below summarizes all the hypotheses developed in the theoretical framework, as they will be used to analyze the selected cases.

Hypothesis	Statement
<i>H1</i>	Social movements tend to define a certain condition as a problem or frame a particular policy issue (problem stream in MSF), and then influence the public opinion in order to attract governmental attention and achieve policy change.
<i>H2</i>	As social movements are powerless, they aim to influence governmental groups, which are represented by the interest groups in the political stream in the MSF, in order to trigger a change in public policy.
<i>H3</i>	Social movements are likely to be most effective, when all the conditions of MSF are satisfied and well aligned. In other words, all the three streams should be present, together with a policy entrepreneur and a window of opportunity.

Table 3: Theoretical framework hypotheses

Chapter 3 Research methods

The report used a mixed method design to test the hypothesis H1-H3 developed in the theoretical framework using the three cases of Amsterdam, Dublin and Stockholm which have been chosen from the selection procedure among various possible cases.

3.1 Case studies selection procedure

The case studies have been selected based on specific criteria and characteristics to leave room for comparison among them. The distinctive factors that determine the selection of the cases are the following:

- Similar geographical characteristics. These are the city size, population, growth, urban density and geomorphology. The cities that have been examined present similar geographical characteristics.
- A national policy for cycling promotion for all the case studies under consideration is established by the Government. The extent of the policy adoption based on the total trips done by bicycle in urban areas, on the availability of traffic rules and regulations for cyclists and their vehicles and on the sufficiency of cycling infrastructures is another key factor. This is an important element as research examines the extent to which policy has been successfully adopted and implemented under the perspective of the social movements' influence on it. A one to 1 to 5 rating scale has been used in order to classify the strength of the policy change, based on the reputation of the cities as cycling friendly destinations and on the modal splits. For this purpose, the national strategies promoting cycling have been studied and assessed.
- Gross Domestic Product (GDP) per capita (per person). It is critical to select cities/countries with similar financial performance, as this can strongly contextualize which policies and in which domain they emphasize on.
- The lifestyle among the local societies and communities should be similar, in order to draw valid conclusions and have a fair base for comparison among the cases. Lifestyle refers to the interests, views, attitudes and behavioral orientations of an individual, a group of individuals or a culture. It is a combination of defining intangible factors such as demographic variables and intangible ones such as the psychological aspects, personal values and preferences (Kahle & Close, 2011). For this purpose, only European cities have been selected, where countries and particularly the citizens present similar lifestyle behaviors and there is a broad common pattern in the cultures.
- A very important pillar of this research set is the existence of social movements. However, it is not always straightforward to point out the existence of such advocacy groups. To overcome this barrier, a one to 1 to 5 rating scale has been used. Number 5 represents the strong indications for the existence of social movements that played a role in the deployment of bicycle policy, while number 1 represents the low evidence of social movements' occurrence. The social

movements' existence has been examined at a national level, therefore cities that belong in the same country may have the same rating.

- Finally, the accessibility and availability of data regarding the cases is another critical factor that will be taken into account along the research.

Table 4 lists all the European cities that have been selected as possible case studies for this research based on the distinctive factors that have been analyzed above. An extensive version of the characteristics of these studies can be found in the Appendix.

Country	City	City Area (km ²)	Population	Urban density (people/km ²)	GDP per capita (USD)	Social movements (1 to 5)	Policy change & adoption
Netherlands	Rotterdam	324.14	623,652	3,043	52,331.32	5	5
Netherlands	Amsterdam	219.32	872,680	4,439	52,331.32	5	5
United Kingdom	Edinburgh	264	518,500	1,828	42,330.12	3	4
United Kingdom	Leeds	487.8	793,139	1,430	42,330.12	3	4
United Kingdom	Glasgow	175	612,040	3,555	42,330.12	3	4
Denmark	Copenhagen	179.8	632,340	4,600	60,170.34	1	5
Sweden	Malmo	332.6	344,166	4,049	51,615.02	3	5
Sweden	Stockholm	188	975,904	4,200	51,615.02	4	4
Norway	Oslo	405.75	697,549	1,645	75,419.63	1	5
France	Strasbourg	240.2	284,677	1,900	40,493.93	1	4
Finland	Oslo	480.75	693,494	1,400	48,782.79	1	3
Germany	Karlsruhe	173.46	312,060	1,800	46,445.25	1	3
Ireland	Dublin	117.8	554,554	4,811	78,660.96	4	3
Slovenia	Ljubljana	163.8	295,504	1,712	25,946.18	1	5
Belgium	Antwerp	204.51	529,200	2,600	46,420.66	1	3
Spain	Seville	140	702,386	4,900	29,600.38	1	4
Austria	Vienna	414.78	1,911,191	4,326.10	50,137.66	1	3

Table 4: Possible cities to be selected as case studies

3.2 Final case studies selection

In order to increase the quality of the research in a multiple-case design, the selection of cases needs to be driven by appropriateness and adequacy. Appropriateness is about demonstrating a fit to both the purpose of research and the phenomenon of inquiry, while adequacy determines how much is enough or in other cases (Shakir, 2002).

Considering the limited time of a thesis project, the purpose of the research and the fundamental need for generalizability of the results, the report will proceed with three cases. The research objective is to deeply emphasize on how social movements affect legislative policy, especially in the field of cycling policy. In particular, the report will focus on how social movements can lead to the adoption of a policy and promote the implementation of that policy. Therefore, after carefully examining the list of possible case studies that have been developed in the preparation phase, the rest of the report will proceed based on three cases that seem to present the characteristics that fit most for this type of research. They satisfy most of the criteria set above; they are all European capital cities with similar urban area, density, population, GDP, and there are both national and local cycling policies established. A major pillar of the research is the existence of Social Movements. Indeed, all the selected cases present strong evidence of very active cycling activism.

The key difference among them is about the pro-cycling policy adoption and the subsequent implementation of that policy. In particular, there is a variation in scale/speed of policy adoption, implementation, and success among them. The statistics on the average km/day and number of trips cycled as indicated by the report of the European Commission can measure some form of success, and are presented in the next paragraph.

Firstly, the Netherlands, and especially Amsterdam is a place where cycling presents a successful story with many people actually riding their bikes daily. According to the European Commission, 3.27 km/day and 0.85 trips/day are done per person in Amsterdam, indicating the dominance of bikes. Sweden, and particularly Stockholm, is a city where people tend to cycle a lot, but not that much as in Amsterdam. In Sweden the numbers are relatively smaller, with 1 km/day and 0.5 trips/day done per person by bike. Finally, Ireland and especially its capital -Dublin-, is a place where despite the various cycling advocacy groups that occurred from the 90s till today, very few people have integrated cycling in their life, as the trips made by bike are significantly lower compared to the other two cities. It is worth stating that only 0.20 km/day and just 0.02 trips/day are reported for each person in Dublin. This variation would allow us to examine whether the strategies and influence of social movements differed in three otherwise reasonably comparable cities. Some further details are presented below:

The Netherlands is a country where a strong social movement emerged in the 70s and managed to significantly influence the political landscape by pushing the Government to adopt a favorable policy for cycling. A great part of the series of events took place in Amsterdam, where the social movement “Stop de Kindermoord” focused on influencing the local councils and actors. The success of the movement is proven by the favorable cycling regulations that followed afterwards. Today, Amsterdam is considered a cycling paradise for bike lovers, while this sustainable means of transport counts more than 35% of the trips within urban areas (Statistics Netherlands, 2016). Amsterdam is a case with an established policy both nationally and locally, and a successful implementation of the adopted strategies. This case will offer valuable insights about the ways in which social movements push the authorities towards adopting a policy. The MSF and the theoretical framework will support finding the contextual factors and conditions that are necessary for a movement to affect the legislative processes and bring about significant policy changes.

Ireland is a county where cyclists constantly demand governmental attention to actually implement the national cycling policy and proceed with investments in transport infrastructure. Recent data indicate lack of infrastructures and unsafe cycling paths, especially in the capital city. The absence of proper facilities - particularly in Dublin, triggered the creation of independent, voluntary teams pushing local and national governments to bring about improved conditions for cyclists and greater recognition of the benefits of it. Although from time to time there have been various plans to promote cycling both nationally and locally, their implementation has never yielded the greatest results. This case presents a recent wave of movements complaining for the lack of implementation, and another phase of movements in the 90s which seems to have not managed to adequately influence the policy arena as extensively as in the case of Amsterdam. A favorable cycling policy has been adopted nationally, and many complementary measures followed in Dublin, while the final implementation of the objectives seems insufficient. The ways in which movement’s activities influence the policy implementation-after the policy is already established- will be better highlighted via the analysis of this case, while the practices used by these two movements will be compared with those used by “Stop de kindermoord” in Amsterdam.

Sweden is a place with evidence of social movements occurring in the literature. From the 30s till today there have been three expressions of contemporary bicycling activism and advocacy that reflect divergent goals, strategies and modes of organizing. These initiatives are the well-established Swedish national cycling advocacy organization “Cykelfrämjandet”, the municipalities association “Svenska Cykelstäder”, the organization “Svensk Cykling”, the ad-hoc “Ghost Bike Sweden”, and a very recent on-line group called “Bike Maffia”. These advocacy groups collaborated and supported the political structures on both national and local level towards the development of bicycle-friendly policy. The priorities of the national strategy have been set in 2014, and these include new bike paths, safer roads and awareness raising about how to ride a bike safely. In the same year, a regional bicycle plan was developed for Stockholm. This third case is characterized by a highly decentralized way of governance, compared to the other two cases. The analysis of the case of Stockholm will contribute major clues about the ways in which social movements target the responsible authorities from city to city to adopt a policy, how this can affect what is happening also at the nation level, and also the reverse.

3.3 Data collection

The majority of the data was qualitative meaning they were in the form of words. The data for the process trace were obtained through various sources such as online scientific sources (Web of Science, Scopus) and via different types of media archives (television, radio, newspapers, magazines, blogs and online websites). In addition, 10 interviews were conducted with stakeholders from Amsterdam, Dublin and Stockholm in order to understand the factors that influence the success of the social movements in achieving changes in the field of cycling policies.

Therefore, the form of the data was articles, scientific papers, interview notes, transcripts of focus groups, answers to open-ended questions, transcriptions of video recordings, newspapers or magazines articles. It should be pointed out that national newspapers usually contain information and news that are nationally applicable, without deeply emphasizing on the local events that often occur. For this purpose, the tension was to dig into local newspapers of the corresponding cities that give space to analyze milestone facts for the cities. The time of publication was another important factor in the choice of print media, and for this I emphasized on newspapers or magazines (especially digital archives of them) that were published just before the policy adoption but also just later.

3.4 Interviews

Interviews can be either structured or unstructured, and a combination of both is also possible. For the purpose of this research a combination of both types of interviews was the optimal strategy, called semi-structured interviews. More specifically in the first part of the interview, a set of questions has been asked in a logical order, starting with the “warm-up” and then moving to the main ones. After obtaining the information needed via the answers in the first part, the second part was less planned and adjusted based on the answers given, in order to drive the discussion in paths that seem valuable for the research.

The reason for conducting interviews with people who are more knowledgeable in the three cases is to explain and better understand the process of policy-making in favor of cycling - especially the contribution of the social movements on it, to clarify questions that arose during the analysis of the findings of the cases and also to hear the respondents' opinion in the developed hypothesis based on their experience. In the beginning of the research it was difficult to estimate how many people would be available or willing to be interviewed and contribute with their knowledge to the research. However, for each of the case studies (Amsterdam, Stockholm and Dublin) three participants accepted the

invitation and agreed to participate in the interviews. The potential candidates for the interviews were firstly identified through analysis of the advocacy groups and organizations' websites as well as governmental departments responsible for cycling policies in the three cities. Indeed, the participants were relevant stakeholders in the field of transport policy making process and people who were actively involved in activism groups or social movements aiming for better cycling conditions. They were approached via mail, and the subsequent interviews were carried out via MS Teams or Zoom, with each interview being about 30 to 60 minutes depending on their time availability, willingness to discuss and in the flow of the discussion. Interview questions with members of the movement focused on the relationship between social movements and the policy-making process based on their experience and participation with such groups, how these groups were created, their approaches and activities, and their vision on how these groups can make successful changes. Interviews with representatives of the authorities responsible for cycling measures sought to highlight whether the role of the social movement had a real impact on developing policies in order to triangulate the success of these movements and their views on social movements. The material from these interviews was recorded, transcribed and coded. The details of each of the participants are presented in Table 5.

Respondent	Name	Role	Case	Date of Interview
Respondent 1	Maartje van Putten	Co-founder and chairman of "Stop de Kindermoord"	Amsterdam	22.05.2021
Respondent 2	Bert van Wee	Professor in Transport Policy at TU Delft	Amsterdam	01.06.2021
Respondent 3	Marjolein de Lange	Co-author of the book "How Amsterdam became the cycling capital of the world"	Amsterdam	25.05.2021
Respondent 4	Joan O'Connell	Active member of I-BIKE-Dublin and recent member of Dublin Cycling Campaign	Dublin	28.05.2021
Respondent 5	Vanessa Sterry	Active member of I-BIKE-Dublin	Dublin	31.05.2021
Respondent 6	Stephen McManus	Co-founder of I-BIKE-Dublin and CyclingWorks Dublin	Dublin	21.05.2021
Respondent 7	Ulf Eriksson	Strategic planner & Cycling Coordinator in the Regional Cycling Office in Stockholm	Stockholm	28.05.2021
Respondent 8	Klas Elm	Chairman of Svensk Cykling (Swedish Cycling)	Stockholm	1.06.2021
Respondent 9	Emil Rensvala	Operations Manager of Svenska Cykelfrämjandet, Secretary of Riksdag's bicycle network	Stockholm	04.06.2021
Respondent 10	Emilia Sternberg	Project manager at Cykelfrämjandet	Stockholm	09.06.2021

Table 5: List of participants in the interviews conducted for the research

3.4.1 Advantages and disadvantages of online interviews

Looking at the advantages of conducting the online interviews, it is worth saying that despite the Covid-19 restrictions I managed to approach people who live and work in three different countries in a relatively short period of time. From the respondents' point of view, it eliminates any discomfort that some of them may feel when facing the researcher (Sekaran & Bougie, 2016). It is also easier for them to spend some time on an online interview than on a face-to-face one, as it requires less time and no hassle. However, one limitation of this research method is the fact that all the interviews were not carried out face-to-face. This way of interviewing can possibly influence the interviewer's contact with the interviewees. Firstly, an online interview is more impersonal than a face-to-face one and is hard to build a trustful relationship and a very good contact between the two. Moreover, it is difficult to observe the

body language, the facial expressions and the several gestures of the participant. This can affect the interpretation of the answers given and therefore requires further questions to clarify any ambiguities. Finally, online interviews enable respondents to avoid talking about topics that may be of interest to the researcher, without giving the latter the opportunity to emphasize them.

3.5 Process Tracing

Process tracing is a method to explain change and causation used to evaluate and develop theories in social sciences, by drawing inferences on the basis of causal mechanisms (Bennett & Checkel, 2015). In this method multiple data points such as observable implications are collected, together with alternative explanations that are inconsistent with the theory, and then they are tested empirically. As this method is often used to complement comparative case study research, it would make a good contribution to my analysis. By tracing the causal process from the independent variable of interest to the dependent variable, we have the possibility to exclude potentially intrusive variables in cases where they do not match. Consequently, this creates a stronger basis for attributing causality to the other independent variables (George & Bennett, 2005). For this research, a similar but less rigorous approach was followed, as some of the events that are being analyzed took place many years ago, meaning that observable implications might be limited. The MSF model was used to explain agenda dynamics to examine policy adoption and implementation.

3.6 Content Analysis

The content analysis aims to find common patterns across a data set. The analyzing process starts with the deep comprehension of the data, proceeds with the labeling phase while searching for themes with broader patterns of meaning, reviewing and defining whether these themes fit the data, and finally arrives at the write up and creation of a coherent narrative that includes the most valuable quotes. Content analysis enables the researcher to analyze (large amounts of) textual information and systematically the regular presence of certain words or concepts (Sekaran & Bougie, 2016). In the following section the narratives for the three cases will be presented.

Chapter 4 Relevant background for the cases

4.1 Examining the cycling policies in the three selected cases

Transport policy is changing and the development of cycling policy around the world is an indicator of this. Whether driven by environmental movement, climate change or changes in urban culture, transport policy is an important area in shaping the future of cycling (Tschoerner-Budde, 2020). In the majority of the countries around the world, cycling policies and programs are considered primarily, if not exclusively, a matter of local government, with only limited involvement of the central government (Pucher & Buehler, 2007). However, it is a fact that national policies set the conditions on what can happen on a city level, by providing the contextual framework. Thus, before emphasizing on a local level, it is wise to start with a comparison between the countries. This chapter presents the relevant background about the cycling policies that have been established in the three cases along with other ways that each country promotes cycling as a common means of transport.

4.1.1 Netherlands

Netherlands is a well-known -under the sea level country- for the canals, the windmills, the innovative water management policy, and also for the numerous bicycles travelling around in the country. As the country, and especially large urban cities such as Amsterdam and Rotterdam, is very densely populated over short distances, cycling is considered an ideal means of transportation. Indeed, the Netherlands belongs to the countries which have successfully promoted cycling for everyday commuting. At this point, it should be mentioned that the popularity of bikes is not related to inability to afford other expensive transport modes, as the level of car ownership in the country is one of the highest globally (Pucher & Buehler, 2008). In addition, bicycle ownership rates are similar between different income categories (ibid.) According to the report of the European Commission, 36% of the Dutch population prefers to use bicycles as their main means of transport on a typical day, while only 11% chooses public transport and 45% private cars (Quality of Transport, 2014).

In the Netherlands the greatest growth in cycling transportation took place from the 1970s until the early 1990s. The events that brought about this social change in bicycle use were public frustration with road accidents, especially of young children, the great oil crisis of 1973, and a common belief that car use had been obsolete (Wardlaw, 2014). In particular, in 1973, a campaign called "Stop de Kindermoord" or "Stop the Child Murder" started in the Netherlands, referring to the car accidents in which many children were suddenly killed. Indeed, a large number of people organized great and continuous protests against this high rate of child deaths on the roads, which lasted for months (Wagenbuur, 2013). This social movement prompted the Dutch government to look for other modes of transport that could be safer, less dangerous and more socially acceptable.

Starting with the established cycling policy in the Netherlands, the latest national cycling strategy document has been set for the period 1990-1997, and it was called 'Masterplan Fiets' in Dutch or Cycling Master Plan in English, providing the national guidance while the regions are in charge of the development of cycling. This is because it is the responsibility of municipalities and provinces to build cycle paths and encourage the use of bicycles (European Cyclists Federation, 2021).

The Ministry of Infrastructure and Water Management has a leading role, and closely works with other Ministries to better implement bicycling in Dutch society. In this Agenda, the Dutch government utilizes the power of cycling in an integral implementation process based on mobility, spatial planning and sustainability. Although the Dutch cycling share is high, there is still room for further growth, as many commuters still travel to work by car (Government of the Netherlands, 2019). The Tour de Force is a partnership between governments, market participants, social organizations, knowledge institutes and platforms, which is committed to develop a stronger cycling policy in the Netherlands and achieve this further growth (Tour de Force, 2019). More specifically, the very ambitious objective of Tour de Force is to manage to increase the number of kilometers cycled by 20% in 2027 compared to 2017. To achieve this, the following 9 goals have been set:

1. The Netherlands continue to be the leading country for bicycles
2. Create more space for cycling in all cities
3. Increase quality on busy and important regional cycling routes
4. Optimize the transition between public transport and bicycle modes
5. Targeted promotion of cycling
6. Reduce cycling accidents
7. Reduce the number of stolen bikes
8. Increase knowledge about cycling
9. Set environmental visions

In addition to the national cycling plan, it is also worthwhile to analyze some of the innovative ways in which the Dutch government encourages the use of bicycles. First of all, the options for promoting bicycle use generally concentrate on distances of up to 15 km, in order to avoid any tailbacks. If more people choose to ride a bike instead of driving to and from work over such distances, the tailbacks at peak hours will be significantly reduced. Cycle Highways are fundamental not only within cities but also between them. The government has encouraged municipal and provincial authorities to establish appropriate regional cycling routes and there are currently more than 25 cycle superhighways in use or under construction (Government of the Netherlands, 2021).

To continue with, the Government is encouraging employers to provide good facilities for cyclists to their employees, as they can also benefit if their employees cycle to work. Some of their advantages can be the savings on parking costs, the less absences due to illness, and the better shape of employees. For this reason, the government invites employers to give a mileage allowance to cyclists. Simply put, employers can pay cyclists a mileage allowance of up to € 0.19 per mile, the same price as staff traveling by car to work. It is worth mentioning that this mileage allowance is tax-free, and this is also in the benefit of the employers. Lastly, another measure the Government promotes is to simplify the tax rules with regard to the use of company bicycles for private purposes, and this is in force from the 1st of January 2020 (Government of the Netherlands, 2021).

In recent decades, the Netherlands has managed to increase the total number of cycling trips while reducing the number of deaths and injuries of cyclists (Pucher & Buehler, 2016). The country's cycling accomplishments, and the success story that lies behind this achievement, can offer valuable lessons for cities in other European countries. Nowadays, the Netherlands is considered the ideal country for

cyclists, as there are more bikes than locals. According to Eurobarometer, in the Netherlands cycling is mostly developed compared to other European countries (European Cyclists Federation, 2021). In particular, longer trips by bike are more numerous than in any other country, as Dutch people do not cycle only for short distances.

4.1.1.2 Amsterdam

Amsterdam is the capital city of the Netherlands, and presents the following demographic characteristics (StatLine, 2021):

- City area is 219.32 km²
- Population of the city is 872,680, and of the urban area it is 1,558,775
- Urban density is 4,439 /km²

Non-motorized transport determines a central position in Amsterdam's transport policy, as the concerns about quality of life and air pollution constantly increase at a global level. With the implementation of the bicycle policy program "Choice for cyclists: 2007-2010", the city has begun to improve the cycling conditions by spending about €40 million of city funds on various projects (City of Amsterdam, 2007). The total amount of funding reached €70 million thanks to some extra funds from other levels of government.

A big part of this money has been used to improve bike parking facilities and guarded bicycle garages, while traffic calmed areas (with a speed limit of 30km/h) have been expanded. In addition, a significant amount has been invested in cycling education, public relations campaigns and other promotional activities designed to increase cycling among young people and other groups in society who tend to cycle less frequently. Bicycle education in schools is fundamental for the Dutch population as it further acquaints children with cycling and teaches the necessary rules of traffic safety and road behavior. Bicycles are provided free of charge in schools by the city government so that students can learn how to ride a bicycle safely in Amsterdam (de Lange & Feddes, 2019).

To continue with, Amsterdam made many efforts to integrate bicycles and transportation planning in all areas of the city and in many parts of the city administration. In particular, the traffic and transport infrastructure department (DIVV) is responsible for coordinating and harmonizing all cycling efforts throughout the city, integrating transport and spatial development plans. Another program by which the city tried to strengthen cycling was towards combating bicycle theft. In 2006 Amsterdam announced its goal of reducing bicycle theft to 6% of all bicycles by 2010, as an increased share of them had been stolen in previous years (City of Amsterdam, 2007). To achieve so, a comprehensive approach has been introduced and this consists of official bicycle registration, collaboration with shops, and strict police checks on cycling ownership. More specifically, the Government promotes engraving unique codes into the bike frame and registration of this code in the police, in order to easily detect the stolen bikes during regular checks. For this purpose, a special website has been developed specifically for the simple reporting of bicycle theft issues (Theft Bicycle- Dutch police). Close to this, bicycle shops adopted a common policy, not to repair, buy or resell any bike that could possibly be stolen, together with the local police that steps up checks on bike ownership and potential bicycle theft.

Looking at the traffic safety of the city, in 2005 there were 40% less severe cyclist injuries and deaths from traffic accidents than during the mid-1980s. Furthermore, as for the city's bike infrastructure, in 2007, the city of Amsterdam had a total of 450km of bike paths which two years later was increased by

200 km, and three important bridges and tunnels connecting the main bike network were constructed. Another way of promoting cycling in Amsterdam was the restriction of car access to the city center and the creation of roads solely reserved for pedestrians and cyclists. It is also worth mentioning that parking spaces in the city center have significantly decreased since the 1970s, while the fees for the remaining car parking spaces have substantially increased (Langenberg, 2000). Unlike car parkings, Amsterdam has large bicycle parking facilities at its train stations. Last but not least, Amsterdam has pioneered an innovative integration of automobile and bike use by launching a program called “Park and Bike” (Pucher & Buehler, 2007).

4.1.2 Ireland

In 2009, The Irish Ministry of Transport published the "First National Policy Framework for Ireland". According to the national authorities, the creation of a National Cycle Policy Framework is fundamental, as it can be a powerful tool for encouraging cycling in urban areas, while providing a common, integrated basis for long-term cycling policy development and implementation in all the government levels. This document set a clear and very ambitious goal for the development of cycling during the next decade aiming that a genuine cycling culture can be created in Ireland. The target was to manage to make all the Irish cities, towns, villages and rural areas bicycle friendly. Moreover, the Irish authorities wanted to increase the share of cycling from 2% in 2006 to 10% by 2020, which would mean an additional 125,000 people commute to cycling.

The main goal of the comprehensive package of interventions of the Framework to increase numbers of cyclists are the development of physical cycling infrastructure. This can ensure that urban road infrastructure (excluding motorways) is modified accordingly to become more appropriate for bikes and that traffic management measures are also cyclist-friendly (Irish Department of Transport, 2009). In particular, the Irish NCPF 19 objectives covering Infrastructure, Communication/Education, Financial Resources, Legislation and Enforcement, Human Resources and Coordination, and Evaluation and Effects. These will be briefly presented below:

Objective 1: Plan, develop and design the towns in a more cycling and pedestrian friendly way.

Objective 2: Ensure that the urban road infrastructure is designed or retrofitted in order to be cyclist-friendly, while the traffic management measures are also cyclist friendly.

Objective 3: Provide defined rural cycle networks especially for guests and leisure cycling.

Objective 4: Provide bike-friendly routes to all schools, adequate in-school cycling facilities and cycling training for all students at the school.

Objective 5: Make sure all parts used by cyclists are maintained at a high level and well lit.

Objective 6: Ensure that both rural and urban cycling networks are labeled based on an agreed standard.

Objective 7: Provide secure parking for the bicycles.

Objective 8: Ensure proper integration of cycling in public transport.

Objective 9: Provide cities with public bicycles.

Objective 10: Work towards improving the image of cycling and promote cycling using the so called “soft interventions” such as advertising campaigns, events, etc.

Objective 11: Improve cycling standards and behavior on the roads.

Objective 12: Touch up drivers' education as well as driving standards, in order to appreciate and respect the safety needs of cyclists.

Objective 13: Provide fiscal incentives to cycle.

Objective 14: Provide appropriate levels and timely financial resources for the implementation of the NCPF.

Objective 15: Change legislation towards improving cyclist safety.

Objective 16: Improve traffic law enforcement to enhance the safety and respect of cyclists.

Objective 17: Development of an objective structure that can coordinate the implementation of the activities across the many Governmental Departments, Agencies and NGOs.

Objective 18: Properly guide and train design professionals to enable them to develop and implement the policies that are proposed in the NCPF, by enriching their knowledge on the subject of planning for cyclists in Ireland.

Objective 19: Constantly evaluate and monitor policy cycling success to ensure the new measures are implemented.

Cycling as a means of transportation or leisure activity is growing in popularity in Ireland, but with a relatively low pace. Although the Irish authorities aimed to achieve a 10% cycling share by 2006 from 2% in 2006, the target was not achieved. Between the 2011 Census and the 2016 Census, the percentage of the total mobile population that chose cycling as their main mode of transport increased from 2.2% to just 2.7% (Central Statistics Office, 2018). The various measures that have been implemented, such as a bicycle rental program, bicycle purchase programs, reduction of speed limits and the construction of separate lanes to promote cycling seem to have a positive impact as the number of commuters cycling to work started increasing, but the results are still not sufficient (Caulfield, 2014).

From 2019, the Department for Transport, Tourism and Sport launched a public consultation to review Ireland's sustainable mobility policy. This review arose from the Governmental commitment to reexamine public transport policy in order to ensure that services are sustainable for the future and meet the needs of a modern economy (Irish Government, 2019), as in the previous years there have been many indications that transport policy was not sufficient.

4.1.2.1 Dublin

Dublin, is the capital of the Republic of Ireland, considered as eminently cycle-friendly city, and presenting the following characteristics:

- City area is 117.8 km²
- Population of the city is 554,554
- Urban density is 4,811/km²

In 2013, the National Transport Authority published a survey regarding the current cycling infrastructure in the Greater Dublin area, together with precise recommendations for a modern cycling network. The survey results showed that the quality of service provided by the current cycling infrastructure in Dublin was much lower than the standard recommended by the Irish National Cycle Manual (Irish National Transport Authority, 2013). Nearly 4,500 bicycle thefts were reported in Dublin

in 2013, but the actual number of bicycle thefts is likely to be around 20,000 in 2013, according to Irish household surveys (European Cyclists Federation, 2014). In addition, recent researchers have pointed to serious infrastructure shortages in Dublin, suggesting that the lack of proper cycling facilities is related to the fact that one group of the population cycles less (Carroll et al., 2010), and there are still many cycling injuries (Foley et al., 2020).

The Transport Authority of the Greater Dublin Area (GDA) drafted an ambitious cycle network plan, which was published December 2013 in order to improve the existing situation in the field of cycling. This GDA plan aimed to increase the cycling existing network from 500 km in length to 2900 km by 2020. This plan included the active promotion of cycling training programs already provided by some local authorities (such as Dublin City Council) and, subsequently expanding these to all schools by 2020 such as the offer of public bikes such as the OV bike scheme in the Netherlands (Irish department of Transport, Tourism and Sport, 2012). In addition, the Greater Dublin Area Cycle Network Plan noted that the most reasonable way to achieve the national goal was to achieve a much higher rate of cycling in urban areas than the national average, especially in the greater Dublin area, where cycling is already more frequent (Irish National Transport Authority, 2013). These plans have, or will be, incorporated into any relevant Metropolitan Area Transport Strategies.

However, funding for the development of cycling infrastructure was reduced in the years after the publication of the plan due to the financial crisis and only in the very recent years funding that was allocated to support the physical development of these network plans increased. For this reason, many movements promoting cycling were created and flourished while they are still striving for improving the cycling infrastructures. Although the policy adoption that was so sought after happened, the implementation of the plan was not that successful.

4.1.3 Sweden

Moving to the next country, Sweden is a diverse, cycling-friendly country with a well-developed network of bike lanes in and around its major cities and well-marked bike lanes across the country.

In 2014 the Swedish Transport Administration Safer published the “Safer cycling” strategy, a common strategy developed for the period 2014-2020 to enable stakeholders to contribute effectively to an improved level of safety for cyclists. This national strategy is the first for Sweden and symbolizes the government's ambitious goal of joining efforts to promote more and safer cycling, by strengthening positive cycling trends and encouraging people to get on their bikes. It focuses on creating more bicycle-friendly municipalities, improving the knowledge of different groups of cyclists, prioritizing bicycle traffic in Community design and a more functional cycling infrastructure (Government Offices of Sweden, 2017). In addition, it is proposed that the following action areas should be prioritized (Swedish Transport Administration, 2014):

1. Improve operation and maintenance in both winter and summer, in order to reduce the number of serious accidents by up to 45 percent. One way to stimulate the development is for the local authorities to measure the indicator of the maintenance of cycling routes in the context of goal-based management. The key players of this goal are The Swedish Transport Administration, the local authorities and the Swedish Transport Agency.

2. Design cycling infrastructure based on the needs of cyclists, and subsequently reduce the number of cyclists seriously injured by about 15 percent, to achieve extended and safe cycling in the long term. Some of the measures in this area of action include the creation of coherent networks of cycle infrastructure and safe passages, the removal of fixed objects and the reduction of curbstones, improving diversions in connection with road works and safe tram and light-rail lines. The stakeholders involved are the same as those in the first action area.

3. Start development processes for safer cycles and better equipment. Promoting the use of arm and leg pads together with the right usage of bikes can significantly reduce the number of serious injuries is 30 percent, while increased safety technology with emergency braking systems and air bags on vehicles absorbing the crashes, have the potential to decrease the number of people killed even more. The key stakeholders of this principle are Industry, tradesmen, users, insurance companies, local authorities, the Swedish Transport Agency and the Swedish Transport Administration.

4. Promote safe behavior and increase the use of helmets and studded tires. It is fundamental to develop new methods and approaches in order to actually influence the behavior and habits of all the road users in traffic. Campaigns to promote the use of cycle helmets as it is not compulsory according to the law, to counter cycling under the influence of alcohol and use cycle lights and reflectors are some of the measures that are taken by the Swedish Transport Administration. The main actors of this fourth goal are tradesmen, voluntary organizations, insurance companies, the Police, local authorities, the Swedish Transport Agency and the Swedish Transport Administration.

5. Develop knowledge on primarily the risks of accidents and cost-benefit status. It is also needed to enrich the knowledge of the precise distances covered by cyclists to better estimate the risks and benefits of costs. Integrating cycling within the educational system, in universities and institutes of higher education is also valuable to develop knowledge for the road environment. The stakeholders involved are Institutes of higher education and other research environments, industry, consultants, voluntary organizations, insurance companies, the Swedish Transport Agency and the Swedish Transport Administration.

In addition to adopting the national cycling strategy, the government has launched two other important assignments. First, the government commissioned the Transport Analysis, along with other relevant bodies, to design a uniform method for measuring bicycle traffic at local and regional level and to make proposals on how to promote its consistent implementation. Second, the government asked the Swedish Transport Authority to support non-profit organizations in 2017 for information and training initiatives to promote more and safer cycling, with SEK 9 million (Government Offices of Sweden, 2017).

In Sweden, there are three levels of government and these are the national, the regional and the local level, all of them constituted of elected politicians. The local municipalities have historically been very independent, and still have very strong power over land use planning and permitting, road construction and operation, as well as most cycling and walking infrastructure. The national government owns the national road and rail network through its agency "Trafikverket" and is responsible for setting the regulatory framework for transport, partly financing major transport investments (Rye & Wretstrand, 2019). The current national transport strategy for Sweden is set out in the National Transport Plan for Sweden which was developed by the national agency Trafikverket, and applies in the total country. It should be noted and taken into account in the research that in Sweden the regional and, in particular,

the local level is independent of the center and, therefore, it is likely that the national targets only serve as a general guide to lower governance levels (Rye & Wretstrand, 2019).

4.1.3.1 Stockholm

Stockholm is the capital city of Sweden and the most populous urban area in Scandinavia and presents the following characteristics (SCB statistics Sweden):

- City area is 188 km²
- Population of the city is 975,904
- Urban density is 4,200/km²

The capital of Sweden, Stockholm, has in recent years made great efforts to increase the share of cycling in its modal split by strictly following the national plans (Bastian & Börjesson, 2018). The political interest in cycling has grown, as indicated by a major government inquiry which was completed in mid-2012, and was combined with the governmental promise for significant investment in cycling infrastructure (ibid.). Undoubtedly, one of the most important developments is the general strategic move towards a higher priority of cycling and public transport and the allocation of resources to enable the sustainable development of transport infrastructure (City of Stockholm Executive Office, 2007).

As of 2012 there is the “Cykelplan 2012” for the city of Stockholm, which aims to utilize the existing inner and suburban plans, focusing on commuter cyclists and prioritizing regional routes. This plan set the goal to expand its cycling rates and make Stockholm able to compete with cities such as Copenhagen and Amsterdam in terms of bicycle friendliness and bicycle safety (Cykelplan, 2012). 2 years later, in 2014, a regional bicycle plan for Stockholm was established for the period 2014-2030 aiming to improve cycling opportunities in the Stockholm area. This came as a result of the SATSA II Regional Cycle Strategy project that took place between 2010–2013. SATSA stands for collaboration for an effective transport system in the Stockholm region where the Swedish Transport Administration, County Administrative Board, the Regional Planning (TMR), the Swedish Transport Administration in Stockholm County Council, and the municipalities in the Stockholm area together with a number of interest groups have participated. The goal in the bicycle plan is that 20 percent of trips to the county will be by bicycle by 2030, while the Regional cycling network will be expanded for more convenient and fast cycle journeys. In addition to cycling for day-to-day commuting, leisure or cycling for tourism will gradually develop. When it comes to road design, bike lanes will be designed to be easily oriented with high operating quality, providing good directions and traffic information, while all traffic environments must be designed to be safe for traffic. Another key pillar of the policy is to achieve good connections to public transport, access to rental bicycles at major public transport hubs and create parking facilities in downtown areas.

Local authorities in Stockholm have set up a regional cycling office to expedite the expansion of cycling and to facilitate the county transport managers to expand the regional cycling network. This Bicycle Office coordinates and contributes to cycling knowledge and experience. Every year, the Bicycle Office prepares a bicycle account and conducts ongoing studies on bicycle development, expansion of bicycle lanes and the effects of cycling. In close collaboration with the Swedish Transport Administration and the region's municipalities, the Bicycle Office will revise the regional cycle plan in 2020-2021 (Regional Bicycle Office, 2016).

Chapter 5 Overview of policy making process

5.1 Public Policy-making stages

The process of producing public policies can be divided into five main stages which are the agenda setting, the policy formulation, the policy adoption, the policy implementation and the policy evaluation. Another important phase in the policy making process is the policy change. For the purpose of this research only some of these concepts are being considered. Those are the agenda setting, the policy formulation, the policy change and the policy implementation, as the research analyzes the impact of social movements on these particular levels. Therefore, a brief explanation of these policy stages together with their main characteristics is presented in the following paragraphs for a better understanding of these terms.

5.1.1 What is agenda setting?

Agenda-setting deals with how policy issues emerge, or not, as candidates for government attention. Setting the agenda is a step of the process by which governmental actors take a decision on which issues need their attention and prioritize among many others (Howlett, Ramesh & Perl, 2020). Among other topics, it includes the identification and definition of the "problems" that subsequent policy actions intend to solve, the preliminary investigation of possible solutions to such issues and also the assessment of the extent and nature of political support for each type of action to resolve them (Kingdon, 1984). In addition, it is considered to be probably the most critical stage of the policy cycle, because everything that happens at this early stage of the policy process has a decisive effect on the entire policy cycle and its consequences (Howlett, Ramesh & Perl, 2020).

5.1.2 What is policy formulation?

Policy making describes the process of generating choices about how to enact a publicly recognized problem. In this phase of policy-making, options are identified, refined and formalized that can help resolve issues and problems arising from the agenda-setting process. This often happens once a problem is identified and entered on the official agenda, but it can also occur before these discussions on "informal" public agenda issues (Béland & Howlett, 2016). In this process, sometimes systematically and more often in a less thorough way, an initial assessment of the feasibility of policy choices is conducted and decisions are made based on which alternatives may be more appropriate to adopt compared to others. Despite the fact that they also involve decisions that should be made, these formulation efforts and dynamics differ from public policy decision-making, where a particular series of action is approved by authorized governmental decision-makers and often translates into law or regulation committed to implementation (Keyes, 1996).

The distinguishing feature of policy-formulation is that means are proposed to address perceived social needs and matters (Jones, 1984). By the time a government recognizes the existence of a public issue and, consequently, the need to take action on it, then the problem becomes part of the government's official agenda - policymakers must decide either to ignore it or take some action to tackle it (Howlett, Ramesh & Perl, 2020). Policy formulation therefore involves exploring and evaluating possible alternative solutions to address a particular problem. These alternative solutions may come from the agenda-setting process when a problem and its possible solutions are placed on the government agenda

at the same time (Kingdon, 1984) or options can only be created only after moving an item to the official agenda. In all cases, the main task of policy-making is to limit the range of all possible options to those that are available and are more likely to be accepted by the decision makers (Howlett, Ramesh & Perl, 2020).

5.1.3 What is policy change?

Firstly, it is important to distinguish "policy change" from "policy reform", as the two terms are often used interchangeably in the literature. Policy change refers to gradual changes in existing structures or to new and innovative policies (Bennett & Howlett 1992), while policy reform describes a major policy change. However, according to Fullan (2000), reform as a deliberate intervention through policy may or may not bring about change. In principle, policy change is about replacing one or more existing policies with one or more other policies. New policies can be adopted, existing ones can be changed or even terminated (Stewart, Hedge & Lester, 2007). Howlett and Cashore (2009) define as an "orthodox" way of looking at policy change, which are determined by a broad consensus that:

- policy analysis must be historical in nature and aim at long periods of time such as many years or decades
- primary mechanisms of policy reproduction are policy institutions and subsystems,
- exemplary change is possible only with simultaneous change of institutions—in the case in which institutions remain unchanged, policy change can only be gradual
- an exemplary change in a policy subsystem requires external shocks that cause a radical disintegration of existing political ideas, beliefs, institutions, stakeholders and behavioral practices.

In general, the concept of change refers to an empirical observation of difference in form, quality, or state over time of a particular entity. A policy change occurs by changing the inherent properties of a policy (Sinko, 2016). Fullan (2007) states that many attempts at change do not succeed because "no distinction is made between theories of change (what causes change) and theories of changing (how to influence these causes)". Therefore, it is significant to underline that policy change goes hand in hand with policy implementation (Cerna, 2013). Policy implementation will be better explained below.

Policy change can be of the first order, when only the policy media calibrations change (while the hierarchy of objectives remains unchanged). Second-order changes include changes in policy instruments (while the target hierarchy remains the same), while third-order changes include general changes in the calibration of institutions, instruments, and target hierarchies (Šinko, 2016)

5.1.4 What is policy implementation?

After a public problem has been part of the political agenda, many alternatives have been examined to address it, and the Government has decided on a course of action, it must actually implement this decision. The effort together with the knowledge and the resources devoted to translating policy decisions into action are the implementation stage of the policy cycle. While most of the policy decisions specify the general tools that are expected to be used to achieve the goals, subsequent choices are inevitably required to manage programs and achieve substantial results. Besides other tasks, funding must be made available, staff assigned and procedural rules developed to actually operate a policy (Howlett, Ramesh & Perl, 2020).

As defined by Mazmanian and Sabatier (1983), implementation is the process of enforcing an important policy decision, which is usually incorporated into a statute, but can also take the form of important executive orders or court decisions. Implementation is the stage within the policy process in which actors seek to translate policy intentions and resources into actions that result in specific policy outcomes and ultimately achieve (or not) the desired policy outputs. Policy implementation is usually based on civil servants and administrators to establish and manage the necessary actions required to implement a policy. However, non-governmental organizations that are also part of the policy subsystem can contribute to the implementation of these activities (Howlett, Ramesh & Perl, 2020).

5.2 Defining a Positive Cycling Policy

A pro-bicycle policy is both complementary and integral to achieve a comprehensive policy on transport and parking for all modes of transport such as public transport, walking, cycling and cars. After examining the national and local policies on cycling and the areas that each country is deepening to promote cycling, and extensively analyzing documents describing the necessary conditions, enough data has been collected on the key pillars that must be included in a policy to be considered favorable for cycling. These areas can be briefly summarized in the following pillars; the road safety, coherence, bike-friendly urban design, the integration of cycling in public transport, the proper education for cycling for all ages, and the provision of financial incentives to make cycling more appealing to the community (Gunn, 2018). Their success in making cycling accessible to all is largely due to the coordinated implementation of all these measures, so as to enhance each other's impact on the promotion of cycling. A key lesson to be learned is the necessity of a coordinated and multifaceted approach (Pucher & Buehler, 2008). Besides, it should be noticed that a very important starting point for a positive cycling policy is the recognition of cyclists, and a real understanding of their needs. Cyclists are just common women and men, girls and boys of different ages and at different stages of life who use bicycles for various purposes.

A positive cycling policy can be defined as a policy that seeks to maximize road safety specifically for cyclists. It should include measures that are objectively proven to be safe and that the cyclist believes are safe. In particular, ensuring the quality of the cycling surface is fundamental as cyclists are safer when focusing solely on road traffic and not distracted by sub-standard cycling surfaces. Close to that, other measures that should be included in the policy are proper junction design, appropriate lighting during night times, proper sewerage installation to prevent accidents, and frequent cleaning of premises (Lawson et al., 2013).

Another key pillar of a policy that is considered positive for cycling is the promotion of coherence in the cycling network, the connection of all the centers of the main destination zones for cyclists, but also ensuring the proper integration of cycling in public transport. A well-targeted network should carry the majority of cycling traffic, while cycling routes should be reasonable, continuous without interruption, and include fixed signs. Integrating cycling into the common transport chain, linked to other means of travel is vital, both for utility and recreational trips, as combining the bicycle and public transport in one journey is a high-potential intermodal trip chain (Dufour, 2010). The quality of a bicycle network is not only enhanced by the directness of the routes and the high quality of the road surfaces as mentioned above, but also by the bicycle facilities and services such as the parking slots that are well connected to the network (Hull & O'Holleran, 2014).

As moving forwards, it should be mentioned that creation or recreation of bicycle friendly cities and neighborhoods should be a primary goal of such a policy. Bike-friendly urban design is essential as it provides the framework for the flourishing of the bicycle. Activities such as adapting urban road infrastructure and incorporating traffic management measures to ensure that cyclists are adequately protected from cars should be included in potential national or local pro-cycling strategies (Hull & O'Holleran, 2014).

Furthermore, a proper cycling policy should also aim at the rigorous education of all ages about the benefits of cycling. More specifically, the presentation of the environmental, health and economic benefits of regular cycling is essential in creating a cycling culture in the community. In this way people can better appreciate the importance of this sustainable means of transportation both for themselves and for society as a whole. A cycling-friendly policy should emphasize the importance of organizing awareness campaigns to support cycling in society and familiarize the community with this mode of transport. To continue with, special attention should be given to children and students (de Lange & Feddes, 2019). Cycling education in schools should be promoted as children need to know more about cycling early in life. In addition, bicycle-friendly routes to all schools is another measure that should be included in such a policy, as well as appropriate school cycling facilities.

Once suitable cycling infrastructure is in place, potential cyclists may only lack the incentive to use their bike for commuting purposes. To skip this possible issue, great attention must be given in providing financial incentives, in allocating resources for the purchase of bicycles and overall in providing benefits for non-motorized short distance travel. Actions such as offering public bikes schemes in the city centers, providing direct financial incentives for cyclists, both for the purchase of conventional and electric bicycles or for bicycle repair, and supporting employers to pay employees who cycle to work tax free fees should be actively promoted (National Cycling Manual IE, 2011). Besides, the policy should consider waiving taxes on bicycles, generally enabling regular cyclists to be entitled to tax benefits. At this point, it should be underlined that subsidies and grants involve the provision of a financial incentive and therefore, require adequate funds for the duration of the subsidy period, meaning that the pro-cycling policy should consider the timeline behind. Last but not least, an easy finance scheme would substantially boost the demand for cycles, especially among low-income groups, and also trigger people to abandon the motorized vehicles and switch into a sustainable mode of transport (European Commission, Guidance for Cycling Projects in the EU).

Conclusively, it is crucial to ensure the adequate enforcement of the proposed regulations to overcome the barrier of poor policy implementation. Continuous intensive enforcement that is well explained and made public has a long-term effect on peoples' behavior, and thus traffic legislative framework enforcement should be a priority in national policing plans (Mäkinen, et al., 2003). It is true that the majority of the proposed policies in various countries are usually more advisory in nature rather than obligatory to follow. This is, after all, one of the main reasons why the effective implementation of new policies fails. Therefore, measures requiring compliance with the proposed rules at both individual and administrative level should be introduced. A national pro-cycling plan should force local authorities, organizations and stakeholders involved to respect the proposed framework and support the implementation of the policy from their side. Finally, a zero-tolerance approach should be introduced that will be followed by heavy penalties and sanctions against those who consistently violate the rules and present dangerous behavior that could affect cyclists' safety.

Chapter 6 Results analysis

6.1 Analysis of Amsterdam

In order to better understand the events that led to the adoption of the policy in Amsterdam, a lot of data was collected through the literature, archives from that time, media that extensively covered the events and through interviews with relevant stakeholders. After sorting and evaluating the information, a rough timeline of the sequence of events was created. Finally, the events are analyzed according to the principles of the Kingdon's model (The Multiple Streams Framework). The following section presents the analysis of the pro-cycling policy adoption process based on both a chronological order but also in the meaning of the elements of the MSF.

The problem stream

Kingdon highlights the need to explore how specific problems can move forward on the policy agenda. Part of this problem definition process is led by members of social movements that are particularly important in demonstrating issues related to public policy. One of these kinds of advocacy teams that appeared in 1970 and fought for the rights of the rollers was "De Lastige Amsterdammer", in English - "The Troublesome Amsterdammer". This consisted mainly of students from the University of Amsterdam. They rented 25 bakfietsen (rental bikes) and drove them to the city, keeping traffic moving around Dam Square, the historic center of Amsterdam and gave information leaflets to the public (Reid, 2017). The students who constituted this early form of social movement served as an early warning system for activating the citizens regarding the increase in deaths due to road accidents.

In 1971, 3,000 road deaths happened, and one of the victims was the youngest child- six years old at that time- of a Dutch journalist, while riding her bicycle to school (Verkade, 2020). The number of fatal road accidents peaked in 1972 and caused great public dissatisfaction. A noteworthy fact that happened in the end of 1972 was the publication of a documentary called "Wijkgroep de Pijp - "De Pijp's neighborhood group" which was filmed on the proposed remodeling of Amsterdam's De Pijp district. This film presented the area's working class children asking for safer roads, and when parents took the law into their own hands by closing off streets, angry motorists were shown getting out of their cars to fight with the parents. The newspapers got inspired by the documentary, and the area's children were provided with "play streets" while the car traffic was reduced (Reid, 2017). This can be perceived as the first evidence that the problem of the inappropriate transportation system came to be identified and attracted attention by important stakeholders such as the press.

In 1973, the journalist decided to write the story in an article in the same year, which was widely publicized about car accidents. The father of the dead child aimed to demonstrate to the wider public that motorists use the public space in a way that fatally harms many children, and this should be over as soon as possible. His tension was to stop the indifference in this great public issue and raise the awareness of the society. One of the statements that has been used in this editorial was the phrase "Stop de kindermoord" which a few months later became a great slogan and a label for a diverse and growing movement. There was a clear and captivating purpose behind the compelling message "stop the child murders". Undoubtedly it was a powerful message, and it is a fact that people are far more likely to be mobilized by a message if it's clear and involves obvious benefits for all. It is also worth saying that

Kingdon had mentioned that activists can determine a vital role in bringing problems to the public and governmental attention.

The social movement "Stop de Kindermoord" consisted of many local groups and organizations. "Stop de kindermoord" managed to gain widespread support among both mainstream commentators and young urban political activists as well (Fried, 2013). Their shared goal was to de-motorize Amsterdam, improve public transport, control pollution and promote cycling. During their mobilization phase many individuals participated in the mass behavior and they organized various activities such as national street play days to influence the public and attract new members. One of the most notable protests took place outside the Rijksmuseum in Amsterdam, in which participants laid down their bikes pretending to be dead. Their long-term ambition was again to influence the locals and point out the problem of lack of appropriate space and infrastructures for safe cycling.

The politics stream

As it was mentioned earlier, the politics stream includes all of the socio-political aspects such as public mood, pressure campaigns and ideological divisions in the house of representatives. Provo was a Dutch counterculture movement in the mid-1960s, which preceded the "nozem" movement and followed the hippie movement. Their plans sought to address significant social problems and make Amsterdam more viable and sustainable for its citizens. The most famous of these plans is the "White Bicycle Plan", which aimed to improve Amsterdam's transport problem, and will be discussed further in the policy stream, as it served as a policy solution available at the time (Voeten, 1990). In 1967, the political wing of Provos won a seat on the City Council of Amsterdam. The election result did not change anything then, except that the political group recognized that with an official office, the perks that come by and generally placed on the board - it had moved forwards and started actively participating in the political arena. However, for some of the protestors this was too "mainstream", and so they agreed to disband (Reid, 2017).

In the early 1970s, campaigners opposed state interventions by the Left and the laissez-faire economy of the Right, as they felt that both of them were a threat to the quality of urban life. The political sphere of that time did not seem ready to adopt fresh radical policies, but one year later an opportunity for policy change discussions appeared. In particular, The Club of Rome drew public attention with its first report to the association, *The Limits to Growth*, published in 1972. This report showed that economic growth could not continue indefinitely due to resource depletion (Meadows, 2008). Indeed, the results of the report had a significant impact on the public debate in the Netherlands and provoked more critical thinking in the political scene regarding the environmental aspects of the ongoing car industry (Van Goeverden & Godefrooij, 2011). Thus, Dutch politicians gradually began to realize the many benefits of cycling and their perception for the transport policies started changing - recognizing that cars might not be the way of the future (Van der Zee, 2015). The more left wing politicians really agreed with the opinions of the advocates, so they saw the reasoning behind it. The support of the right wing politicians was not so much based on the same thinking. But for Amsterdam, most of the politicians from all the political parties used to cycle by themselves, so they truly knew about the issues cyclists were experiencing (Marjolein de Lange, personal communication 25.05.2021). Simply put, the politicians in Amsterdam started gradually recognizing themselves the importance of the issue.

Maartje van Putten, who was the first president of the action group "Stop de kindermoord", stated in one of her previous interviews that there was a special period in the mid-1970s when the Dutch

authorities were remarkably accessible. More specifically, she referred to the close interaction with politicians and the fact that the latter were really interested in listening. A good example was when a group of activists cycled to the home of Prime Minister Joop den Uyl, calling for safer roads for children. In the end, although they failed to cross the hallway, the prime minister came out to hear their appeal, and this is a clear indication that politics was eager and ready for a change (Van der Zee, 2015). Besides, while discussing the willingness of the politicians to hear the activists, Maartje van Putten underlined that *“It was not easy, we had to argue with them on the television, to actively fight. We were enthusiastic so we did it. We were not a political party, and this was very important and attracted a lot of attention. It is important to have all the political parties behind you but not belong to any of them”* (Maartje van Putten, personal communication 22.05.2021).

As the discussion for the politics streams goes further, it is worth quoting the statements of Tom Godefrooij who was involved with the Cyclists' Union as a young man. He clearly stated that his team began to realize that they finally "managed to strike a chord". According to him, the noisy demonstrations, and actions such as the nightly attempts to paint illegal bicycle lanes in streets the union considered dangerous were the only means to reach out to people and also to politicians. Cycling activists had a great fighting spirit and knew how to express their ideas to achieve a better future for cyclists. This is because there were already politicians - even in the 1970s - who realized early on that the general focus on cars would ultimately cause problems one day. One of them was definitely the Prime Minister who showed signs of change in his mood for green transport. Indeed, in order to demonstrate this favoritism for cycling and promote oil-free trips, one day he rode his bike to the ground of his official residence in front of many news cameras. After all, a few months later during a televised speech he urged Dutch citizens to adopt a new way of life and take energy savings seriously (Van der Zee, 2015). Bert van Wee in an attempt to explain this shift in the politician's perception towards cycling noted that *“cycling was a cheap flexible transport method that could use the existing streets. It's a very democratic, fully acceptable for everybody to cycle and an egalitarian way to travel. In a city like Amsterdam, if they would build a metro line for example, they could expect big problems because of the soil conditions. Public transport and especially underground public transport would be a nice solution, but it also comes with high costs, high uncertainties and a lot of problems”* (Bert van Wee, personal communication 01.06.2021). At this point it is also worth noting that the Netherlands already had many cyclists compared to other cities, and this was another factor that led the government to become more cycling oriented. In addition, apart from the mobility problems that already existed in Amsterdam, the financial situation of the public transport company was really bad as it was nearly bankrupt (Marjolein de Lange, personal communication 25.05.2021). This was another significant parameter that can explain the interest of the more and more governmental actors to cycling.

Gradually, the majority of the Dutch elected officials and administrators became aware of the many benefits of cycling and shifted their transport policies. In 1977, a newly elected city council focused on cycling as an integral tool in solving Amsterdam's transport problems, introducing practical measures to make roads more cycling-friendly (Buehler, 2010). *“The change firstly came from those left-wing parties, when they took the majority in the city council, after many years of the social democrat party leading. The more left wing parties such as the social-democrats and the greens were earlier in favor of cycling, and then the more liberal together with the Christian parties followed”* (Marjolein de Lange, personal communication 25.05.2021). It is clear that the national mood for cycling was now focused on promoting and enhancing cycling. Three years later, the Dutch Ministry of Transport launched a benchmarking project and instructed the Dutch Cyclists' Association Fietsersbond to conduct systematic data collection. This project included a written survey among municipalities' officials to assess the role

of cycling, another survey among cyclists to get their opinion on how satisfied they feel with the existing cycling infrastructures, an accurate data collection on the percentage of bike use as a means of transport, together with the volume of traffic and road safety and a final assessment of the quality of the bicycle network and facilities in cities (Cycling Expertise, 2012).

The policy stream

In the 1950s, Dutch city planners often presented plans for highways through Amsterdam to create space for car traffic but this had no space for bicycles. According to Feddes, this can be explained as "a sense of jealousy in bombed-out cities like Rotterdam, which were much more flexible in modern traffic planning. Next to it, some other cities, such as The Hague, filled canals to turn them into roads for cars. However, the proposals of the town planners provoked opposition from those who wanted to maintain the traditional beauty of Dutch cities. This was the first sign of resistance, even indirectly, to the pure dominance of the car (Ganno, 2020). However, along with the new road construction, cycling was also discouraged and its repression was visible everywhere, Feddes says.

In 1960 the Amsterdam City Council decided that on some roads there was not enough space for all means of transport, concluding that a ban on bicycles would solve the problem. Policymakers and urban planners announced that cycling as a means of transportation was dead, but many futurists secretly rejoiced that the bike was on its way because it was seen as part of the problem and not as a potential solution (de Lange & Feddes, 2019). A statement by the journalist Ben Croon in the 1960s summed up the situation at the time, saying that "Until recently, cyclists had absolutely no status in traffic or in society in general and they still were the pariah of urban traffic" (Ganno, 2020).

The British Report Traffic in Towns by Colin Buchman, published in 1963, as well as the International Traffic Exhibition in Munich in 1965 that both influenced the Netherlands, presented a new European vision on urban traffic with little room or attention for the bicycle, and the car was the most likely choice. As the City of Amsterdam had no alternative policy, it based its decisions on the Schematic Plan of 1931, which was drafted and supplemented by decisions of ad hoc and ancillary policies, driven by the fear of abandoning the modern world. It is worth mentioning that around the same time period, around the world, urban traffic has been hit by stormy changes, and various studies to develop a new vision for traffic and the city have been conducted across Europe by urban planners seeking to tame wild urbanization (de Lange & Feddes, 2019).

The advance of the car was more than obvious, while according to the historian Peter-Eloy Steal the car became the perfect symptom of prosperity, showing social status. The vast majority of the city's population was aiming to buy a car, and 40% of car journeys took place within five kilometers, which would otherwise be the ideal cycling distance. The consequences of this extensive domination of cars had a dramatic impact on Amsterdam, as the city was not designed for so many vehicles, and the streets became more dangerous, busier and more chaotic. Besides, there was great confusion in the circles of the municipal government, as all its policies and integrated plans about transportation planning were becoming more and more outdated (Gannon, 2020).

In the late 60's, a kind of impasse had been reached and all plans to demolish the city centers, build sidewalks or fill canals were halted. The overall goal was to protect the city's heritage from the uncontrolled motorization. It was the very first time that public opinion placed a limit on the power of the car. In the following years, the number of cars on the roads continued to increase rapidly, bringing

many consequences. In 1965 31,868 road accidents, 93 deaths and 5,655 injuries were reported in Amsterdam, but this was still considered normal. During the same period many social changes also took place, as a large number of young adults moved to the city and many of them continued to cycle. These new entrants to Amsterdam were used to riding bicycles as children in their homelands, so they brought their bike to the big city and found it to be the perfect way to get around the city (Gannon, 2020).

This was the period when activism began to flourish and the advocacy groups began to actively support cycling and gradually develop expertise in what was needed to make cycling a practical possibility in the age of the motor car. Many possible solutions were considered for the strengthening of cycling and the diminish of car travel in Amsterdam. Some of them have been actually influential, but some others failed to achieve an outcome. According to Kingdon (1995), it is the community of experts that discusses, studies and ultimately selects solutions for implementation. As it was shortly presented in the political stream, the White Bicycle Plan was a project initiated by the movement Povoos and it was proposing the closure of Amsterdam to all motor transport in order to improve public transportation. Moreover, in 1967 they also suggested one of the first bicycle sharing systems in which the municipality would buy 20,000 white bikes per year in order to provide them to the public for free. However, the proposed cycling plans were rejected by the city authorities (Voeten, 1990).

Since the early 1970s there has been a gradual shift in the perception of traffic in the whole country, resulting in greater attention to safe cycling and walking. The first call for a bicycle demonstration in a car-free city was issued in May 1974. In 1976 a demonstration attracted 4,000, one year later it reached 9,000 and in 1978 15,000 (Gannon, 2020). In the midst of this growing awareness of green transport, many proposals have been considered, and the City Council has begun to consider cycling as a real alternative to public transport. Some urban planners and elected officials have begun to question the wisdom of uncontrolled car policies. What also played a role to make pro-cycling policies more appealing was the awareness that the so-called “predict and provide” paradigm could not last longer. This paradigm means that policymakers by then forecasted an increase in the population and in car ownership, leading up to congestion. Between 1967 and 1973, the “predict and provide” paradigm was abandoned in almost all larger cities in western countries. There was a shift in only six years in which local authorities realized that this paradigm was not doable because Amsterdam would suffer, and there would be no place to go” (Bert van Wee, personal communication on 01.06.2021).

A budget line was introduced for the first time to subsidize cycling facilities in urban areas in the Transport Ministry's Multiyear for Persons Transport Plan 1976-1980. For the utilization of the budget a steering group of municipal employees was appointed, and they collaborated with the national department of Public Works, while the decision-making for the implementation of the plans was at the municipal level. As the promotion of this project seemed more difficult than expected, the Minister took the initiative to fully fund two "demonstration bicycle routes" in The Hague and Tilburg as examples for other municipalities to follow (Van Goeverden & Godefrooij, 2011).

The main development step for an actual policy change happened in 1978, when the Dutch Labor Party PvdA was appointed to a planning and transport position committed to change the priority given to the motorized vehicles. With this change of political policy-making, “The powerful Public Works Department suddenly became a bastion of outdated expertise, overtaken by new concepts and different forms of developing skills and knowledge” (de Lange & Feddes, 2019).

The PvdA began to adopt a really pro-social policy in favor of the less powerful such as women (the majority of cyclists), children and the elderly, but according to the "Bicycle Memorandum", defending the interests of the bicycle was for the common good of society as a whole of. For this purpose, various plans were developed for the creation of an integrated cycling network, and the restriction on car traffic in residential neighborhoods. Dealing with the parked cars turned out to be the best starting point. However, reducing car ownership has never been considered a substantive policy, as the motor lobby campaigned against the promotion of the cycling space by using the slogan "Happy to drive"(Gannon, 2020). Finally, in 1978, the first genuine cycling strategy was eventually adopted in Amsterdam, thanks to the aim of the newly elected city-council which focused on solving the transportation issue of the city (Buehler, 2010).

The window of opportunity

Kingdon claimed that the unpredictable and short-lived policy windows open and make policy change more likely for a certain period of time (Kingdon & Stano, 1984). In other words, policy change becomes possible when a window of opportunity opens and the three streams, which usually follow their own, very different, logic and rhythm are aligned. In order to make a favorable decision regarding cycling, the problem must be taken as significant enough to justify an intervention, the proposed solution or alternatives must be considered feasible and accessible and should have the potential to solve the problem or reduce its' size and finally, there must be a public consensus on the need for a new policy, or at least there must be strong stakeholders to support it.

The window of opportunity started appearing slightly in December of 1970, when the oil-prices had fallen to an all-time low (Hellema, Wiebes & Witte, 2004). This low oil price foretold the oil crisis that was to occur a little later, in 1973. That year, Saudi Arabia and other Arab oil exporters imposed embargoes on the United States, Britain, Canada, Japan and the Netherlands in support of Israel in the Yom Kippur War, quadrupling the price of oil (Van der Zee, 2015). As the Netherlands was dependent on Arab oil this embargo was a high hazard. The embargo seemed to threaten the Dutch position in the international oil sector, and therefore the Government started thinking of introducing several measures to reduce oil consumption.

During the same period, the fatal accident of a Dutch journalists' daughter took place, and his popular article "Stop de kindermoord" donated the name to the social movement. The topic received considerably high media coverage as more and more newspapers and channels devoted time to highlighting the victims of the car accidents, proving in this way the magnitude of the problem. The members of the protest groups definitely benefited from this national television exposure (Reid, 2017). At that time, thanks to extensive press coverage, the problem had received considerable attention and the public was fully aware of the problem, while citizens began to realize the urgency of a new transport policy that would protect cyclists and pedestrians. Furthermore, the oil embargo prompted the politicians to reconsider cars and opened the road for discussion about alternative means of transport such as bikes. It is worth referring to the decision of the Government to decree a series of car-free Sundays in autumn of 1973, giving the possibility to children and families to play even on the highways (Van der Zee, 2015). Maartje van Putten commented on this saying that *"when the oil crisis appeared, it was the time that we were asking for permanent free Sundays to socialize in the streets again and meet outside. And finally it was happening for some period, it was good timing"* (Maartje van Putten, personal communication 22.05.2021).

People suddenly remembered how life looked before the monopoly of the car, and were convinced of the magnitude of the problem. Finally, it was only a few years before 1973- in 1967-when the movement Provos had proposed a bicycle sharing plan to reduce the motor transport in Amsterdam. Although at that time the suggested plan was not adopted, it sowed the idea of promoting cycling. This alternative solution seemed more applicable and feasible after the oil crisis, in order to both reduce the oil-dependent commutes and the number of road accidents. The strongest stakeholders who energetically supported the need for a policy change were the mass citizens' alliances and particularly the social movements activists. Their continued efforts to inform the public and politicians were rewarded.

Policy entrepreneur

Finally, Kingdon stressed the importance of the role of so-called "policy entrepreneurs" in the decision-making process and consequently in policy-making. Policy entrepreneurs are people who take leadership in one or more currents, push the issue on the agenda and shape it into an acceptable policy by negotiating and seeking compromises (De Wals, Espinoza-Moya & Béland, 2019). In addition, they must also be ready to take action to further their ideas and couple the streams at opportune moments such as the windows of opportunities.

The major campaigner Maartje van Putten played a key role in shifting Dutch transport policy to safer streets. Maartje at that time was a young mother from a wealthy and powerful Amsterdam family who was also involved in the emerging social movement of 1973. She was appointed President of "Stop de Kindermoord" and dedicated herself to tackle the high level of death and injury on Dutch roads and to promoting less traffic in Amsterdam (Fried, 2013). Maartje coordinated many of the movement's demonstrations and fought hard for cycling, together with many other active members of the movement. While describing the very early stage of the social movement due to the social situation - the emergence of the movement- Maartje van Putten stated: *"When I saw the article with the front page title "Stop de kindermoord", I personally felt that something had to be done. I met with other people who were also aware of the accidents happening in the same area and soon we had a whole group. We had an economist from a bank, some students from TU Delft, some people who worked for city planning and also many mothers. So we had a group and we agreed that we have to start something to wake up the Netherlands, the city planners and the local and national authorities"* (Maartje van Putten, personal communication 22.05.2021). After the emergence and the successful coalescence of the group, the movement and especially its major actors such as Maartje attempted to couple the streams and acted drastically to achieve the best output. More specifically, their activities identified the poor situation as a public problem that would have to be on the policy agenda to be resolved (problem stream). Due to the oil crisis, there was good timing and this fleeting opportunity (window of opportunity) gave them room for influence in the political arena - as politicians were friendlier approaching the bike than ever before. According to Maartje van Putten, the momentum for the case of Amsterdam *"was more the article by the journalist rather than the oil crisis. It is very rare to see only a nationwide well known paper with only one article in the front page. This article was a wakeup call for us, and it also pointed to the well-defined problem of the children's deaths on the roads"* (Maartje van Putten, personal communication 22.05.2021).

The social movement participants worked closely with elected officials and politicians (political stream), such as the Prime minister, to convince them of the urgency of the situation and also to find a strong ally. The cycling plans that have been suggested firstly by Provos and later by the "Stop de Kindermoord" served as the alternative solution that can be represented in the policy stream. These

cycling plans received a lot of support from Amsterdam's Cyclist Union too. The Cyclist Union promoted cycling plans with their knowledge, they didn't have a lot of money but they had a lot of power at that time. The "Stop de Kindermoord" has been doing a lot, but this was more on the national level, but the Cyclist Union was very much involved at a local level. They discussed fiercely with politicians and civil servants about every road plan, every street plan that was made, because they felt that cycling needs to be improved and they were annoyed by how bad things were (Marjolein de Lange, personal communication 25.05.2021).

Conclusively, "Stop de Kindermoord" was subsidized by the Dutch government, set up headquarters in a former shop and continued to develop ideas for safer urban planning (van der Zee, 2015). Lastly it changed its provocative name from "Stop de Kindermoord" to "Priority for Children" (Reid, 2017).

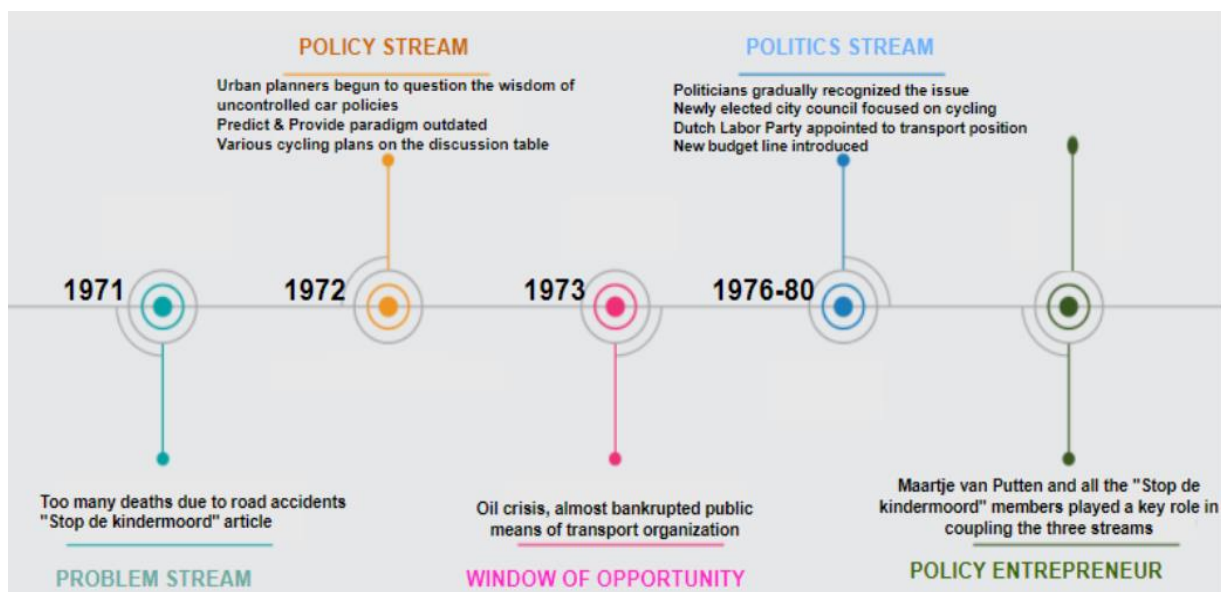


Figure 1: MSF timeline of key events for the case of Amsterdam

6.1.1 Results for Amsterdam case

Social movements in Amsterdam undoubtedly played a major role in the formulation of the cycling policies in the 70s. These interest groups were the "Provos" in the mid-1960s, the "Stop de kindermoord", the movement on making road transport safer called "Veilig Verkeer Nederland" and a movement on cyclists originally called "De fietsersbond". All of them were promoting different messages but under the same perspective, which was road safety for everyone and especially for cyclists. "Stop de kindermoord" was the one that was widely emphasized as it was perhaps the most active and catalytic advocacy group of that period, as suggested by various researchers (Reid, 2017, de Lange & Feddes, 2019).

"Stop de kindermoord" -thanks to its strong and powerful message that was actually covering the purpose of the movement- received great attention from the public and especially from the parents who have been sharing the same worries as the members of the group. Everybody agreed with the statements which they were making and also the media were following their actions to protest for better cycling conditions. They organized many massive actions, together also with other groups such environmental activists and bike organizations such as the Cyclist Union. Strong protests in front of important

buildings and blocking streets that were perceived as dangerous were some of the means that they used to communicate their vision to the public. Very often spokesmen appeared also on television fighting for better cycling conditions and explaining their view. A very important aspect was the fact that the movement was not belonging to any political parties, and this attracted the interest but also the respect of even more people (Maartje van Putten, personal communication 22.05.2021). The compelling message “stop the child murders” was a direct attack to the public trying to mobilize them and make them aware of the urgency of taking action on the lack of safety on the roads.

Furthermore, the movement received a lot of media attention, as it was also very new to society as people took to the streets demanding action from the government. This media attention brought the activists closer to the public, helped to raise people's awareness and therefore their sensitivity. This happened during the third stage of the movements' life cycle called bureaucratization when “Stop de kindermoord” had already had some success in raising awareness of the need for a coordinated strategy, and their political power was higher compared to the previous phases. A good example of their success in activating many individuals was that they proved to be supportive in their actions as they began to get angry with the drivers who were frustrated by the “Stop de kindermoord”. The public took over and the locals started joining. Maartje van Putten highlighted the importance of having the public opinion on the side of the movement. *The case of Amsterdam, therefore, supports the first hypothesis, which is proven by the activists' attempt to influence the public opinion firstly to increase their power. Last but not least, it provides another factor in this hypothesis which is the support of the media as a means of rapid access and influence to the public.*

To continue with, the mindset of planners and local policymakers definitely plays a role in what has been done for cyclists in the past decades in Amsterdam. Although there has been a decline in cycling rates, the policymakers and urban designers reinvented the bike and started realizing that they should make it more appealing to the public. The Dutch Government recognized the benefits of cycling such as the cheap price and the low energy consumption solution. Besides, as the Netherlands is a relatively egalitarian society, cycling is an egalitarian way to travel because it's a very democratic way of transport, and it is fully acceptable for everybody to cycle (Bert van Wee, personal communication 01.06.2021). Even in the early 1970s, politicians began to realize that the general focus on cars would eventually cause some problems, showing signs of changing attitudes towards green transport and oil-free commutes. The big step was made by the newly elected city Council of 1977 which took real action to promote cycling as an integral part of solving Amsterdam's transport problems, introducing measures to make roads more cycling-friendly (Buehler, 2010). Moreover, the majority of local politicians from all parties used to cycle themselves in the city of Amsterdam and could understand the magnitude and urgency of the problem. In addition to political actors, many of them were also parents to children who go to school by bicycle, and this made them aware of the issues faced by cyclists (Marjolein de Lange, personal communication 25.05.2021). Also members of the national parliament who lived in Amsterdam used to come on their bikes to the meetings of “Stop de kindermoord” too. The movement was not politicized in the sense of it was a social issue that everybody recognized as an important issue, and all the political parties-despite their beliefs-were in favor of that. In that sense it was easy for the group members to convince the politicians. It turned out that they were very welcome by the politicians, without much effort to achieve it (Maartje van Putten, personal communication 22.05.2021).

Overall, the governmental actors have shown that they recognize cars are not the only way of the future, but cycling can be a proper means of transport for the city and cyclists deserve road safety as well. Besides, it is a fact that Dutch authorities were really accessible at that period of time - something that

is very likely to be different compared to nowadays according to Maartje van Putten. The cycling activists who had the fighting spirit to change the situation on road safety utilized the politicians' willingness to listen to their arguments and thus they achieved a close and creative interaction with them. Social movements did not directly target the governmental groups to find powerful allies, and this is likely to have happened because they did not need them that much during that period. The movement representatives did not focus on a specific party because they were all open to them, while it was much easier to reach out to politicians. They just demonstrated a sensitive issue that should be an issue for everybody, and they benefited from the openness of the politicians (Maartje van Putten, personal communication, 22.05.2021). *Consequently, this is in contrast with the second hypothesis and there is no evidence to support it in the case of Amsterdam, as the movement did not search for allies within the political arena.*

As it was written in the Guardian, "Stop de Kindermoord" is a lesson for the modern world. Protest and advocacy are essential to achieving a change on the streets through politics, enforcement, infrastructure and cultural change (Van der Zee, 2015). Protest for the issue of insufficient road safety was fundamental to trigger this policy change, and this issue was well defined and demonstrated by the activists. Proven by the projects that followed after, the politicians listened to the active requests of the social movements' members and gradually recognized the need of integrating cycling in the transportation planning. The change in the city council and the appointment of the Labor Party to the planning determined a great part on the sequence of the events. Close to this, very often various cycling plans have been considered at that period-although many of them were never taken seriously, while there was a forecast for an increase in the population and subsequently in the congestion within the cities.

It is worth mentioning that the "Stop de kindermoord" had a close collaboration with academics from TU Delft who provided them with a plan for the infrastructure design and how living areas should look like, used by the activists to negotiate with the urban planners (Maartje van Putten, personal communication 22.05.2021). These pro-cycling plans had been strongly supported not only by the social movement but also by various external stakeholders. The movement's president had a leading role with all its members, but many environmental groups, the Amsterdam Cyclists' Association, the medical sector, especially the pediatric associations, have made significant contributions to promoting these cycling projects too. Finally, one last factor that influenced the success of the pro-cycling policy adoption was the oil crisis that occurred during the same period. This provided the right time to integrate cycling as a suitable means of transportation in urban planning. *In conclusion, the case supports the third hypothesis on the effectiveness of social movements, all the conditions are met and aligned. The three streams are present, coupled by the policy entrepreneur in a window of opportunity, and all of the conditions contributed in achieving a pro-cycling policy adoption.*

6.2 Analysis of Dublin

For the better understanding of the factors and events that shaped the adoption of the pro-cycling policies in Dublin but also the actual implementation of them, various sources have been analyzed. The data have been collected through literature, archives from that time, media platforms, blogs and through interviews with relevant stakeholders coming from the advocacy groups. After sorting and evaluating the collected information, the next step was to create a draft timeline of the sequence of events. Finally, the events were analyzed according to the principles of the Kingdon's model (MSF). The section below presents the analysis of the pro-cycling policy adoption and implementation process based on both a chronological order but also in the meaning of the elements of the MSF.

Problem Stream

The problem stream consists of the socioeconomic, environmental public problems that people want the Government to address. When certain conditions are identified as “non-ideal” they are called problems and draw attention from major stakeholders such as policymakers (Fowler, 2020). One of these socio-environmental issues that caught the attention of volunteers in Ireland was the dominance of cars dating back to the late 1970s and early 1980s, when there were numerous anti-urban protests. At that time, Voluntary Service International (VSI), the Irish branch of Civil International, a global peace movement that began in 1920 with an interest in sustainable development, published *Give Way Bikes - A Dublin Cycling Exhibition* (Gualdi & van den Noort, 2013). The reason behind this publication can be justified by the VSI's need to shed light on a neglected topic, that of cycling, and bring it to the policy agenda. This Cycling Exhibition paved the way for the creation of the Dublin Cyclists Action Group, the Cycle Folk, and the subsequent emergence of the Dublin Cycling Campaign in 1993.

The Dublin Cycling Campaign is an independent, voluntary cycling advocacy group that has been working towards improving the city of Dublin for cyclists since 1993. They are represented on the Dublin City, Fingal, South Dublin and Dun Laoghaire Rathdown County Council committees on Transportation "Strategic Policy" and have been appointed as one of the advisory bodies in the preparation of the government's National Policy Cycle Framework. The members of the group are lobbying local and national Government to bring about better cycling conditions and greater recognition for the field of cycling (Dublin South Central Green Party, 2020). Following their statement, they actively work to encourage cycling and to represent the interests of everyday cyclists. They mainly aim to make the streets safer for cyclists and to increase public awareness of the benefits of cycling (Dublin Cycling Campaign-LinkedIn, 2021).

In 2009, it was the first time when an issue received considerable public attention, and this was the debate on reducing speed limits in the city center, in order to create safer roads and thus make the city dangerous for cyclists and pedestrians. This topic attracted the attention of the elected officials, and one of the elected city councilors actively followed up, which will be further discussed in the policy stream. Four years later, at the end of 2013, the creation of the ambitious cycle network plan to improve the current situation in the cycling sector by the national transport authority was now a fact (Irish NTA, 2013). However, just in the next year, the issues surrounding cycling continued instead of improving and the daily problems became bigger and bigger. One of these issues that was quickly defined as a problematic situation by the Dublin Cycling Campaign was the growing numbers of bicycle thefts. Indeed, during their bureaucratization phase they called for tougher measures to combat this problem,

as an estimated 20,000 bicycles - worth a total of around € 10 million - are stolen in Dublin alone each year. According to the Dublin Cycling Campaign, the number of bikes taken has doubled since the Bike to Work program began in 2009. The use of such indicators was done to show that things are getting worse and to inform the public about it, but also to highlight the urgency to combat the problem. Although the Bike to Work program was adopted, it left a lot of room for problems such as bicycle theft, and thus the Dublin Cycling Campaign aimed to bring light on them.

As the situation around cycling showed no signs of progress, a new advocacy group called I BIKE Dublin was set up in Dublin in 2017. Their main goal was to improve cycling conditions in the city, as the already established advocacy organization seemed to be stuck in the bureaucratization phase and despite their coordinated strategic efforts the output for cycling was not sufficient. At that time there was a lot of frustration online for cyclists, finding that the roads were too aggressive, too dangerous, and inhospitable for cyclists. A lot of people were being killed by drivers. The group initially consisted of 12 people in their emergence phase, and their first activity took place on June 27, 2017, and this was about protecting a contraflow lane that was considered as black spot for illegal parking (De Moelder, 2017). During the event, a truck driver wanted to go on the cycling lane, and there was a confrontation between a tiny woman and a big truck there which caused traffic chaos in the whole city center of Dublin. *“Even if we wanted to plan something that would attract the newspaper, it wouldn't be such one”* (Stephen McManus, personal communication 21.05.2021). Suddenly, the movement went really big and really quickly, and people were starting to follow the group. The media coverage helped the group to quickly jump in the coalescence stage and gave extra space to people to come together for a broader mobilization. Indeed, the action immediately caught the attention of the media and one week later it was the first topic on the news of the national television channel (Kapila, 2017). This can be interpreted as a first attempt to influence the public opinion and define an unpleasant situation for cyclists as highly problematic - although their tension was not to create such an incident in real time. In their next effort to highlight the lack of enforcement of cycling laws, seventy-nine volunteers of I BIKE conducted a survey in Dublin and the results showed that at least 491 cases of motorists parked on bicycle lanes in less than a week (McGreevy, 2017). In addition, the I Bike Dublin campaign also claimed that even its limited research would show at least 25,000 violations of the law each year, with the aim of drawing public attention to the issue.

It was in March 2018 when a young man died when his bicycle collided with cement in a very central location in the city center. As expected, this event organized the activists and provoked many reactions. In particular, I BIKE Dublin partnered with other cycling teams and organizations to carry out a die-in outside of the Parliament to highlight the dangers of cycling in Dublin (O' Brien, 2018). The reason behind this peaceful attempt to ask politicians and legislators to “stop killing cyclists”, as the citizens were dissatisfied with the strange cycling image which was still very dangerous. Pretending to be dead due to car drivers was a strong message and a harsh image that could not be ignored by people passing by, but also by local media who rushed to cover the issue. Lastly, some equally unpleasant incidents of cyclists falling happened in the last week of January 2020, when a surprisingly large number of people fell off their bikes around the city center. The Dublin Cycling Campaign aiming to activate the local society issued a press release stating: “One of the victims stated that he had suffered a displaced elbow that required surgery and that while waiting for the ambulance to arrive, two other cyclists fell in the same place.” (Ginty, 2020). In addition to trying to wake up the local community for the lack of measures to actually protect cyclists, the members of the campaign made various statements to the government, raising the basic suspicion that the accidents were due to oil slicks from motor vehicles, and this will be further described in the next stream

Policy Stream

Policy stream is the process in which experts use their knowledge to develop a potential policy or program proposal (Kingdon & Stano, 1984). As the Dublin Cycling Campaign sought to pressure local and national governments to improve conditions for cyclists and better recognize the benefits of cycling, at one of their meetings they discussed whether they should take a stand on mandatory helmet use and develop a proposal or not. After considering the pros and cons of such a policy, they decided that since no government or other body proposes such a thing, the Campaign does not need to take a stand on this rather divisive issue (Campaign Spokes, 1999). Although they decided not to raise a flag regarding helmets, some members of the Campaign submitted a proposal to the Government regarding the state budget spent on promoting cycling. This submission suggested that the money spent on bicycle facilities should be increased to 5%, and in their view, there should also be a national bicycle route connecting all cities with a population greater than 20.00 to in 2005 (Campaign Spokes, 1999). However, due to the Celtic Tiger Years that characterized Ireland at that time, this was not a realistic goal, and any thoughts about financing cycling were withdrawn as only the car industry was prioritized (Vanessa Sterry, personal communication 31.05.2021).

Five years later, in 2005, there were five deaths of cyclists reported, the last of which occurred when a cyclist was hit by a truck. The Dublin Cycling Campaign stated that heavy goods vehicles (HGVs) accounted for 78% of cyclist deaths in the city. More specifically, they argued that an immediate safety summit should be held with cycling teams, road haulers, the National Safety Council and the Ministry of Transport. The news of the cyclists' deaths was used to draw the attention of National Security Council officials to the tragic consequences of having so many good heavy vehicles on the roads and to push them to think of a possible solution to this problem. The National Security Council (NSC) was quick to respond. They returned proposing that the construction of a port tunnel would be the solution. The 5.6-kilometer Port Tunnel will connect Dublin Port with the M50 and remove 20,000 trucks from the city center daily, making the area safer for cyclists (Irish Examiner, 2005).

In December of the same year, Irish cyclists met with Transport Minister Martin Cullen TD to actively call for a major overhaul of current transport policy since they strongly believed that isolating cycle tracks is not sufficient to promote cycling. This meeting was used by the representatives of the Irish cycling campaign as an opportunity to emphasize to the Minister the importance of promoting cycling as the appropriate way for short distances. Their main argument was that such a move would benefit both businesses and the local economy, as congestion in urban areas could be reduced and workers could reach a healthy physical and mental condition over time (Foran, 2005). In simple words, they influenced the importance attached to cycling to persuade politicians to include the bicycle in setting their agenda.

These efforts paid off a few years later, when in 2008 the Irish government launched a complete roadmap to encourage the use of sustainable means of transport, called the Smarter Travel Policy. This was the government's action plan to reduce national car traffic from 65% to 45% by 2020 (Smarter Travel, 2009). This policy framework aimed to create a strong cycling culture in Ireland by coordinating various cycling promotion activities in many areas, including: bicycle-friendly infrastructures and programming, education, training, enforcement, promotion, coordination and the creation of a public bicycle rental scheme (Caulfield & Leahy, 2011). Indeed, Dublin introduced a public city bike rental program, the Dublin Bike, and arrived on the policy adoption stage.

A year later, in 2009 a speed reduction initiative was launched in 2009 under the strong leadership of a city-elected politician, Councilor Andrew Montague. However, around the same time, around € 21 million was spent on car advertising in Ireland in 2010 (Nielsen Advertising Intelligence Services, 2011). The reaction of the media in favor of cars and in some cases, the misinformation about motor-vehicles led some City Councilors to waver in their positions and a proposal was made to abolish or reduce the 30 km / h test zone that had been created. In response, the Dublin Cycling Campaign Association, launched a well-researched and organized campaign aiming to keep the 30km / h zone by bringing together a diverse range of civil society actors. The myths were shattered, the benefits were well-clarified and the elected officials persuaded to maintain the calm and safe zone with the speed limit 30 km / h, with only a small subsequent change to the zone that was finally approved (Gualdi & van den Noort, 2013). Overall, the Dublin Cycling Campaign made a significant contribution to the City Council to consider advanced policies that would otherwise have been rejected. Indeed, the Greater Dublin Area, an ambitious cycle network plan was published in 2013, in order to improve the existing situation in the field of cycling (Irish department of Transport, Tourism and Sport, 2013).

The official adoption of these pro-cycling programs was the outcome of the fact that the three streams were coupled. The problem of insufficient road safety for cyclists was obvious, the numbers of deaths have increased over the previous years and well pointed out by the Irish activists. In addition, there have been suggestions by the Dublin Cycling Campaign to the government indicating the actual needs of cyclists for extra funding and substantial actions. Therefore, the policy alternatives already existed. Key role played the interaction between Irish Cycling Campaign and the Transport Ministry delegates, which helped the urban planners to recognize that they should finally put forward a proper cycling plan.

After the official policy adoption, the laws were still not being enforced, and were not being respected by drivers both at the national and local level (Joan O' Connell, personal communication 29.05.2021). As it was briefly presented in the problem stream, in 2014, again the Dublin Cycling Campaign took action again and highlighted the need for more resources and collective government efforts to combat the growing number of thefts, and generally improve the cycling conditions further. Campaign's spokesman David Tiney argued that a multi-agency team needs to be set up to address the issue and come up with a specific policy to address cyclists' problems (Irish Examiner, 2014). The National Transport Authority took note of the campaigners' demands and the following year organized campaigns to encourage cyclists to light and secure their bikes against theft (NTA, 2015). Just a year later, it was officially announced that Ireland had the highest increase in cycling deaths in the EU in nine years - report. Specifically, the number of fatal bike accidents increased by an average of 8% per year in 2010-2018. A total of 83 cyclists were killed between 2010 and 2018. The report by the European Transport Safety Council, whose members include Ireland's Road Safety Authority, has called for urgent action to tackle the deaths of cyclists and pedestrians (McCárthaigh, 2020).

The response from the Irish National Transport Authority was immediate and it was announced that a 5 km cycle path from Phoenix Park to the Tom Clarke Bridge had finally been selected for implementation after seven years of planning for the project (Kelly, 2019). But a small number of powerful businesses and parking companies attached to big shopping centers of the area that had an exit point at the very start of the streets were not willing to change their setup. While they are big companies with massive solicitor firms representing them, they made submissions objections to the council issue, and some of them threatened legal action in the High Court. They turned out to be very active in trying to block any interventions coming in (Joan O'Connell, personal communication 28.05.2021). Unfortunately, only a few months later it was officially announced that the project would not be

completed before 2024, despite the urgency of the situation. This external small but very powerful lobby influenced the perception of Dublin authorities, and led to a new de-couple of the streams. Despite the urgent problem and the solution for the 5km pathway, the decision makers took a step back and postponed the implementation of it. The Dublin Cycling Campaign reacted by saying that at least some temporary measures should be introduced to protect cyclists in the meantime before the actual implementation of the adopted policy. As a sign of protest, many cyclists went to the banks of the River Liffey on Sunday morning demanding the implementation of the proposed cycling plan along one of the busiest streets in Dublin city center (Pollak, 2020).

The most recent incident in Dublin was that a large number of people fell off their bikes around the city center in the last week of January 2020. The members of the movement suspected that oil and dirt from construction sites mixed with dry weather are the cause. Kevin Baker, who is the president of the team, assumed that the reason behind this phenomenon could be that the heavy vehicles operating in the construction area deposit dirt and oil on the roads. This in combination with the lack of rain during this period led to the creation of dangerous and slippery spots (Ginty, 2020). In addition, Louise Williams, the campaign's vice president, continued by saying that local authorities should not rely solely on rainfall to clear roads to make them safe enough for cyclists. With these words she implied that there must be a specific plan for cleaning the roads, and this shows its intensity to contribute to the policy process for safe cycling. She made it clear that he was very concerned about the safety of people trying to ride their bikes in Dublin, stressing the importance of danger-free roads. Activists also sent a request to the Dublin City Council to comment on the matter, but the city council did not respond, prompting the movement to wonder if the council was really affected by the unusual number of reports of cyclists slipping on the streets around the city's center (McGreevy, 2020).

Politics Stream

The political stream includes the political atmosphere and the corresponding competition between value-based decisions. It is also worth saying that policy communities, networks and politicians play major roles in shaping discussions about whether problems deserve attention or whether policies are feasible (Fowler, 2020). The political atmosphere of that period seems to be divided, and although policies have been adopted on the papers, the final implementation encountered problems.

Although between 1986 and 2001 Ireland experienced a sharp drop in cycling levels. and the share of people cycling for work, school or college more than half during this period from 5.6% to less than 2% (Short & Caulfield, 2014), the majority of the Irish politicians seemed to stay away from the growing problem. This was until 2005 when the members of the National Security Council showed the first signs of goodwill and proposed the creation of a port tunnel to decongest the city center and also to make it safer (Irish Examiner, 2005). At the end of the same year, Irish Transport Minister Martin Cullen met with a group of cyclists to discuss the burning issue, but as it turned out the only actual response from the government came in 2008 - which was already 3 years later in 2008! The government's action plan to reduce national car traffic was their way of promoting green transport and cycling, but as the problems cyclists faced in the coming years continued to grow, it seemed that the government was more willing to draw up a thoughtful and hopeful plan, instead of really correcting the situation by adopting real measures. Their cold attitude on cycling issues can be possibly explained by the recession that followed after the Celtic Tiger years of that time, and the severe economic downturn that emerged in the economy of the Republic of Ireland. Although different councils were going to propose cycling infrastructure plans, they never materialized because of the recession and the need to rescue the banks (Vanessa Sterry,

personal communication 31.05.2021). There was no money in the country and therefore even if some politicians were willing, they just could not make much. The economic and financial crisis lasted until the end of 2013, when the Cycling network plan was established.

Politicians' attitudes towards cycling did not differ much in the following years, and despite the 2013 Network plan of the Transport authority of the Greater Dublin Area, they did not take any real steps to strengthen cycling and implement the suggested objectives. Years were passing by, and not only was the situation not improving, but something paradoxical happened. In August of 2018, the official car of the Dublin lord mayor Nial Ring was photographed parked in a cycling lane illegally. While one would expect this to provoke strong protests, members of the Dublin Cycling Campaign found a particularly caustic way of expressing their displeasure. They raised money and donated him a bicycle, as he would have to "lead by example". It should not be overlooked that in his latest statements-without hiding his opposition to cycling- the mayor complained that cyclists sometimes hit cars driving too close and suggested that the streets of Dublin may be too narrow to introduce separate cycling cycles (O'Neill, 2018).

The reported deaths of cyclists during the period 2010-2018 quickly drew the attention of the elected officials who proposed the solution of the Port Tunnel. Spokesman Brian Farrell was optimistic that the port tunnel would eliminate the collision between cyclists and trucks in Dublin city and that cyclists and trucks would stop competing for space in such a small area. But the Irish Road Transport Association, which represents and promotes the interests of the licensed transport industry in Ireland, did not share this view. Indeed, Jimmy Quinn's spokesman quickly claimed that they had tried hard to educate their members about the dangers posed by cyclists and to install very large mirrors on all trucks to solve the problem, as it really bothered them as well. However, he concluded that the IRHA would not be in favor of a complete ban on the delivery of trucks to the city center, as according to the union, cyclists were the ones who should take more responsibility for their safety, according to the rules of the road (Irish Examiner, 2014). This cold and apathetic attitude indicated a relative refusal of the governmental actors to take effective action in favor of cycling and the substantial implementation of the policies that they themselves have instituted over the past years.

However, by the time I-BIKE-Dublin was set up in 2017, a gradual change in the hitherto neutral to cold-hearted attitude of the politicians towards cycling had begun. The group started making a lot of noise, and approached almost all the leaders of the political parties, achieving a very direct, active, dynamic and creative way of complaining and getting attention from the authorities. One of these ways was when the daughter of a member appeared in a ceremony in front of the Minister of Transport and gave him 24 roses saying: "Each rose represents a cyclist killed in the last 18 months and I don't want to be one of those" (Stephen McManus, personal communication 21.05.2021). This was a really hard hitting action that really did not get unnoticed.

Finally, on the occasion of the accidents of cyclists who fell down due to the slippery streets in the city center, the Minister in charge of road safety stated that cycling is not as dangerous as it is considered. He argued that cycling has become safer and that the reason behind the increased deaths is the increase in the number of cyclists (McGreevy, 2020). The Minister's statement shows that although politicians are changing, there is still room for more until cycling becomes a safe means of cycling in transport by both the state and advocacy groups.

Policy entrepreneur

Policy entrepreneurs play a fundamental role in the policy making process, with a particular role to couple the three streams during policy windows in order to support certain perspectives. In simple terms, they want to convince decision makers that a particular policy is politically acceptable to solve a major problem (Zahariadis, 2005). For many years, this element of MSF was missing in Dublin's cycling policy making process.

While businesses and the media can be strong allies in promoting alternative policies, they do not always respond as expected. In the case of Dublin, and particularly in 2010, the media did not respond well to cycling initiatives. Although much progress has been made in lowering the speed limit in Dublin, the media has preferred to continue with strong car advertising in the country. In particular, they did not mention enough about this speed limit initiative, therefore the City councilors were not properly informed and started rethinking about the speed limit policy again. In this way, a valuable and powerful policy entrepreneur such as the national media and the press was lost, and acted against the benefits of a pro-cycling policy.

Looking at the latest developments in Dublin's cycling story, it should be noted that steps are being taken by local businesses as well as technology companies to promote and support cycling policies along with the cycling movements. In 2018, Ireland's largest hotel operator Dalata, which owns the Maldron and Clayton hotel chains and also manages the Gibson Hotel, is another team seeking to develop further the Dublin Cycle Network area. The hotel complex follows Trinity College Dublin and Digit Game Studios to join Cycling Works Dublin, which aims to show that businesses support cycling and urge the state to invest more (Nova News, 2018). Next to this, Dropbox, which is a giant US technology company, is an official business member of Dublin Cycling Campaign since 2020. This clearly shows high-tech organizations seeking to make the Irish capital more cycling-friendly (Taylor, 2020). Today there is a great list of companies that signed up for the Cycling Works Campaign, which is an offshoot of I-BIKE-Dublin to support cycling such as trade Unions, Google, Facebook, Vodafone, big multinationals. However, it should not be overlooked that approaching these companies and convincing them to get onboard was not an easy task for the advocacy groups. *"The way we approached these companies was not to complain to the companies, but we prepared all the materials and never said publicly that this cycling work was done by I BIKE DUBLIN, because companies would never get involved with activists. We explained that we were just bringing up a project that the government launched about 10 years ago (in 2008), with lovely cycling infrastructure for the whole of Dublin and it was abandoned. So you are basically supporting something that the government already at some stage was in favor of. That was acceptable for most companies. In the end this was very complimentary, because the government does listen to the corporate sector a lot because they are the main source of taxation"* (Stephen McManus, personal communication 21.05.2021).

Cycling groups get a more positive reaction from companies that are modern and maybe have a younger workforce. There's also the tech companies currently being set up in Dublin looking very much at micro mobility such as the use of e-scooters, as they see cycling as an opportunity for them as well and thus they support safe cycling infrastructure (Joan O'Connell, personal communication 28.05.2021). Finally, these new Irish companies together with the network of the high tech multinational one's act as individuals willing to use their resources for the benefit of cyclists, and have the potential to couple the streams and achieve the optimal result for the cycling policy implementation.

Window of opportunity

The three streams converge in a policy window during which the adoption is likely to take place. The first window of opportunity appeared just after the dramatic economic downturn, in 2013, when the recession was over. The financial situation in the country started improving, and the governmental actors started rethinking again of issues that have been neglected over the previous years. Cycling safety was one of them, and this led transport authorities to adopt the cycling network plan for the Greater Dublin Area.

Some years later, the release of the EU report on cycling deaths, which showed that Ireland had the highest increase among all countries, as the number of cycling deaths increased by an average of 8% per year in 2010 -2018, could be viewed as another possible “window of opportunity” for better implementation of the cycling policy in Dublin. This was almost four times the rate of the next countries, such as the Netherlands and France, where rates rose only by 2 percent. Nevertheless, this opportunity has not been totally utilized for a radical change in that period, and the three streams did not manage to align. Although the problem of the lack of proper cycling conditions, despite established policies, had received sufficient attentions thanks to the continuous efforts of the movements, the city planners along with the elected officials did not seem amenable to change and take action in favor of cycling, despite the feasible policy solutions that passed from the discussion table over time. Their resistance can be also explained by the pressure that the lobby from the motor industry - a lobby who would not make money out of people switching into bicycles - to the decision makers (Stephen McManus, personal communication 21.05.2021). Therefore, one of the elements of the Multiple Streams Framework was reluctant to proceed to the next step of policy enforcement. The so-called proper implementation of cycling plans was never achieved successfully until now.

In 2020, the pandemic breakout offered another good fortune for the next step in the policy making process for cycling. More specifically, the lack of much traffic on the roads, the quiet town and the significant decrease of car congestion was a convenient time period for the local authorities to redesign the transportation infrastructure, without great objections from those who see cycling as a threat. Indeed, Dublin City Council has put in cycling protections on the exact spots where I-BIKE-Dublin had held our activism actions. *“They’ve actually taken on board what we have done previously with their own bodies during certain times, and they’ve implemented small plastic bollards to prevent cars from parking there. Covid-19 was an easy way for them to implement it without causing any serious issues because the traffic was reduced”* (Vanessa Sterry, personal communication 31.05.2021).

Here also comes the role of the potential policy entrepreneurs to convince policy makers that a certain idea is politically acceptable and feasible to solve the problem during this window of opportunity. Technology companies and local businesses that have recently emerged to support the proposed cycling plans of the advocacy teams have finally the opportunity to define this role and try to manipulate policy streams in order to support this perspective. Conclusively, despite the fact that the fleeting opportunity of the EU cyclist death report has not been utilized in 2018, the pandemic offers a good timing for policy entrepreneurs to influence Dublin decision-makers and persuade them to step up cycling by taking real action, without facing extreme opposition. Last but not least, the politics stream is now much more prepared to implement cycling goals than they were a few years ago.

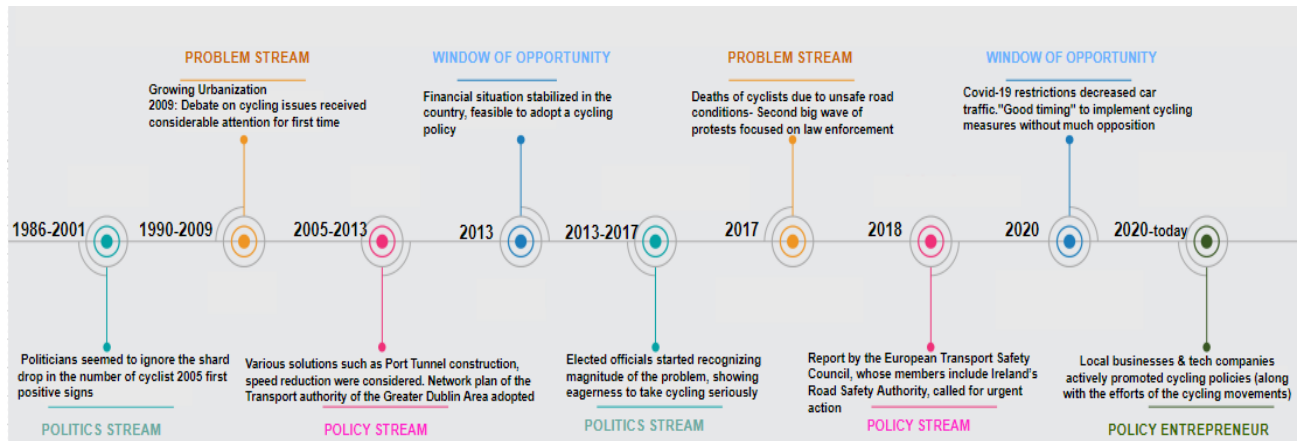


Figure 2: MSF timeline of key events for the case of Dublin

6.2.1 Results for Dublin case

The Dublin Cycling Campaign and I-BIKE-Dublin have sought to improve cycling infrastructure plans and achieve better cycling policies, both from different angles and with various strategies. The members of the campaign lobby both local and national policy makers and civil servants to bring about better cycling conditions and greater recognition for the field of cycling, while I-BIKE-Dublin are first line, dynamic activists with many confrontational actions on the streets. The importance attached to cycling in Dublin fluctuated across time. For many years until the mid-2000s cycling remained neglected, and the Dublin Cycling Campaign contributed to bringing it again on the discussion table. The first real measures in favor of cycling appeared in 2008, when the Dublin authorities followed the strong demands of the advocacy organization to take the promotion of cycling seriously. In the following years, politicians began to work actively to adopt a comprehensive cycling policy, which was implemented in 2013. However, the problems faced by cyclists continued and the lack of law enforcement led to the creation of I-BIKE-Dublin.

Although both groups presented different structures and ways of governing, they both started from the same base that was to identify issues related to the safety of cyclists. They made public statements and used indicators such as the numbers of people being killed, the number of bike thefts, and the number of daily offenses against bicycles to point out the problems for cycling. This was their direct way to inform the local community about it, but also to highlight the urgency to combat the problem and draw attention to it. In addition, they organized a number of activities, such as protecting a contraflow lane considered as a black spot for illegal parking, monthly cycling demonstrations along the Dublin River, and conducting voluntary information surveys (McGreevy, 2017 & Kapila, 2017).

Close to this, the agglomeration of social media played a big role in the case of Dublin. The fact that people happen to be complaining about the same things in the same place and coming across each other, and suddenly agreeing on hashtags, was a means to come closer to the public. I-BIKE-Dublin set up a Twitter account to put things out there, as they understood the importance of utilizing this technological means. Some other activities to make the common citizens aware of the urgency and the importance of this issue were the participation on radio broadcasts, and TV shows and the press releases (Vanessa Sterry, personal communication 31.05.2021). Besides, they knew that if they would achieve enough support amongst the public, the Council's Offices might be willing to modify some of the plans for cycling. However, we should underline that the advocates were not expecting to engage more and more

people with their campaign, as this would not be a realistic objective and too ambitious. Their best ambition in relation to public opinion was to remove the negativity and humanize the cyclists in the eyes of the public, without expecting them to start going into the streets.

Finally, for I-BIKE-Dublin to be able to make change there was a clear need to reach out to the general public, but also to other people who are maybe feeling the same way. It was necessary to mobilize support for change and spread the word out that it is a problem that affects everybody (Joan O'Connell, personal communication 28.05.2021). *Considering all the above, the case of Dublin supports Hypothesis 1 that social movements identify a problematic situation, and then influence the public opinion to attract governmental attention and achieve policy change. Finally, it points out the contextual power of social media to easily reach out to the public and bring together people with common views.*

Much of the pro-cycling policy adoption and implementation in Ireland, and in particular in Dublin, is directly linked to the politics stream, mainly in the way it has met the demands of the movements for better cycling infrastructure. However, their mood over the years was primarily influenced by external actors and stakeholders with interest in the transportation planning, and less by the activists who have reported unsafe cycling conditions. This is because social movements are composed of common individuals, and the average citizen does not have the same lobbying power as a huge corporation or commercial (Vanessa Steery, personal communication 31.05.2021). However, although people within the social movements might not have formal power as the elected officials in the city council, in the national parliament, they definitely have the power of the vote (Joan O'Connell, personal communication 28.05.2021). Indeed, I-BIKE-members tried to translate their power of vote into perceived strength, and subsequently influence the politicians.

Politicians react to the public because they are supposed to reflect the will of the public, the will of their constituents. The fact that politicians started finally adapting to the new perceived public-will was actually achieved through the movements' strong campaigns, and their attempts to approach almost all the leaders of the political parties. Both the I-BIKE-Dublin and Dublin Cycling Campaign realized early on the importance of stirring up the politics stream and engaging with them. Indeed, they recognized that without politicians having a will or a want, or even being approached by people, they are not going to necessarily know that there is an urgency for changing the city's infrastructures and making it more sustainable. Therefore, they achieved a very direct, dynamic and creative way of complaining about cyclists' problems through good tactical moves to make the most possible noise to politicians.

A noticeable campaign launched by I-BIKE-Dublin was I-BIKE-I-VOTE. That was every time somebody went to vote, they would take a picture outside of the voting station with their bicycle, and just tweet I-BIKE-I-VOTE. They wanted to create awareness of the problems, but more than awareness to educate people about the importance of sharing the road safely and respectfully and to wake up to the importance of the cause. According to the members of the group, I-BIKE-Dublin managed to change not only the public perception of cycling as a legitimate mode of transportation, but also convinced the politicians to listen to them. Whereas there have been projects sabotaged by opposition from some politicians, they regretted it when they understood that people will remember at the next election. I-BIKE-I-VOTE attracted the governmental attention and reminded them that people have the power of the vote, and I-BIKE-Dublin now has the power to influence a lot of people. The message was going out to politicians, but this was happening through the common people - as politicians in general are "scared" of annoying activists (Stephen McManus, personal communication 21.05.2021).

As it is difficult for ordinary people to make any changes in policy making processes, I-BIKE-Dublin tried to find an ally with those who do have greater voice and the power to potentially make the change. Most of the time, this ally would come through a more left leaning perhaps centrist government official or city council official (Vanessa Sterry, personal communication 31.05.2021). The Green party has always been absolutely pro cycling but the other parties showed up at a much later stage. *The case, therefore, supports the hypothesis H2 that the social movements actors who do not have formal power, aim to influence governmental groups, which are represented by the interest groups in the political stream in the MSF, to finally intervene in the policy adoption and implementation for cycling. The lesson to be learned from the Dublin case would be that although individuals may have no legislative power, their collective voices are certainly valuable and can achieve much - depending on who guides them to be heard. Lastly, it is vital for the social movements to figure out who is the right person to target within the political arena, based on the jurisdictions, the responsibilities but also the interests that have.*

The activism in Dublin can be distinguished based on their efforts to influence two stages of the policy making process, which are the policy adoption and the policy implementation. The period for adopting the policy was the years before the two landmark cycling programs adopted for Dublin, the first in 2008, when the Smarter Travel Policy was introduced, followed by an ambitious and coherent cycling plan in 2013. The official adoption of these two plans was the outcome of the three streams alignment. The problem stream and especially the various cycling issues, such as unsafe roads, increased deaths and the increasing number of bicycle thefts, were well defined by the Dublin Cycling members, as this was their motivation for creating the team. Through their activities, they were able to negotiate with city planners and elected officials, acknowledging that absolute dominance of cars was not the way to a sustainable future. Besides, the potential solutions to tackle these issues existed many years before they were finally considered, although many of them remained unfeasible during the years of financial recession and the lack of funding. When finally, the financial situation in the country was stabilized in 2013 after the national economic crisis, this served as an opportunity for the local authorities to take action in favor of cycling. However, there was no policy entrepreneur to articulate the three streams at that time and achieve the optimal outcome cycling. Although the media could have played this role, they promoted car ownership, following the interests of their sponsors.

The period following the approval of the cycling network plan in 2013 was characterized by very few real developments in the cycling infrastructure and the defective implementation of the proposed guidelines. This caused frustration in cycling communities and sparked a second wave of protests by advocates focusing on the implementation of cycling measures, as most of them have already been accepted in the past. I-BIKE-Dublin has proven to be the driving force behind the change in the perception of cycling as a legal means of transport, and key achievements are now being made to encourage cycling. Their activities highlighted the black spots and shortcomings in law enforcement, and quickly the politics streams understood the message. In addition, valuable knowledge and contributions were shared in the policy stream, as the City Council consulted team members on what was proposed for cycling, in order to ensure a commitment from the government to allocate a minimum budget (Stephen McManus, personal communication 21.05.2021). Today, there is also a large list of technology companies supporting the Cycling Works Campaign, a branch of I-BIKE-Dublin to achieve better conditions for cyclists, while many Irish companies with a young labor force see cycling as an opportunity for them, acting as pro-cycling policy entrepreneurs. In conclusion, the Covid-19 pandemic provided a window of opportunity and a good time for Dublin City Council to implement cycling measures without much opposition from car-oriented lobbies, as the car traffic was either way much

reduced. *In view of all the above, the Dublin case supports the H3 hypothesis, proving that when all MSF conditions were eventually met, the result was more successful and beneficial, which means that the efforts of social movements were more effective. Last but not least, in this first big round of activism the policy entrepreneur was missing, and although the pro-cycling policy was adopted it, the cycling measures were not enforced to the extent that started happening now.*

6.3 Analysis of Stockholm

Analyzing and reconstructing the policy making process in the field of cycling in Stockholm was based on the collection of various information that have been scattered in time. Stockholm presents a slow, incremental but steady development of cycling that began in the 70's and gradually evolved until the previous decade. The necessary data to complete the MSF framework was collected through literature, archives from the 70s until the recent years, media platforms, blogs, advocacy organizations' websites and through interviews with relevant stakeholders coming from the three major cycling advocacy groups and the Regional Cycling Office in Stockholm. They were then categorized in chronological order into a timetable but also based on the logic of MSF components. Finally, below the report presents the analysis of the events that shaped the pro-cycling policies adoption over time by using the MSF approach as described by Kingdon.

Problem stream

The car used to be part of the freedom generation for the Swedish working class, and through a strong working class movement until the 1970s the motorized vehicles would occupy a strong position in Swedish culture. In the late 60s, there were social movements and protests in Stockholm, sparked by environmental concerns and transport issues, aimed at creating an alternative city in favor of the bicycle instead of the car. These movements could not move the general population at that time and therefore could not influence politicians and their subsequent urban-planning decisions (Koglin, 2015).

However, in the early 1970s, increasing attention started being paid to the automotive industry's negative impact on safety, noise and air pollution, and opposition to automobile-oriented urban development. While previous criticism of the urban car industry underscored the importance of the negative side effects of motor vehicles in the early 1970s, a wider resistance to urban reconstruction and motorways emerged in Stockholm (Oldenziel & Trischler, 2003). The Cykelfrämjandet was an interest organization for cyclists in Sweden with a large office in Stockholm, which gradually began to push for a better and more attractive cycling environment. Some years after their set up it was the time when negative perceptions of bicycles began to be complemented by positive ones, and started spreading among social actors. This resistance was initially activated by residents' associations and urban environmental groups, better known as the Alternativ Stad, together with Cykelfrämjandet that emphasized on the benefits of cycling (Oldenziel & Trischler, 2003).

The Cykelfrämjandet, known as the official Swedish national cycling advocacy organization, has made efforts to get politicians at local, regional and national level to consider the need for increased cycling and the environment, public health and accessibility, but also to educate people around cycling. An important action was the publication of "Cycling" magazine four times a year, with the aim of forming a favorable opinion for cycling and turning Sweden into a real cycling nation. Through this magazine, the organization wants to convince more people to choose bicycles for everyday transportation needs, exercise, leisure activities, highlighting the associated benefits of it. The former name of the magazine

was “Cyklisten” for the period 1935-53 and “Cykel- och mopednytt” for the period 1954-80 (Cykelframjandet.se).

Thanks to the continuous efforts of bringing cycling to the fore, cycling was no longer perceived as the vehicle of the poor, whereas urban auto mobility has become an increasingly controversial issue. The "modernization" of the bicycle at that time can be partly explained by its inclusion in popular green discussions as an environmentally friendly means of transportation and its position as a health and fashion-related lifestyle product (Horton, 2006). The repetitive information regarding the benefits of more cycling in the cities, in Sweden, and in the society as a whole played a key role in shaping the perception around cycling. Step by step, it was adopted, from the political level, and also from the decision-making layers at the authorities' level (Klas Elm, personal communication, 01.06.2021). The intense and coordinated effort to promote cycling has gradually managed to push the issue on the policy agenda and get the government's attention. Last but not least, Cykelframjandet together with Folksam have developed a website and mobile applications, allowing cyclists to report bicycle traffic errors and suggestions for improvements. In this way they enable citizens to learn more about cycling, but also to contribute with their inputs to transport issues that they may face. Results receiving more than 10 votes are sent digitally to the competent authority, which is usually the municipal office for further action (Cykelframjandet.se).

Politics stream

During World War II, Sweden was able to maintain its neutral policy as a non-combatant and the Nazis never invaded Sweden (Hendrickson, 2007). Stockholm and the country as a whole, came out of the war relatively untouched and also richer than many of the other European cities. However, although the old city center in Stockholm remained unaffected by the war, Swedish urban planners' first decision was to tear down the tight urban areas and replace them with roads suitable for cars and high-rise buildings to a more American model (Rolf, 2021). Moreover, the fact that many people moved to Stockholm in the post-war period generated high tax revenues that allowed designers to focus on modern large-scale projects, such as the construction of a subway system and many city highways (Koglin, 2015). *“In the 50s, and 60s, the engineers and politicians decided that the people shouldn't use the bicycle, they should use the car, and even though Sweden was not part of the war, they turned down a lot of the Stockholm area to make waves for highways and urban sprawl”* (Emil Rensavala, personal communication, 04.06.21). This resulted in a general underestimation of cycling, as the main interest of decision makers was mainly car oriented.

Around 1970, it was the first time that advocacy groups took to the streets and rode their bicycles, in order to make politicians recognize the importance of cycling. The members of the first urban environmental groups of the 1970s and the cycling advocacy group were mostly young people from the educated middle-class, protesting against the wrong decisions of their parents' generation (Eellend, 2010). The urban environmental movement and the bicycle lobby Cykelframjandet pushed local politicians for increased appreciation of cyclists. Although in the early 70s they were not able to influence the urban planners, in 1978 they finally managed to convince them to re-evaluate the urban regeneration and traffic plans of previous years, leading to the creation of the first bicycle project for Stockholm in the same year (Oldenziel & Trischler, 2003).

The 1980s were a period of little interest in cycling from the side of the local and national authorities. The Traffic Board was searching for cheap solutions to solve traffic issues, mainly due to the financial

difficulties faced by Stockholm and Sweden. In the second half of the 1990s, the focus of policy and subsequent planning departments began to shift to cycling again, which eventually resulted in the "Cykelplan 1998" and increased funding for the cycle infrastructure (Emanuel, 2018). More specifically, near the end of the 20th Century the Stockholm's party came to power and started to make some real changes for cyclists. Their focus on improving cycling infrastructure and conditions for cyclists resulted in "Cykelplan" with concrete proposals. Although their plan was met with heavy resistance from the media, taxi organizations and even the Social Democrats, the cycling infrastructure, cycling conditions, and overall cycling levels improved (Koglin, 2014).

The first collective political action was taken in 2008, when for the first time in Sweden, cycling as a mode of transport was included in an infrastructure proposal developed by the Swedish government. In this proposal, the government suggested the direction of transport infrastructure measures for the period 2010-2021, such as financial framework, division of responsibilities, guidance for prioritization of actions and request for expansion and funding from other stakeholders (Regeringskansliet, 2008). This suggestion was accepted by the government at the end of the same year. Members of the Cykelfrämjandet advocacy organization could not hide their happiness after this announcement, stating that Parliament's acceptance is one of the signs that cycling is back on track, coming to the fore and being accepted as a proper means of transport (European Cyclists' Federation, 2012).

However, suddenly the interest in cycling ceased again when right-wing political parties opposed the idea of downtown cycling and reduced funding for cycling projects (Emanuel, 2019). In an effort to boost the political interest in cycling, in 2009 Svensk Cykling that is an industry organization for cycling, introduced an annual politician award called "Cycling Friend of the Year", which is given to the politician who has done the most for cycling during the past year (Svensk Cykling.se).

In early 2012, representatives of the European Cyclists' Federation went to Sweden to speak with members of the Swedish Parliament, local Stockholm politicians and transport authorities who were interested in learning more about cycling initiatives and development from a European perspective. One of the ECF officers, Martti Tulenheimo, said after his visit to Sweden that "There seems to have been a seismic change in Sweden, as bicycles, formerly associated with the center-left, are now attractive to all political parties, including the classic liberals". An actual political shift began in that period, when cycling became a topic of discussion in Swedish politics. According to Eva Lind-Båth, who has been a member of the Cykelfrämjandet for many years, it seems that cycling has finally attracted the attention of Swedish politicians in that year and they started showing a desirable political attitude. She went on to say that it was difficult to understand whether the political support was sincere or not, before the actual budget for the bicycle initiatives was allocated (European Cyclists' Federation, 2012). However, the launch of the "Cykelplan 2012" for the city of Stockholm was the result of the genuine interest of the political stream in critical cycling issues, followed by a regional bicycle plan for Stockholm drawn up for the period 2014-2030 (Cykelplan, 2012). Finally, this was followed by a regional bicycle plan for Stockholm that improves the opportunities for bicycle commuting in Stockholm County (Region Stockholm), clearly showing the coordinated effort of the political stream to take action in favor of cycling.

Policy Stream

One of the design concepts that influenced cycling policies in Stockholm is the SCAFT (Stadsbyggnad, Chalmers, Arbetsgruppen För Trafiksäkerhet). This was a 20-page urban planning paper with regard to

speed and traffic safety, developed by Swedish designers at Chalmers University in the 1960s. SCAFT was inspired by previous reports by Swedish designers exploring the layout of cities in the United States and how they built modern infrastructure for the growing car traffic (Hagson, 2005). According to Koglin (2015) the SCAFT document may have inadvertently shifted the focus to building infrastructure for cars, because when flows are optimized, the car serves as the most appropriate form of transport in terms of speed and convenience. It is noteworthy that many principles of the SCAFT document still exist as a basis for current planning documents after many revisions, such as the VGU (Vägar och Gators Utformning), which sets out the rules for urban planning (Rolf, 2021).

As mentioned above, the first real bicycle project in Stockholm was adopted in 1978. The 1980s were a period of little interest in cycling compared to the 1970s, but in the meantime, providing adequate infrastructure to cyclists and an integrated network has become a commonly accepted policy solution for more and safer cycling (Martin, 2015). In the city center of Stockholm, however, the process of creating bike lanes was considered to be fraught with conflict. While some less conflicting bike lanes were created in the late 1970s, around 1980, the Traffic Board voted for the creation of simpler and cheaper solutions, particularly proposing painting "bike lanes" on wider sidewalks to accelerate the development of a cohesive network (Oldenziel & Trischler, 2003).

In an effort to explain why previous investment in the bicycle network has declined, conservative Traffic Commissioner Sture Palmgren in 1985 referred to financial difficulties, but acknowledged that was not the only reason. Indeed, he argued that competition for less space in Stockholm was very high, as public transport wants bus lanes, residents need more parking, but overall traffic must move in a way that does not create queues or pollute the air. He went on to say that these needs of the various groups cannot be ignored. Therefore, in some places it was technically impossible and very expensive to create additional bicycle lanes, concluding that under these conditions, the growth rate of bicycle lanes is quite satisfactory (Martin, 2015).

Apart from the decreased investments in cycling, the proposed "Cykelplan 1988" was met with strong opposition from various stakeholders, and although the cycling situation improved overall, the plan did not totally materialize. When conflicts of interest in urban traffic were overcome, the policy-makers had to take action on the bicycle. Since the 1990s, and especially during the period 1998–2006, the bicycle network has expanded significantly, but often - especially when cycling lanes on major streets have been proposed - met strong opposition, mainly from the traffic and the Stockholm Chamber of Commerce (Emanuel, 2015). Stockholm Chamber of Commerce has been a very old fashioned, car-oriented organization asking for more roads for the city to be able to grow (Ulf Eriksson, personal communication, 28.05.2021 & Klas Elm, personal communication, 01.06.2021). A milestone year was 1998 - when the local Stockholm party managed to use its power to push for improved cycling conditions (Beckman, Linusson & Nilsson, 2009).

Although many decades passed from the first cycling plan for Stockholm in 1978, and the Cykelplan 1988, not much seemed to have happened. Despite the new notions of cycling, the re-emergence of cycling as a common means of transport was slow and discontinuous until 2012, with an exception of policy reform in 2005. The reshaping of the transport system has been hampered by previous decades of motorized planning and urban development, and the old conceptions, habits and routines that come along with it (Martin, 2015). An update of the old bicycle plan took place in 2005. In particular, the urban planners drew attention to the key weaknesses identified after the 1978 plan, which were the lack of a coherent and navigable bicycle network, the existing cycling infrastructure had too many obstacles,

cyclists had to share some common areas with pedestrians or even cars, and there was a relatively low level of safety at intersections (Högström, 2009). This was the result of the efforts of bicycle lobby organizations to submit proposals for the modernization of the old cycling policy that was not sufficient at that time, and their close cooperation with politicians to make them consider these changes.

Between 2008 and 2011, interest in cycling ceased as right-wing political parties opposed the idea of downtown cycling and reduced funding for cycling projects (Emanuel, 2019). However, in 2011 the ambitions for better cycling infrastructure increased, as well as the budgets allocated for cycling infrastructure because the financial situation of the country improved. This increased budget gave local authorities the opportunity to reconsider cycling promotion, while the political interest in cycling has grown. This is indicated by a major government inquiry on cycling issues which was completed in mid-2012, and was combined with the governmental promise for significant investment in cycling infrastructure (Bastian & Börjesson, 2018). In general, the budget trend for cycling infrastructure in Stockholm has been on the rise since the 1990s, and although it declined slightly between 2007 and 2011, budgets in the following years showed an increase (Rolf, 2021).

The increased budget combined with the growing interest in cycling led to the creation of the "Cykelplan 2012" which is part of the "Stockholm Vision 2030". This vision plan expresses Stockholm's ambition to develop a more sustainable city and "Cykelplan 2012" focused on increasing cycling within Stockholm and set a goal of increasing the number of cyclists to 15% across the peak time by 2030 (Stockholm Stad, 2012). This ambition resulted in another direct increase in the budget for cycle infrastructure for the following years to come, and was enriched with the regional bicycle plan for Stockholm country in 2014.

Policy entrepreneur

Policy entrepreneurs are those change agents that combine the three streams into a proposal during a window of opportunity. The environmental movement together with Cykelfrämjandet combined the three streams in 1978 aiming to convince the decision makers in Stockholm that the choice of promoting cycling is politically acceptable to solve the salient problem of urban traffic. In particular, in 1978 there were policy alternatives feasible to make urban planning more sustainable, politicians started re-thinking car dominance and there was more attention given on the negative side effects of motor vehicles.

In the most modern years, there have also been a number of people in Stockholm who have played a key role in promoting cycling policies. One of them is Stella Fare who represented the Stockholm party from 1985 to 2002 and was mayor of Stockholm from 1998 to 2002 (stellafare.se, 2021). She was the first political actor to strongly emphasize and support the development of cycling infrastructure in Stockholm. She is also famous for being the first politician to make a difference for cyclists in Stockholm (Rolf, 2021). Indeed, she contributed a lot in the bicycle network expansion of that period, even though the development of infrastructure met strong opposition from the Stockholm Chamber of Commerce, and the automotive industry.

As for the Swedish car industry, it is worth noting that they use their influence to keep car ownership costs relatively low, resulting in more demand for car infrastructure (Rolf, 2021). Therefore, due to their power, the automotive industry plays an indirect role in the cycling policies under discussion. The cycling lobby, which consists mainly of Cykelfrämjandet, Svensk Cykling and Svenska Cykelstäder,

does not have the same bargaining power as the car lobby, which ultimately reduces the extent to which they can easily interfere in the political scene. Therefore, although they were enacting as policy entrepreneurs in the past, they had often faced obstacles from outside stakeholders with conflicting traffic interests. However, they have been actively striving for bringing policy alternatives for the renewal of the old cycling plans on the discussion plans, and kept an open constructive dialogue with the politics stream. As a result, in 2012 the increased budget available in Stockholm made their proposals more workable than ever, and as politicians were convinced of the needs of cyclists, they adopted the "Cykelplan 2012".

Window of opportunity

The creation of the first cycling program for Stockholm in 1978 was the result of direct pressure from the urban environmental movement and the Cykelfrämjandet bicycle lobby on the local political stream for an increased appreciation of cyclists. Besides, the period of the 1970s was a convenient period for the problem stream as growing attention started being paid to the automotive industry's negative impact on safety, noise and air pollution, and opposition to automobile-oriented urban development, making the cycling policy seem more feasible. The environmental movement together with Cykelfrämjandet combined the three streams and the cycling plan of 1978 was the tangible result of their continuous efforts. The social movement "Stop de kindermoord" in the neighboring country of the Netherlands in the early 70s and also the disruptive event of the oil crisis has definitely influenced cycling, facilitating the right time for this policy change to happen (Emil Rensvala, personal communication 04.06.2021).

In 2012, after many years of small steps towards an integrated pro-cycling policy, the Cykelplan 2012 was finally there. The increased financial resources available in Stockholm have facilitated the implementation of transport redesign and cycling integration within the plans, opening a new window of opportunity for cycling. In that period a real political shift in favor of cycling started happening and all political parties within the Swedish parliament welcomed cycling, influenced also by the European Cyclists' Federation. *"There has been a political will, with which all the parties have been in favor of investing more in cycling infrastructure"* (Emil Rensvala, personal communication 04.06.2021). Close to this, Stockholm was beginning to become crowded, which framed the perception of the problem in the issue of urban traffic. Urbanization continued and people moved out of the countryside, making the city less friendly (Klas Elm, personal communication 01.06.2021). These conditions provided the favorable framework for the adoption of the Cykelplan 2012, and the ground was fertile for the uptake of cycling infrastructure promotion. The cycling lobby, mainly Cykelfrämjandet and Svensk Cykling, contributed with their proposals to the development of the policy and actively collaborated with the political stream to achieve the best result for cycling.

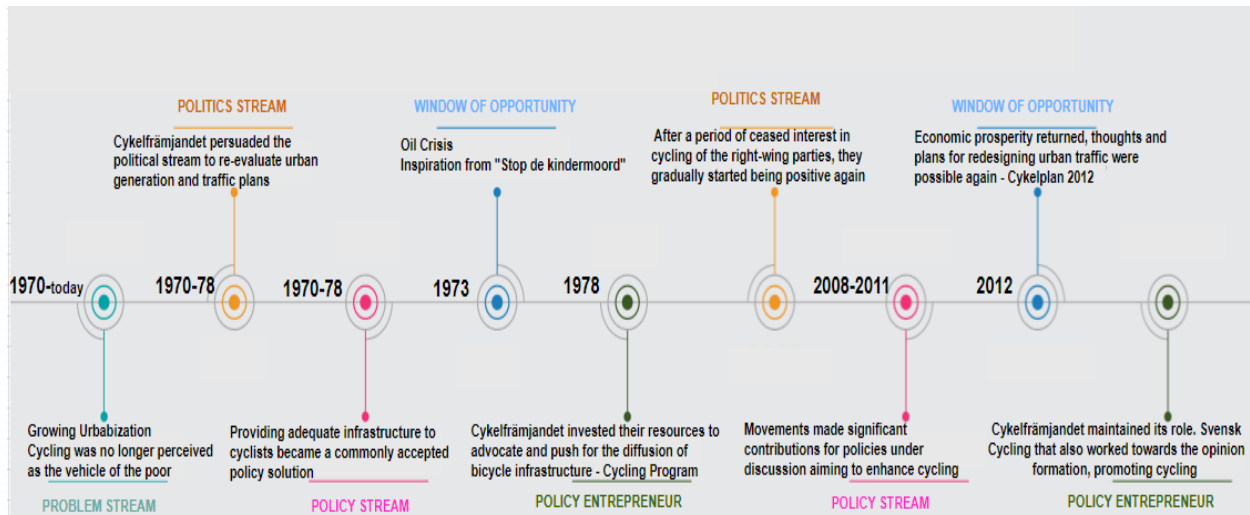


Figure 3: MSF timeline of key events for the case of Stockholm

6.3.1 Results for Stockholm case

Cycling activism in Sweden takes many forms and strategies. Such activism might be found in traditional cycling advocacy organizations working to influence official policy makers at transnational, national or local levels, while it can be also found in loosely organized grassroots movements (Balkmar & Summerton, 2017). Cykelfrämjandet is the formal Swedish national cycling advocacy organization, Svenska Cykelstäder (Swedish Cycling Cities) is an association composed of 35 municipalities and 6 regions, supported by 7 associated members - Stockholm is one of these regions-, and Svensk Cykling (Swedish Cycling) is an industry organization working towards the opinion formation. In addition to focusing on the prospects and rights of cyclists, these expressions of bicycle activism reflect clear and provocative visions of the role of cycling in future mobility, as well as the ways in which bicycles are challenged as political and cultural symbols.

Starting with the Svensk Cykling, although they underline the importance of public opinion, they do not have that much interaction with the common public, as they do not have that economic strength to do that. Nowadays they organize two main public events such as the Bike Day of Sweden and the winter Bike to Work Day, while presenting a broad media approach, to try to make the media talk, show or write about cycling to get the general opinion. However, since they don't have the means to wake the public and extensively influence it, their main focus is the policy makers and secondly the general media (Klas Elm, personal communication 01.06.2021). Therefore, they are working directly with the policymakers and the politicians. Their strategy is to target the politicians, decision-makers or elected officials to convince them to interact with Svensk Cykling for facts and statistics concerning cycling, cycling infrastructure and cycling policy. Indeed, they play a big role in pushing the policy towards a more bike friendly political environment. This cycling-friendly political environment is the result of a general shift in cycling public opinion, which has pushed politicians to change in favor of cycling. One of Svensk Cykling's most important achievements is the creation of a network for politicians interested in cycling, involving all political parties in parliament, which serves as a forum for policy or regulation or law debate for promoting cycling in Sweden. Besides, the members of the organization keep very good contacts with the different political parties, meeting them four or five times a year to discuss key issues around cycling. In 2009 for instance, they launched the politician award "Cycling Friend of the Year", in an effort to strengthen their relationship with the politics stream. It is worth noting that not

only does the defense organization turn to governmental actors, but politicians also come to them to discuss their ideas on the issue or just to get more information for cycling facts (Klas Elm, personal communication 01.06.2021).

Moving to the Cykelfrämjandet, it stands out as an advocacy organization focused primarily on performing "corridor politics". It operates mainly through well-established, largely discursive channels and forums for achieving political influence (Balkmar & Summerton, 2017). The board of the organizations holds an advisory role to the public on the multiple benefits of cycling, primarily for information and education. In terms of their intervention in policy issues around cycling, they target directly to specialized actors who consider them competent. When it comes to the common public they work towards convincing more people to choose bicycles for everyday transportation needs. More specifically, they direct part of their communication to the general public in the sense of disseminating information and educating people about the joy and health or environmental benefits of cycling to get more people to ride. The publication of the magazine "Cycling" which points out the advantages of cycling at the social level is their way of communicating their perception of cycling and to acquaint the Swedes with this means of transport, framing the socioeconomic and environmental conditions of the problem stream. In this way they also contributed to modernizing the bicycles in a very car-oriented period and managed to integrate cycling into the policy agenda. Furthermore, they also collaborate on Winter Bike to Work Day with other advocacy organizations such as Svensk Cykling, which is partly aimed at non-cyclists. Their goal through this winter campaign is to spread the message that it is still possible to ride a bike in the winter and get more people to ride their bikes. Besides, they also turn to existing cyclists to engage and involve them in cycle politics, spreading information about the Cykelfrämjandet's work to the legislature or to policy makers to improve conditions for cyclists.

On the other hand, the winter campaign is also addressed to policy makers, which means that in order to get more people to cycle in the winter, it is necessary for the responsible authorities to take action and ensure that the roads are clean enough and that there is a good solid infrastructure. To really make a change happen and improve things around cycling, their engagements are directed towards the power holders. In particular, the greatest part of their communication is devoted to policymakers, politicians and decision makers, as they aim to keep a good dialogue and an ongoing discussion with legislators at all levels. Picking as an example the event of a need for better cycling infrastructure, it is clear that Cykelfrämjandet has neither the budget to solve it nor the mandate to carry it out. Their way of doing that is to push it and try to get the people who have that decision-making power to make those decisions, as they believe that there is a lot of power in having a voice and advocating for an issue (Emilia Sternberg, personal communication 09.06.2021).

Overall, they have good connections with the policy makers within the national parliament, and they bike politics as an activist, dialogue partner, and lobbyist. Close to this, the Regional Cycling Office in Stockholm underlines that they are a good power in this change. More particularly, since 2014, there has been a bike plan focused on building bike infrastructure, which is now being revised. Cykelfrämjandet has been very active and has given their inputs to the plan, and although they have not been part of development, they contributed with their inputs (Ulf Eriksson, personal communication 28.05.2021). In other words, they interfered in the policy stream by providing alternatives and proposals that can be applied to cycling design to enhance this sustainable means of transport. They utilized their connections to persuade the political stream for the feasibility and the necessity of applying these proposals, and managed to be trusted by the political stream. Finally, it should be noted that the

Cykelfrämjandet is not a political organization, while members are not engaged for political reasons, but because they enjoy cycling as a pleasant leisure activity.

Last but not least, Svenska Cykelstäder is a knowledge cluster of cycling experts who share ideas, information and methods, forming the basis for both community planning and opinion formation. They participate in the bicycle debate and provide a basis for political decisions on bicycle issues by streamlining communication between research and practice. In this way, they contribute knowledge in the policy stream on how conditions for cycling can become better based on the research they perform. They usually submit formal documents and proposals for the national cycling plans which are under development, and meet the authorized actors informally. Svenska Cykelstäder wants to increase cooperation between all stakeholders in community planning and work together to improve cycling at all levels (SvenskaCykelstaden.se).

Furthermore, it is very important for them to have the acceptance by the general public on certain issues, and sometimes they also aim at the general public to try to influence them and emphasize the need for investment in cycling to the decision makers. It is worth mentioning that not all the activists know how planning works, and for these people it is an easy start to start influencing the general public, as it is more accessible for them. However, they recognize there are very few people who have the power to really change cycling policies, and although they have the knowledge, maybe they don't have the power to influence the policy that is under development. Thus, they collect all the data for the various municipalities involved in the organization and then direct their communication to the national decision-makers and politicians from all parties in the Swedish parliament who are responsible for traffic issues (Emil Rensvala, personal communication 04.06.2021).

Taking into account all the above related to the actions and strategies of the various social movements that promote cycling in Sweden and Stockholm, we can conclude that there is not enough evidence to support the Hypothesis H1. The three groups interact with the public and respect its importance, but have an educational attitude towards them, in order to inform them about the benefits of cycling rather than being active on the political issues around it. They do not expect to achieve a policy change through the public, as they directly target their powers for change in the political stream itself. The case therefore supports the hypothesis H2. All three groups in question aim to maintain a good discussion with decision-makers, governmental actors and generally the political stream both at national and local level. In this way they make them aware of their demands on cycling issues and to persuade them to change their policies. Conclusively, another interesting finding is that apart from influencing the politics stream, they contribute with suggestions in the policy stream as well. Thanks to the knowledge of some members of the teams on traffic issues and together with the research carried out, they share ideas, information and methods for better traffic planning and improvements in cycling policies.

We can distinguish two phases in which the three streams were coupled and Stockholm came to the adoption of policies in favor of cycling. Starting with the first cycling program of 1978, it came as a result of the increasing attention given to cycling. The advocates of Cykelfrämjandet with their continuous efforts played a key role in persuading the political stream for the feasibility of their policy proposal. In particular, they stressed the need to promote cycling in order to reduce the negative side effects of motor vehicles and urbanization. It is also worth saying this period of time coincided with the oil crisis, and the resounding presence of the social movement "Stop de kindermoord" in the Netherlands, creating a favorable environment for the development of cycling. Cykelfrämjandet turned out to be willing to invest their resources to advocate and push for this certain policy advancement and

the diffusion of bicycle infrastructure. They invested their time and resources to shape the political agenda to amplify the political will in favor of cycling, enacting as a powerful policy entrepreneur despite the opposition of external stakeholders.

Moving to the period of 2012, the problem of the growing urbanization was again on the discussion table. Economic prosperity has returned to Sweden after a period of reduced budget, making thoughts and plans for redesigning urban traffic possible again. Cykelfrämjandet maintained its role across time as a powerful and worthy policy entrepreneur, actively collaborating, negotiating with the urban planners and political authorities by making significant contributions for policies under discussion. Besides, Svensk Cycling worked towards the opinion formation, pushing the political environment to adopt the pro-cycling plan and determined the role of the policy entrepreneur too. The problem, politics and policy stream were aligned thanks to the efforts of the advocates and the better national financial situation created a window of opportunity. The result was favorable for cycling, the "Cykelplan 2012" was established and two years later it was supplemented by another regional plan to coordinate the government's attempt to strengthen cycling.

Considering all the above, the findings for the first Stockholm cycling policy adoption in the 70s show that when all MSF conditions were eventually met, the result was very effective for cycling. Similarly, examining "Cykelplan 2012" the results show that economic prosperity and increased national funding served as a window of opportunity for a favorable policy outcome. Therefore, we can conclude that the case of Stockholm supports Hypothesis H3 for both waves of policy adoption in 1978 and also in 2012, when the three streams were coupled during a policy window thanks to the efforts of the advocacy organizations.

In conclusion, Table 6 below presents the summary of which Hypothesis worked for the cases.

Hypothesis	Amsterdam	Stockholm	Dublin
H1	Supported	Not supported	Supported
H2	Not supported	Supported	Supported
H3	Supported	Supported	Supported

Table 6: Results for supported Hypothesis for each case

Chapter 7 Cross-Case comparison

This chapter presents the ways in which social movements influence the policy making process, especially the policy adoption and implementation, which is done by comparing the three cases. The previous chapter has shown how social movements and advocacy groups managed to have an impact in Amsterdam, Dublin and Stockholm. The following paragraphs aim to explain the findings of each case compared to the theoretical framework. After that, the report will compare the similarities and contrast the differences between the three cases, in order to identify any patterns and also to explain the variation in the coherence of the findings.

7.1 Comparison of hypothesis findings

7.1.1 Hypothesis 1

Reminding again the first Hypothesis it states the following: *Social movements tend to define a certain condition as a problem or frame a particular policy issue (problem stream in MSF), and then influence the public opinion in order to attract governmental attention and achieve policy change.*

For this hypothesis the analysis of the three cases proved that it is supported for Dublin and Amsterdam but not for Stockholm. Starting with Amsterdam, “Stop de Kindermoord” played a great role in shaping a debate around cyclists’ road safety and the appropriateness of transport infrastructure of that time. Their main target was to influence the local but also the national society, and bring attention to an issue that according to their interests was important, framing in this way the problem stream. Therefore, they organized massive actions, large scale protests on the streets, they often appeared in the televisions and made strong statements demanding actions from the government. This social mobilization was the intermediate step to reach out to the politicians and persuade them to reconsider a policy change in favor of cycling. For the Dutch activists it was vital to have the public support, as they knew that arriving to the politicians would not be a big problem. Similarly, in Dublin, advocacy groups approached the public through protests, campaigns and social media in order to find people who have common views on the problem, thus highlighting the urgency of the situation to the political stream. Therefore, by raising their voice through public support, they could legitimize their claims and persuade policymakers to include cycling issues on the policy agenda and implement change. One difference between Amsterdam and Dublin is that in the latter, activists did not expect the public to take part in their protests, but simply to express their views, while in Amsterdam they aimed to mobilize the people.

On the other hand, in the case of Stockholm the three advocacy groups kept an advisory role towards the public opinion, stressing the benefits of cycling without putting efforts to frame the conditions around cycling as problematic. One reason that can explain this difference in strategy between Stockholm and the other two European cities lies in the formation of the movements that were active there. Specifically, while in Amsterdam and Dublin the groups consisted mainly of common citizens without any scientific education in the field of cycling and policy making, in Stockholm a big part of the members was much more knowledgeable with professional roles in such subjects as they were cycling specialists. This knowledge enabled them to follow a different strategy without necessarily investing in forming the public opinion. In contrast, in the other two cities where the members were

mostly young people, parents and citizens side by side, it was more feasible and realistic to turn to the general public first as an intermediate step to receive political attention later.

In view of all the above, we can conclude that influencing the problem stream and getting the public support is a necessary condition for the strengthening of social movements, but it may be of secondary importance if the movements themselves have the ability to negotiate with decision-makers from the beginning. In this case, they are likely to skip the intermediate step of informing the public through the configuration of the problem stream and may only have an advisory role to it.

7.1.2 Hypothesis 2

Moving to the analysis of the findings for the second hypothesis derived from the theoretical framework it describes the following: *As social movements are powerless, they aim to influence governmental groups, which are represented by the interest groups in the political stream in the MSF, in order to trigger a change in public policy.*

For this second hypothesis the analysis of the three cases found evidence to support it for Dublin and Stockholm but not for Amsterdam. To begin with, the “Stop de kindermoord” in Amsterdam flourished in the post-war period in the 70s, when most countries were gradually being re-created. At that time, politicians were more approachable and beyond that they could recognize the sensitivity of the issue. The fact that child safety has been heavily linked to cycling has played a key role in raising the awareness of political authorities, eliminating the need for the social movement to specifically target the political stream to achieve change. All political parties had adopted a favorable approach to cycling, and since the new city council was made up mainly of Labor party members who had primarily supported plans to improve cycling infrastructure, the political stream was already prepared for change.

In contrast to the case of Amsterdam, the advocates of Dublin and Stockholm put a great part of their efforts to influence the politics stream and convince them to take action. Starting in Stockholm, the actors who participated in these groups were well informed about how the policy-making process works and who makes and implements the decisions. Setting up a network with politicians from all the political parties but also from all the governance layers was critical for them, as Sweden presents a decentralized way of governance regarding the policy implementation, but the national parliament set the policy guidelines. Close to this, as public opinion at the time had already begun to gradually shift in favor of cycling, the advocacy organizations concentrated their powers on politicians to keep their interest high. Moving to Dublin, members of the social movement sought to transform their individual voting power into a collective force to the political stream. The difference with Stockholm is the fact that although the Irish cycling activists did not have the means to pressure the political authorities in terms of knowledge, they had to find a way to contact them in order to fight the powerful automobile lobby. The political stream in Dublin was already highly biased by the interaction with this powerful external stakeholder who, because of their bargaining power, had greater access to the policy-making process. Although it was harder for the advocates to find out who are the responsible governmental actors to target, they approached members from all political parties and pushed for change from different angles.

Finally, considering all the above we can conclude that social movements and organizations aim to influence the government under some particular conditions. The first and by far the most crucial is whether political will exists or not. If politicians are already willing to support change, then social movements may not need to negotiate with them, but simply oversee their work. The second condition

refers to knowing how to approach them, in which way and when. It is much easier for the specialized bodies to have access to the political stream rather than for the common people. Finally, the existence of strong policy opponents determines the need to interact with decision-makers to ensure that the voice of the movements is adequately represented on the board.

7.1.3 Hypothesis 3

The final hypothesis that has been tested for the three cases studies argues the following: *Social movements are likely to be most effective, when all the conditions of MSF are satisfied and well aligned. In other words, all the three streams should be present, together with a policy entrepreneur and a window of opportunity.*

The results of the narrative analysis of the three cases present supporting evidence for Amsterdam and Dublin, and in part for Stockholm - which will be further analyzed below. Firstly, the “Stop de kindermoord” can get credit for a big chunk of cycling policy change in Amsterdam, especially due to their contribution in framing the problem stream, but also for enacting as policy entrepreneurs and coupling the streams in favor of cycling. However, their efforts also paid off due to the political desire to resolve the issue and the existence of policy solutions that were possible at that time. We must also not overlook the window of opportunity that arose due to some other external events such as the oil crisis and the poor financial condition of the public transport of that period which undoubtedly facilitated their success.

Moving to the next case, in Dublin, it was proven that the substantial policy implementation actually materialized after the three streams were coupled by a policy entrepreneur during a policy window. It is worth noting that the first time the three streams as presented by Kingdon existed - the problem was identified, there was an alternative to combat the problem and the politicians were positive - a pro-cycling policy was adopted, but in reality the advocacy groups did not achieve their main goal as the situation for cyclists did not improve. Although the policy launched in 2013, the actual implementation did not materialize until the next big wave of protests. In that second wave, the difference was the fact that the city council benefited from the time coincidence with the Covid-19 restrictions and the reduced traffic in order to implement the plans, but the activists also found support from some companies in Dublin that supported their plans. As the situation eventually improved, this means that the other two conditions were necessary for the movements to be more effective and for a real change to be achieved.

Lastly, Stockholm presents two different phases when a cycling plan was adopted. Starting with the first cycling program in 1978, this came as a result of the alignment of the three streams thanks to the efforts of Cykelfrämjandet. The Swedish advocacy organizations acted as a policy entrepreneur, used their negotiating and networking power to couple the streams at a time when the oil crisis and the inspiration of the Dutch movement facilitated the change. At this point it is worth stating the similarity between Stockholm and Amsterdam where both Cykelfrämjandet and “Stop de kindermoord” played the role of the policy entrepreneur, even though they presented different characteristics in their setups. In the same way, the “Cykelplan 2012” of Stockholm materialized when the window of opportunity opened and the change actually happened. A similarity with Dublin is the fact that the condition of the policy window was satisfied when economic prosperity came back in the country after an economic crisis; the result met the goals of the advocacy groups as cycling infrastructures were improved. This shows that when this fleeting timing opportunity for a desired action appeared, the pro-cycling adoption was actually materialized.

After carefully examining all the above it can be concluded that when all the conditions of the MSF are satisfied the result is more favorable for the movements' goals. Indeed, when there is a well-demonstrated problem, the politicians are eager to adopt a policy alternative that is feasible, and a policy entrepreneur couples these conditions at the right timing, the result can be in favor of activists. Nonetheless, since in the case of Stockholm in 2012 the window of opportunity was missing but the policy output was sufficient, we can conclude that when all the conditions are met, it is apparently beneficial for the movements, but for a policy change to take place it is not necessary to find a window of opportunity, but just to create it. Finally, the political willingness to make the city of Stockholm more sustainable determined the creation of an indirect window of opportunity for the adoption of a better cycling policy by the political stream itself.

7.2 Similarities and differences between Amsterdam, Dublin and Stockholm

7.2.1 Catalytic role of social movements

The previous chapter reveals that social movements played a catalytic role in all three cases. Their substantial contribution to the developed policies is unquestionable and is also evidenced by the real projects established in the cities. Both the social movements actors but those who represent the decision makers and urban planners agreed that advocacy groups played a big role in pushing cycling policies towards the political environment. It might be difficult to see actual changes happening quickly, but there is a lot of power in having a voice and advocating for an issue in the long-term. Although in all cases there were other factors that helped the policy change, such as the oil crisis, the funding availability and the modern trend towards a more sustainable traffic environment, social movements determined a good power in this change which cannot be overlooked and a part of the results in terms of policies is directly related to their existence. Besides, it is relatively easier to achieve small interventions in the developed plans, but for legislative changes multiple actors and groups should come together and combine their different methods and strategies. For instance, whereas I-BIKE-Dublin is a very energetic advocacy group, Dublin Cycling Campaign is a more formalized organization. They both strive for the same output with different methodologies, but their combined forces and collective efforts were proven to be more effective in achieving favorable changes in cycling. Similarly, Cykelfrämjandet, the official Swedish cycling organization and Svensk Cykling aim at the political arena from different angles and both have made significant contributions to improving cycling policies in different ways. The same goes for Provos and the "Stop de kindermoord" where the former served as a stronghold for the latter and paved the way for change, both influencing the political conception of the bicycle. Therefore, we can conclude that as the growth of movement activity increases and various groups of interests - either organized or informal social entities - combine their forces, the effect in terms of mobilizing and achieving policy goals is greater.

7.2.2 Social movements' opponents

The road to success for these movements is not always easy and unhindered. Social movements and advocacy groups in the three cities were strongly opposed by external actors who either had conflicting interests or could not benefit from the cycling promotion. The most common enemy of cycling activists by whom they faced great resistance was the automobile industry and the relevant market. Automobile Clubs, motorized vehicles associations, car & truck Manufacturers, retailers and car parking companies not only did not want to spread the message for change in the cycling infrastructure but many times they opposed it by promoting better car facilities. This was mainly because they interpreted the pro-

cycling programs as anti-cars policies, something they wanted to prevent. Social movements, and especially the most informal entities, do not have the same bargaining power as this automobile lobby, and this power discrepancy mostly favors automobiles over bicycles. In addition, market actors who intervened in the activists' bid for change in the three cities were local shop owners and businesses, who feared losing customers due to car-free city centers. They believed that their businesses could be hit or that they would not make revenues from people switching to bicycles, so they supported the interests of car users and indirectly underestimated the role of bicycles. However, it is worth mentioning that in Stockholm and Dublin, after the first changes in favor of cycling, they realized that shops, stores, restaurants and pubs can really benefit more people by bike or on foot, their resistance began to decrease and they became keen on cycling afterwards.

7.2.3 Target both national and local authorities

Another common feature of the movements that flourished in the three cities examined is that although they aimed at local changes, they started by targeting the national government. In fact, the change came from a coordinated effort both to mobilize local decision makers and city councils but also to address the resistance at national level, so that the issue of cycling can finally be included in the political agenda. In addition, in all the three cases the funding for the investments in transportation infrastructures comes from the highest level of governance, explaining why keeping an open dialogue with the officials in the national parliament and ministers is of paramount importance for the advocates. The local or regional councils are usually responsible for the distribution of this budget, so the members of the movements follow the process to ensure that the implementation of the cycling projects is not undermined. In addition, the laws and regulations that frame the situation in cities are usually at the national level and set strategic guidelines for cycling. It is therefore important to ensure that this is a good foundation for what can happen locally in terms of further cycling development. Finally, a difference among the three cases is that the movements in Amsterdam and Stockholm aimed to achieve changes for the whole country, but also had local branches concentrated on the local level. On the other hand, the advocacy groups active in Dublin were city-oriented with clear targets for the specific area they support.

7.2.4 Conducive factors to the success of social movements

Looking at other contextual factors that have facilitated the success of social movements in achieving favorable changes in cycling policies, we must point out the support, the scale of the city, the availability of funding and the growing urbanization that has magnified the problem of traffic safety. The support of other associations, such as the one for pediatricians in Amsterdam, and environmental groups in Sweden, helped the movements to combine their voices with them and to point out that it was urgent to take action and promote cycling. Secondly, the shape of the older inner cities served as an argument in favor of cycling infrastructure development, as these places are not designed to accommodate loads of road traffic. Close to this, the existence of the historic center in Amsterdam and Stockholm which had to be demolished provoked many protests and sparked interest in alternative means of transportation. This in turn led to an additional force for social movements and their argumentation. To continue with, funding availability in the country and particularly in the city under discussion is an important parameter for the success of the groups. More specifically, the financial situation of the country can either help or oppositely hamper the plans for cycling promotion. For example, the post-Celtic Tiger recession in Dublin and Stockholm's financial difficulties in 2010 acted as deterrents to cycling, and when those issues were resolved and the budget returned to the country, it was much more feasible for them. activists to push for policy changes. Furthermore, the growing urbanization of the 60s-70s in Amsterdam and Stockholm and the fact that many people started moving from the countryside to the

city have created the social conception that urban places will become less friendly if the rate of the private car to travel would remain the same. Nevertheless, despite all the factors discussed that certainly favor the work of the movements, members from all three cities advocacy groups agreed that whenever there is a will, there is always a way to do it and it can fit in any city, even if many of these factors are missing. They suggested that the success lies in the prioritization of cycling and the energetic work of the social movements participants to come across, while the way to figure out how to do it comes second.

7.2.5 Role of technological companies

Examining the role of the technological companies in the three cities, it is noticeable that there is no evidence of involvement in the policy making process for cycling in Amsterdam and Stockholm. One possible reason for this is the fact that the series of major events that led to the change in bicycle policy emerged in the 1960s-1970s, when there were significantly fewer and less powerful technology companies compared to today. The case in which technological companies took a position was Dublin, where there is a list of companies signed up to support cycling such as trade Unions, Google, Facebook, Vodafone and other big multinationals, enacting as policy entrepreneurs in favor of cycling. These companies are made up of a younger workforce that is likely to live in the city center. They are considered more modern, and this may justify their positive approach of making the streets safer for cyclists. Nonetheless, they do not become clear allies of the movements, as explicit cooperation with activists conflicts with their corporate interests and may have an impact on their relationship with the government. There is also another category of tech companies currently being set up in Dublin which is looking at micro-mobility, aiming to benefit their businesses through cycling. Support from these types of companies is important for movements because they can really influence government policies and are very effective in bringing issues to the political agenda as the government listens to the corporate sector a lot which is the main source of taxation.

7.2.6 Role of the media

Mass media is another important factor in the advocacy groups' efforts to influence policy change, as they can justify movements, give them space and opportunity to shape public perceptions of political problems or credible claims, and mobilize a wider audience for action. Even though they can be strong allies in promoting alternative policies, they do not always respond positively. Starting with the Netherlands, the media were actively following "Stop de kindermoord" actions to protest for better cycling conditions. This can be explained by the sensitivity of the issue - as it refers to a very vulnerable social group; the children-, but also from the fact that it was very new to the society of the 70s and the fact that people took to the streets demanding action from the government. This media attention brought the activists closer to the public and helped them increase their power. However, it should not be overlooked that the media amplifies the voices heard on the street, presenting both sides of a story. Thus, they did not cover only the mass actions of the movement against the demolition of buildings and, but also the opinions of those who protested against any policy that degrades the role of cars. We can conclude that the role of the media in the case of Amsterdam was mixed, but the movement actually benefited from them.

Moving to the case of Dublin, although the actions of Dublin Cycling Campaign and I-BIKE-Dublin attracted the attention of the media and became the first topic on the news of the national television channel, the general media reaction was in favor of car plans. In particular, in many times that movements needed media support, the media did not respond well to cycling initiatives and continued

with strong car advertising in the country. This had a direct impact on the attitude of city councilors towards cycling who changed their position to cycling. In addition, in some cases the big commercial media covered the actions of the groups, but in a way that made them look bad or annoying, creating additional barriers, or even they tended to be sympathetic to the drivers. This attitude of the media can be explained from the fact that the biggest source of their revenue comes from motor, car advertisers, car factories, car manufacturers, creating a great bias in their statements. To overcome this barrier, the advocacy groups utilized the power of social media. More specifically, they set up a communication discussion network and launched many online campaigns to bring together people facing the same problems by creating hashtags as a means of reaching out to the public. Therefore, although the majority of the impactful media was opposed to the movement, they found innovative and creative ways to use social media platforms in order to make people understand this bias in mainstream media.

Finally, in the Stockholm case, advocacy groups often contact the general media to try to get the media to talk about cycling to show or write about cycling to influence public opinion. Although there is no evidence for the media to take a positive or negative view of the issue, the strategy of the Cykelfrämjandet and Svensk Cykling to engage in media activities implies the importance of their role in influencing the policy-making process.

7.2.7 Speed of policy adoption

An important difference observed between the three cases lies in the speed of adoption and implementation of the pro-cycling policy. Indeed, in Amsterdam the change in favor of cycling came relatively quickly after the emergence of the social movement “Stop de kindermoord”, while in Stockholm and Dublin this happened long after. Starting with Amsterdam, the social movement firstly appeared in 1972 and quickly managed to occupy an active role in the society. Only 6 years later the first genuine cycling strategy was eventually adopted in Amsterdam, proving that they acted as catalysts to accelerate the change to materialize. In order to explain this rapid policy change, it is worth noting that “Stop de kindermoord” appeared at a time when certain other important conditions were also favorable. The oil crisis, the newly elected city council, the almost bankrupt public transport system and the increased mobility problems that already existed in Amsterdam facilitated this change, making the ground more fertile.

On the other hand, in Stockholm the Cykelfrämjandet was formed in 1934, while the first cycling policy was voted on in 1978. The years between the two events coincided with the post-war period in Europe, although Sweden did not participate in it. In particular, despite the existence of the movement and the effort to promote cycling, the general public opinion of the time was characterized by car-oriented plans, ambitious projects for highways construction and the bicycle generally had a low social status as it was considered the means of transport for the poor. It takes time to change culture and fight stereotypes, and thus the first cycling plan arrived more than 3 decades later. Moreover, in the next concerted effort to influence cycling policy in the 21st century along with the other two most recent advocacy groups, there was a time when, although the political will was quite warm, the country's economic situation made any cycling plan unrealistic. This case clearly shows that the presence of a movement is not the only condition for the adoption of a policy but it acts in combination with other parameters such as economic prosperity, public opinion and political will.

Lastly, in Dublin in 2008 the Irish government launched a complete roadmap to encourage the use of sustainable means of transport, 15 years after the creation of the Dublin Cycling Campaign. During

these 15 years the Campaign tried to pressure local and national governments to improve conditions for cyclists, but they faced many obstacles from outside actors such as the Chamber of Commerce and great political resistance until they finally managed to make it happen. However, although the decision makers launched the Smarter Travel Policy, the subsequent period coincided with the financial recession and the economy underwent a dramatic reversal. Hence, the actual implementation of this plan was never fully materialized, the laws were not being enforced and the situation for bikes remained almost unchanged. This frustration prompted the creation of I-BIKE-Dublin in 2017, an energetic group which actively fought for the cyclists' rights, established relationships with corporations and convinced the political stream to consider the issue more seriously. This time inconsistency between the beginning of social movements, the policy adoption and its implementation is therefore explained by the economic instability of the country such as in Stockholm, but also by the strong influence of external actors' power in shaping the political will in favor of cars.

7.2.8 Cycling alternative to the discussion table

Another point of interest raised in the examination of the three cases is how the cycling alternative came to the discussion table. In Stockholm and in the first big wave of protests in Dublin, cycling has emerged as an alternative means of combating growing urbanization, while in Amsterdam the cycling rate was already high, but there were significant road safety issues. Indeed, there were still many cyclists in Amsterdam compared to other cities and countries, which facilitated the demand of the movement to improve cycling infrastructure, and the government quickly recognized it too. Another factor was the nearly bankrupt public transport organization that served cyclists favorably and made urban designers consider cycling a safe choice with little investment and without uncertainty. Oppositely, the policy strategy in Stockholm and in Dublin of the 70s was primarily aimed at increasing cyclists on the road and persuading people to reduce car-use, but in Amsterdam the policy pillar was the protection of cyclists. In the two cities highways and car infrastructures were already constructed, so there was a need to shift the car oriented culture to a more sustainable mode of transportation. These cities became less sustainable as the car ownership rates were sharply increasing. This led the decision-makers to search for alternatives to improve urban lifestyles and living conditions in the metropolitan areas, and eventually the option of cycling came to the fore. Finally, the second wave of protests in Dublin marked by the creation of I-BIKE-Dublin in 2017 was initiated by the inadequate cycling measures and dangerous unsafe road environment. Although the cycling policy was adopted just two years before it was created, the fatal road accidents of cyclists were very high, proving the major shortcomings in the implementation of the new regulations. This was similar to the case of Amsterdam where the "Stop de kindermoord" was fighting for safer roads, but with the difference that in Amsterdam there was no complete cycling plan at that time, but in Dublin the policy existed but was not properly enforced.

Chapter 8 Reflection on the theoretical conceptualization

It is a fact that interests occupy a central place in the multiple streams framework (MSF). However, interest groups and particularly social movements have played little role in theoretical and empirical studies so far. According to the original conceptualization of Kingdon, organized interests are a key variable in the politics stream. This report revisits Kingdon's concept with a particular focus on social movements and their various activities in the policy making process. In particular, the report argues that by determining the role of movements within the streams there is an added value to the explanatory power of the context. To do this, emphasis is placed on how advocacy bodies influence problems, politicians and policies. The influence of such groups within the currents is explained by linking MSF to the literature of social movements. The report shows that depending on the specific circumstances in each case and the level of their systematic activity, social movements can be involved in all three streams, but they can also be successful policy entrepreneurs.

8.1 Social movements as policy entrepreneurs

Kingdon defines policy entrepreneurs as “advocates for proposals or for the prominence of ideas” in order to describe these agents of change in the field of social policy. However, he does not clearly reflect about the nature of entrepreneurs, arguing that they can come either inside or outside government, they can be found in elected or appointed positions but can also have their roots in interest groups or research organizations. It provides a specific account of their defined characteristics, namely, “their willingness to invest their resources such as time, energy, reputation and even money in the hope of future returns” (Kingdon 1995, 122). These future returns can be seen as a promotion of the values they represent and the policies they support. Social movements represent a form of interest group, as they not only aim to change attitudes, but also seek to change policies. Examining the three cases, it was found that the movements in Amsterdam and Stockholm defined this role, articulating the three currents to achieve the optimal result for cycling, and therefore can undoubtedly take credit for much of the adopted cycling measures. In both cases they invested their efforts to closely collaborate with the decision makers and push for their interests. They have networked with all political parties, aim for an open and frequent dialogue with them and have contributed from their side. Due to their different group composition they emphasized on different aspects, but under the same scope that was to couple the three streams. “Stop de kindermoord” which consisted mainly of ordinary people, young people and parents stressed the need to mobilize the public and the problem stream, since the political stream was already willing to follow and the policy alternatives came from the academics that shared the same vision with the advocates. On the other hand, Cykelfrämjandet and Svensk Cykling are advocacy organizations with members who are more knowledgeable on the field of cycling and policy making process; they submitted particular policy proposals and utilized their contacts to keep a close interaction with the political stream. The movements’ catalytic role as policy entrepreneurs in both Amsterdam and Stockholm underlines what Kingdon argued about the necessity of this actor for a policy adoption and implementation to happen stating that while the three streams may be operating independently of one another, all three need to come together in order for a policy to emerge, and the policy entrepreneurs are very effective in doing that (Kingdon, 1995). In other words, social movements can determine the role of policy entrepreneurs and they can be very effective in bringing all the aspects together. Last but not least, in the case of Dublin and especially in the first wave of protests in the 70s there was no policy entrepreneur at that time, and the result for cycling was not sufficient. This further highlights the

importance of this component for a favorable policy output, as when the policy entrepreneur finally appeared after 2018, the cycling policy started being actually implemented.

8.2 Social movements and the problem stream

A given condition is defined as a problem for which the government must take action in order to find the appropriate solution. These problems occur as a result of the comparison between the current situation and the values of the ideal situations. The process of problem recognition and definition, of fixing attention on one problem rather than another, is a central part of agenda setting (Kingdon 2003, 115). Problem stream dynamics can be influenced by indicators, feedback provided by various actors, focusing events, and the ability of institutions to address potential problems (Zahariadis, 2014). The focusing of social movements' activities can help contribute to the understanding of how problems are identified and perceived by the public. Indeed, the movements that emerged in the three cases under consideration used various indicators to highlight the magnitude of the problems. A relevant example of focusing activities are the organized national street play days of "Stop de kindermoord" in Amsterdam to influence the public and attract new members. In terms of indicators, the Dublin Cycling Campaign, for example, used the growing number of bicycle thefts to highlight the urgency of tougher measures to combat the problem. These findings punctuate Kingdon's suggestion about interest groups that can have a considerable effect on the problem stream. Finally, policy entrepreneurs can also play a key role in identifying problems in ways that both attract the attention of decision makers and suggest an appropriate political response (Kingdon, 1984). As it was extensively discussed in the previous paragraph social movements turned out to be powerful policy entrepreneurs which is another fact that stresses their contribution to the problem stream.

8.3 Social movements and the politics stream

The politics stream represents the large-scale political trends in which the policy process is embedded (Fitch-Roy & Fairbrass, 2018). The political climate that describes the attitude of government officials towards public issues can be influenced by a number of reasons, either because they want to fuel their electoral competition or because they really believe that a particular issue should be included in their political agenda. Social movements are well aware of the fact that politicians want to get credit for citizens' participation in the policy making process as they seek to strengthen their political careers by meeting the demands of challengers. So, on the one hand, the political authorities want to solve public issues by considering the long-term benefit of their political careers, while the defense groups want to achieve better social policies. This relationship works in both directions and there must be a balance to be beneficial to both. In the case in which groups know how to move within the politics stream, whom to target with the right strategy they can be really influential to the political stream and impactful on bringing social issues to their attention. Yet, it is not easy to maintain this balance, as there is always the possibility for decision-makers to take advantage of groups to increase their political power, without actually producing much in terms of policy change. When actors in the movements are more familiar with the political scene, this risk is reduced, as in Stockholm, where the Cykelfrämjandet is a defense body made up of people with cycling policy making experience and focusing mainly on performing "corridor politics". It is also worth noting that even when advocates are less experienced in this area, they can still have a significant impact on the political stream when they are passionate and collectively exercise their individual voting rights over political authorities, as in Dublin. In conclusion, the changes in elected officials and in the ideological issues on a national level described as "national mood" by Kingdon may be related to the social movements systematic efforts.

8.4 Social movements and the policy stream

Policy stream concerns proposals for change coming from academic or scientific organizations. These proposals are the alternative strategies or potential solutions that can be applied to the problem (Kingdon, 2003). Following the definition of (Della & Mattoni, 2015), social movements are informal networks of interaction, based on shared social beliefs and a sense of solidarity, caused by controversial issues and expressed by various forms of protest. Thus, they do not come from the policy community which usually consists of scholars, professionals, experts and government agents. Consequently, it is not common for the actors themselves to have the technical knowledge or academic experience to actually submit valid policy proposals, as they typically focus on encouraging decision-makers to come up with such policy-proposals. However, when it comes to actors who have the scientific background and the necessary knowledge to do so, as in the case of Stockholm, their contributions can be very useful and seriously considered by the political stream when the right means of persuasion are used. Another indirect way to influence policy flow is to form alliances with another group of experts who have the desired scientific knowledge to provide them with feasible policy plans. In this way, activists can be better prepared for a more formal dialogue with decision-makers, as in the case of Amsterdam where "Stop de kindermoord" collaborated with TU Delft scientists who provided them with realistic urban design plans.

8.5 Overall reflection

8.5.1 Reflection on the MSF

The multiple streams theory has been applied to many cases in the world facilitating the researchers to capture and explain social phenomena. Jones et al. (2015) identify 311 meaningful MSF applications produced during the period 2000-2014 where most of them cited Kingdon's theory. Moreover, recent scholarship has used the multiple streams analysis on different policy areas, different political systems and also to the entire policy process, not only to agenda setting. Some of them are the social policy (Compston & Madsen, 2001), the foreign policies (Zahariadis 2005), the analysis of parliamentary regimes (Zahariadis, 1995/2005; Bundgaard & Vrangbaek 2007) and even to the political regime of the EU (Borrá & Radelli, 2011; Ackrill & Kay, 2011). Therefore, it is reasonable enough to say that MSF is a universal concept to describe policy making processes in various fields. Furthermore, this framework allows the researchers to interpret deeper meanings through analysis that is conducted in each stream. Summing up, it can be argued that Kingdon's theory accurately captures most of the processes which contributed to the adoption and implementation of the pro cycling policy in the three European cities under consideration.

On the other hand, in order to interpret and render the concepts of the framework properly, it was necessary to extensively explore many archives. More specifically, a lot of details are needed to adequately assess the events that led to the policy adoption and for the accurate analysis of these events based on the three streams. The difficulty in implementing this framework increases in the case in which the events occurred many decades ago and it is apparently hard to identify much information or stakeholders to contribute with their experience. This was a main inconvenience that arose while analyzing the case of Amsterdam and Stockholm, where the majority of the events happened in the 70s, and it was therefore hard to approach people who were really involved at that time. Overall we can conclude that the MSF model can be data and time intensive.

8.5.2 Reflection on Social Movements theory

As far as the theory of social movements is concerned, it is worth noting that the current literature is highly developed in terms of how social movements emerge, grow and flourish. However, a few scientific works regarding the strategic activities of the movements to influence the decision makers and bring their voice to the front were found. However, only a few scientific papers have been found on the strategic activities of the movements to influence decision-makers and on how to make their voices heard by those responsible for the issues they represent. This thesis attempts to explain how some European social movements attempted to bring about changes in the field of cycling policies, by analyzing their interaction with actors such as the decision makers, the urban planners, the common public, the technological companies and the media. For this purpose, a multi-case study approach was chosen because it is a more powerful method than single-case designs, as it provides more detailed descriptions and explanations of social movements in many cases. This allowed the case findings to be compared by identifying similarities and contradictions and allowing the researcher to better understand how social movements influence the cycling policy-making process at different times, circumstances and political environments.

Chapter 9 Discussion

In this study, a theoretical framework is applied which has been obtained from literature (see Chapter 2). This theoretical framework combining social movements literature with the MSF was used to analyze the emergence of social movements and advocacy groups in three cases. In addition, it helped to create timelines outlining the sequence of events that led to pro-cycling policy adoption, and then to evaluate how social movements influence the policy making process. The framework was applied to three cases in which apart from the desk research also in-depth interviews were conducted with involved stakeholders and actors who are more experienced in the urban planning and decision making of the three cities.

9.1 Limitations of the research

In view of the validity of the research, there are some points to mention. As each study has limitations, it is important to mention them in order to clearly describe under what conditions the results should be interpreted. The first limitation is related to the sample of the research. More specifically, the research design used three cases to test the theoretical framework, and all of them were European cities. Besides, the three cases refer to democratic regimes, and no case with other kinds of political regimes was analyzed. Therefore, although it was easier to compare and contrast the findings, the generalizability of the results especially beyond Europe and in countries where the ruling regime is not democracy might be questionable. On the other hand, the cases were examined in great detail and, after comparing the case findings, the patterns can be clearly identified. Secondly, the next possible limitation is linked to the data collection process. This is because the interviews were not conducted face-to-face, but an online platform had been used due to the Covid-19 restrictions but also because of the distances. This disabled the researcher to stress in particular questions, as the interviewees could easily deviate in their answer, while it was hard to establish a trustful relationship between the two. Next to this, in some cases it is relatively difficult to say with absolute certainty what a particular respondent meant. To overcome this potential limitation, many additional clarifying questions were asked to ensure as much as possible that the answer was clear. Furthermore, another potential limitation that may influence the validity of the results is the age of the data and the timing of the study. In particular, the majority of the social movements and the events that have been examined occurred more than 50 years ago, which creates doubts for the reliability and for the completeness of the data. Besides, it was hard to find out many people that were involved at that time to get a more accurate perspective on the subject.

9.2 Comparison with other studies

To date, no extensive scientific studies have been conducted on the influence of social movements on the development of cycling policy. However, many researchers have emphasized on the task of social movements in producing policy change in other fields. Some of them are the mobilization of ecology, antinuclear, and peace movements in the United States between 1975 and 1995 by Giugni & Passy, (1998), the smoking/tobacco control movement in the United States by Nathanson (1999) and the marijuana movement in Texas by Harris & Morris (2017). The Multiple Streams Framework of agenda setting was used to analyze how movements can shape policies such as the marijuana movement in Texas by Harris & Morris (2017) and the anti-nuclear social movement in Germany by Zohlnhöfer & Huß (2016) and the grassroots movement in Yogyakarta by Widyatama (2018).

Harris & Morris research provides evidence on how social movements influence the policy process and how the policy process responds to activists' efforts, concluding that a properly organized movement can have a significant impact on the problem stream and policy proposals but affecting the political stream might be more difficult. This is in line with the findings of this research, as the two movements in Dublin and Amsterdam significantly influenced the problem stream while in the case of Stockholm the advocacy group offered valuable alternatives to the policy stream. The difficulty of influencing the political stream may indeed be greater, especially for ordinary activists involved in such movements, but as Stockholm and Dublin have shown, this is not impossible. In addition, the issue that the movements are protesting plays a key role in bringing the political stream closer together. In other words, marijuana reform was seen as a highly salient and controversial policy, while road safety and sustainable infrastructure design were more politically acceptable, meaning that for the first it was possibly harder to influence the political authorities than the latter.

Moving to the case studied by Zohlnhöfer & Huß (2016), the anti-nuclear social movements calling for the rapid abolition of nuclear energy have been very effective in shaping the problem stream and mobilizing thousands of people against nuclear energy, while they have made it very difficult for the government to pursue a pro-nuclear policy. The energy industry, on the other hand, has been quite successful in preventing the government's rapid withdrawal from nuclear power, as well as in cycling, where various automobile clubs and shops coalitions have stood as a major obstacle to better cycling measures. The nuclear disaster in Japan served as a disturbing event that shifted the national mood, as did the oil crisis to boost cycling in Amsterdam and Stockholm. Lastly, Zohlnhöfer & Huß's research shows that social movements can be influential on pushing for particular regulations and persuade political forces to reconsider policies that face fierce opposition from organized movements. This is also confirmed by the findings of this thesis.

Finally, the Yogyakarta movement studied by Widyatama (2018) shows that the political stream has a key role to play in opening the window of opportunity when the alternatives come from the policy stream. In addition, this case argues that the politics stream consistently dominates the problem and the policy stream in the policy formulation process after the policy window is opened, indicating the importance of the political will. The findings of this thesis suggest that indeed the eagerness of the elected officials and administrators both at a national and local level determined a great part of the policy adoption. When the window of opportunity was not a condition to facilitate the alignment of the three streams in Stockholm, the dominance of the politician's sincere desire for change acted as a catalyst to the pro-cycling policy adoption which is proven by the "Cykelplan 2012".

9.3 Contribution of the research

This report provides an explanation for how certain social movements and advocacy groups protesting for better cycling infrastructure influence policy adoption and implementation, by using the key principles of Kindgon's framework. The pro-cycling policy process in three cases was reconstructed according to the streams model. Much attention was paid to how the advocacy groups led the policy and how this process worked. More specifically, the report analyses in which extent did "Stop de kindermoord" in Amsterdam, Dublin Cycling Campaign & I-BIKE-Dublin in Dublin, and Cykelfrämjandet, Svenska Cykelstäder & Svensk Cykling in Stockholm affect legislative policy in the three corresponding cities. The research also examines the strategies and tactics followed by these

groups to achieve a more successful outcome in favor of cycling. Finally, the report identified the role of these movements within the MSF and their ability to intervene in each of the three streams.

9.4 Implications of the research

Social movements can succeed in achieving policy change, through various forms of demonstration, networking, mobilization and other strategic tactics. Movement participation has become very popular as a form of political action to improve the cycling plans in many urban places, and their power to influence the public and political scene should not be neglected by the decision makers. Indeed, the research implies that the influence of such advocacy and grassroots groups should be considered while analyzing the policy making processes. Furthermore, although cycling is gaining more and more supporters in many parts of the world, changes in infrastructure and its effective introduction as a means of transport are not always easy. In order for a radical change to happen in a deeply entrenched car-oriented culture, both in society and at the political level, the influence of enthusiastic, energetic, ambitious and goal-motivated movements is vital because they can accelerate this shift. These movements usually represent the voices of a larger section of society with the same views on an issue, and therefore policymakers should keep an open dialogue with them to ensure that their policies are in the public interest. The obstacles that social movements may encounter come either indirectly or directly from stakeholders with interests in the automotive industry. However, the results show that many technological and commercial companies can see cycling in a positive light, which means that they may be willing to support cycling projects and therefore the activities of social movements.

9.5 Future research opportunities

Looking at opportunities for future research, there are some subjects that can be further investigated. Firstly, there should be further studies regarding Kingdon's MSF, especially in particular with regard to external stakeholders such as technology companies and the role of the media in promoting or hindering the movements' activities. The media in the case of Amsterdam and Dublin influenced the success and also the strategy of the movements, but it was not included in Kingdon's streams framework. Although some researchers such as Chow (2014) stated that the media has the power to escalate issues on the policy agenda and increase the chances of the government taking over, there is not much research on their role and attitude in relation to social movements.

Secondly, there is very little research that has linked social movements with the MSF. Therefore, it might be beneficial to investigate more cases in which social movements influenced the policy decisions by using this framework in order to better assess the appropriateness of the theory on examining social movements. This will help to understand the role of the social movement in the context of multiple streams and to define their role within it. For example, this will further highlight where these groups have the power to generally act as policy entrepreneurs or are more effective in influencing the problem and the political stream.

Finally, future research on social movements may include interviews with decision-makers who have interacted with the groups themselves, in order to gain a better perspective on the interaction between the two and to avoid the prejudice of overestimating power of movements. The future research may also include actors representing technological companies with interests on the policy subject. This will allow researchers to evaluate why companies decide to support social movements on the one hand, but also how they react in the event of a conflict of interest on the other.

9.6 Recommendations

This thesis report explored the ways in which the various forms of social movements influence the policy-making process, identifying those that proved most effective in the three cases analyzed. The effectiveness of the methods used by the movements must always be analyzed in the political context of the case under consideration, as this determines the conditions for a group to be successful or not. Actors involved in these movements need to know the political context and its dynamics, as this determines whether their demands are practically feasible and realistic. In addition, in order to strategically establish and achieve the best result, they should be aware of their strengths that are directly related to their knowledge of the policy-making process and the topic under consideration (cycling), their size and passion. In the case of cycling, they must be prepared to fight strong car-oriented stakeholders who usually have strong bargaining power. A key point to remember is that the media can become powerful allies if they know how to use them, especially social media where activists today have the space and freedom to organize mass actions and find supporters.

To continue, for those who want to increase cycling in their cities or countries and would like to really contribute to the redesign of urban spaces, it is important to find others with a common view. Although each voice matters, when these voices become collective, they are more likely to be heard and taken seriously by decision makers. The results of the three cases showed that it may not always be easy to achieve better and safer cycling conditions for many reasons, but when passionate, conscious and well-organized people meet it is really possible to achieve a change. Either by reaching out to the whole of society or by targeting power holders directly, they can achieve great results for cycling and road safety.

Finally, policymakers need to be more open to dialogue with such groups, as they represent a legitimate part of society and can bring issues that ordinary people cannot include on the political agenda. After all, active listening and constructive discussion of group demands in a friendly environment can also be beneficial to their political future. Although social movements do not have the same bargaining power as car unions and major car companies, they still have a large voting power that cannot be ignored. Furthermore, their resistance to cycling should be reduced, as there are many successful examples with countries that despite initial objections the result was favorable not only for cyclists but also for the local market, and subsequently for politicians too.

Chapter 10 Conclusions

This research sought an answer to the question: *“How do social movements influence the successful adoption or implementation of a favorable/positive cycling policy?”* To properly answer this question, qualitative research was conducted by using the MSF in relation to the social movements' work. Extensive literature, desk research analysis on three case studies and semi-structured interviews with relevant stakeholders contributed to this qualitative research. An answer to the main research is provided after elaborating on some sub-questions, and their brief answers are summarized below.

What are social movements, and how are they defined?

The interpretation of social movements was identified through extensive literature research, and comparing various definitions. The most common and widely accepted explanation according to the literature is the definition of movements as informal networks of interaction, based on common social beliefs and a sense of solidarity, caused by controversial issues and expressed by various forms of protest (Della & Mattoni, 2015). Social movements present four stages in their life-cycle which are the following: Emergence, Coalescence, Bureaucratization and Decline (Christiansen, 2009). This definition was fundamental to identify social movements and also understand their structure according to the characteristics of such groups.

How can positive cycling policy be defined?

According to the existing literature, there is no single definition of positive cycling policy. However, a policy is considered favorable for cycling when certain conditions are met and certain points of action are collectively covered in the policy. The characterization of a favorable cycling policy emerged from the analysis and empirical synthesis of various cycling policies developed in the cities and countries in question. The report argues that when certain conditions are properly combined and adequately presented in cycling plans, then they can be considered as favorable cycling policies. These conditions are road safety, coherence, bike-friendly urban design, the integration of cycling in public transport, the proper education for cycling for all ages, and the provision of financial incentives to make cycling more appealing. Finally, a cycling plan should ensure adequate implementation of the proposed regulations to overcome the obstacle of potential poor policy implementation.

What are the variables that influence the effect of social movement into policy processes, and which of these variables are relevant in the context of policy change and therefore should be included in this research?

The answer to this question was given by using the MSF in order to understand how the social movements lead through policy change and how that process works. According to the findings of the three cases; the structure and the composition of the groups, organization of the movements, their knowledge and expertise in the field of cycling, their decision to target either the local or national political stream, and their network with powerful stakeholders such as decision makers and urban designers determines a large part of their effect on the policy process. Furthermore, there are a number of other external factors that may play a role in the effectiveness of social movements. This is the role of the media towards the movements, the existence of external stakeholders who could either hinder

their goals or support the promotion of their plans, the adequate financial situation of a city or country in order to consider cycling plans realistically possible to be implemented, and of course the general political attitude towards the issue. Finally, there are some other factors that can facilitate the effectiveness of social movements to bring the issue of cycling to the forefront, as they provide a favorable environment for the development of cycling infrastructure. These are the existence of a historic center, the spatial scale of the city and other geomorphological and climatic features that make cycling more suitable for some places than others.

What was the role of social movement within the analysis of Multiple Streams Framework?

The role of social movements varied among the three cases examined. Starting in Amsterdam, "Stop de kindermoord" played a vital role in shaping the problem stream by mobilizing public opinion, but the very active and founding members of the group also acted as policy entrepreneurs and actively negotiated with the politics stream to achieve the best policy outcome for cyclists. Moving to the case of Sweden, the advocacy groups, thanks to their composition, have been very effective in influencing the political stream but also in contributing effectively to the policy stream. Similarly, as in Amsterdam, they also acted as policy entrepreneurs that attempted to couple the three streams. Lastly, the role of the two activist groups in Dublin focused both on determining the problem stream by organizing many campaigns and protests, but also on the influence of political groups by creating a network of elected officials from various parties.

How did social movements influence the development of cycling policies in cities (in the Netherlands/ Europe)?

The answer to this question was given by analyzing the sequence of events that led to the adoption and implementation of pro-cycling policies using the MSF in Amsterdam, Dublin and Stockholm. All the social movements that flourished in the three cases had a significant impact on the developed cycling policies, but the ways in which they managed to achieve this influence varied according to the circumstances of each case. In Amsterdam, they worked to raise public awareness and mobilize them to take part in street demonstrations with the movement. This quickly attracted the interest of cycling experts who provided them with knowledge of infrastructure design, but also the support of politicians as they quickly acknowledged their claims. When external conditions were favorable, their efforts paid off as policy entrepreneurs aligned the three streams over a policy window. Next to this, in Dublin, although the groups did not act as policy entrepreneurs themselves, they were very effective in networking with many technological companies and local businesses that had the power to greatly advance their plans and convince politicians of the importance of an integrated cycling policy in Dublin. They also closely collaborated with the elected officials and civil servants, while they were organizing peaceful demonstrations to protest for implementing and respecting the adopted cycling measures. In the last case under discussion, in Stockholm, the advocates closely interacted, negotiated and convinced the policy makers for the necessity of such a policy. They pushed people who had the decision making power, but they also contributed to the development phase of the policy by representing cyclists' rights on the board, and coupled the MSF conditions to materialize the policy adoption.

How do social movements influence the successful adoption or implementation of a favorable/positive cycling policy?

The answer to this main research question comes from the analysis of the three cases and also from the answer to the previous sub-research questions. The findings on how social movements worked in Dublin, Amsterdam and Stockholm were compared and contrasted in order to reach a generalized conclusion that can be potentially applied to other European social movements too. Research shows that movements are very likely to reach out to the public to increase their power, as this is a realistic first step, but political change requires political support. This political willingness may already exist as in Amsterdam, or the movements may gradually form a network of decision-makers who are the absolute holders of power as in Dublin. When movements are made up of people with experience in cycling or policy-making, such as in Stockholm, communication with politicians becomes easier, as well as the submission of alternative policies that need to be considered. Last but not least, they can also play the role of policy entrepreneurs who, because of their ambition and strategic activities, can escalate the policy change process.

These findings are in line with Kingdon's suggestion that activists and policy makers play a vital role in bringing problems to the public and government attention (Kingdon, 2003). Finally, the results of the research are in accordance with Klanderman who first argued that there are main two facilitating factors for social movements, and these are public opinion - targeting the public space, and political alliances-targeting the political arenas (Klanderman, 1988).

Appendixes

A.1 Interviews protocol

The process of the interviews started by identifying the potential participants based on their knowledge, expertise and generally their affinity with the cases. People that have been examined as possible interviewees were members of cycling movements in the three cities, city administrators, decision makers for transport policies, journalists covering the series of events leading up to the adoption of cycling policies, authors, researchers and TU Delft professors with extensive academic work on relevant subjects. After selecting the people that seemed to fit better the needs and the purpose of the research, their contact details were identified by searching mainly on online platforms. The next step was to approach them all by mail, informing them shortly about the subject of my research, kindly asking to accept my request to participate in the interviews and explaining what I would expect to learn from them. Some replies were unfortunately negative, some others recommended me to other people who would be more suitable for the research, but many of them accepted the request. The last stage before setting up a convenient time-slot and finally proceeding to the interview was to provide the participants with the informed consent form, which contains all the details for the research and is the institutionally formal way to get their permission to record and store the discussions, asking them to sign it and share it back before the interview. The exact form that has been sent to the interviewees is presented below.

A.1.1 Informed Consent form for the research with human participants

Consent Form for <i>Social Movement's Impact on policy making process</i>		
<i>Please tick the appropriate boxes</i>		Yes No
Taking part in the study		
I have read and understood the study information in this documents, or it has been read to me. 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, without having to give a reason.		
I understand that taking part in the study involves having a discussion on the topic of social movements and cycling policies which will be recorded.		
There are no risks associated with participating in the study		
Use of the information in the study		
I understand that information I provide will be used for master thesis on a topic for Social movements impact on the field of cycling policy.		
I understand that personal information collected about me that can identify me, such as my name will not be shared beyond the study team.		
Future use and reuse of the information by others		
I give permission for the anonymized transcript that I provide to be archived in a public repository so it can be used for future research and learning.		<input type="radio"/> <input type="radio"/>
Signatures		
Name of participant [printed]	Signature	Date
I have accurately read out the information sheet to the potential participant and, to the best of my ability, ensured that the participant understands to what they are freely consenting.		
Researcher name [printed]	Signature	Date

Social movements' impact on policy making process

The study will synthesize research on social movement theory with that on the multiple streams framework to develop an integrated framework for analysis. The purpose of the research is to contribute to the literature an explanation theory on how social movements affect legislative policy, especially in the field of cycling policy. Nowadays, it is becoming increasingly clear that cycling technology can be a great opportunity with many implications for businesses. For this reason, it is important to investigate how social movements can influence technological innovation and diffusion, particularly in the case of cycling. The benefit of participating is to contribute with knowledge and insights on the research, and consequently support in the creation of this explanation theory for the way social movements act. Oppositely, looking at the risks it should be clearly mentioned that participants are not likely to feel uncomfortable or offended. The questions will be scientific oriented, without asking for any personal data, personal involvement and not asking controversial or sensitive questions.

Regarding the withdrawal procedure from the study, it is simple enough as the people that will be contacted for an interview always have the possibility to decline. Furthermore, even during the interview-when this will be held- the participants have the right to leave at any moment for any reason.

The only personal information about the participant that will be collected is their role (e.g. if they are policy makers, researchers) which will be already known in advance. Some specific questions about their affinity with the objective might be asked in order to determine their relevance with the topic under discussion, and also in order to adjust the questions that will be asked in the second part of the interview. The names and the professional roles of the participants will be included in the thesis report. The participants have the right to request access to review the part of the report that analyses the answers they provided, and they can always comment on it.

The data - that will be in the form of words- also known as qualitative data, will be used only for the purpose of the thesis project under discussion. The recordings of the interviews will be kept in my personal device, and they can be shared back with the participants if they ask for it. After completing and defending my thesis, the interview materials will be deleted and only the written version of the interview will be available in the report. According to the latest schedule, the presentation of the project will take place at the end of July, meaning that there is no reason to keep the recordings after that. Apart from the presentation of my thesis in TU Delft, no other publications will be done.

A.2 Interview Transcripts

A.2.1 Bert van Wee

Bert van Wee is professor in Transport Policy at Delft University of Technology, in the department of Technology, Policy and Management. Some of his main research interests are in transport policy relevant issues, such as environmental impacts, accessibility, evaluation of policies, plans, infrastructure projects, transport and ethics, and the role of technology in the transport system and related policy relevant effects. The interview with Bert van Wee took place on the 1st of June 2021.

My research proposes that there is a link between social movements and policy change, always in the field of cycling. So, based on your expertise and your knowledge on transport policy related issues, I would like to hear your opinion on some things about Amsterdam, especially about how the second policy was developed back in the 70s. I already spoke with some people who were more involved in the events of that period, but I would also like to hear the opinion of someone who had studied it probably but was not involved in the events themselves. So, according to your knowledge and to your research, probably, to which extent do you believe that the Social Movement “Stop de Kindermoord” contributed to the development of the pro cycling policies in Amsterdam?

I was definitely not involved in the events themselves and I did not do empirical research myself on Amsterdam. I read about it. I am one of the authors of the book chapter but not the one for the section on Amsterdam, so I heavily rely on inputs provided by Marco te Brömmelstroet (*author of the book: The Law of the Fastest: How Our Traffic Has Become More and More Antisocial, and professor of Urban Mobility at the University of Amsterdam*). My overall impression is that social movements were actually quite important because they contradicted mainstream policies and opinions and they emphasized the importance of the interests of pedestrians or cyclists. However, it should be mentioned that there were many social movements, it was not only the “Stop de kindermoord”, there was also a movement on making road transport more safe called “Veilig Verkeer Nederland”. There was a movement on cyclists originally called “De fietsersbond”, and it still exists. So there's many interest groups that all have different messages. But what they have in common is that policymakers should prioritize active multi users. I do not know too much about “Stop de kindermoord”, but it was one of the movements, of course focusing on the fact that many children lost their life in accidents with motorized traffic. So they had things like calm down traffic, one way streets, get rid of motorized transport and pedestrians.

Were these interest groups and activism groups the only factor that led this policy change to happen? Or was it a combination with some other factors?

Yeah, there were more factors. As far as safety is concerned, what also played a role is the rapidly increasing number of fatalities and accidents. It peaked in 1972 that we have 3264 registered fatalities in the transport system. After 72 this number declined. So the increasing and unacceptable high fatality numbers were of course also an inspiration for policymakers to change. What also played a role is the awareness that the so-called “predict and provide” paradigm could not last longer. “Predict and provide” paradigm means that policymakers by then forecasted an increase in the population, in car ownership and cars. And then you have congestion and a lack of parking spaces and so on. Therefore, you have to provide the infrastructure to accommodate this growth, that is referred to as the predict and provide

paradigm. Between 1967 and 1973, the “predict and provide” paradigm was abandoned in almost all larger cities in western countries. There was a shift in only six years in which local authorities realized that this paradigm was not doable because Amsterdam would be a full city and finally, there would be no place to go because there is nothing else left but parking places. So the awareness was on the fact that you cannot build your way out of the growth of car use, parking, congestion, etc. That also played a role in promoting cycling, walking and public transport. are of course alternatives. Overall it's not only the social movements that played a role.

For example, did the oil crisis of 1973 also influence the sequence of the events that followed afterwards?

Yes, but just to some extent. Oil crisis was a disruptive event with impacts on travel behavior. The lasting effects were actually relatively small, but by then they thought that the oil crisis would be a major disruptive event. It turned out to be less than expected. The awareness was that the Netherlands was sensitive to fossil fuels. And then, of course, later on, the Brundtland report on sustainability had a huge impact, especially in the Netherlands, but also elsewhere. So there are many things that along the lines of the past six decades played a role and had an influence on cycling policies, and environment safety and accessibility etc.

What about the spatial scale and the existence of a historic center? Did they also contribute by providing the contextual factors to make cycling more appealing?

Yes, sure. Because the old inner cities are never designed to accommodate loads of road traffic, walking and cycling fit way better. And there were huge protests against building the first metro line in Amsterdam. Many people thought this was not good for the city because of the demolishment of many nice, historic buildings, dwellings and others. So there were also heavy protests against demolishing old buildings, including houses. That also fueled the interest in alternatives for the car that fit in better than cars. This also played a role definitely.

This partially answers my next question which is, how did the idea of promoting cycling arrive in the discussion table, for example? Why not promote their public means of transport for instance? Or why not build a metro? Or why not develop electric vehicles?

I think what also plays a role is that the Netherlands is a relatively egalitarian society, in general, and cycling is an egalitarian way to travel. Everybody travels, from 10-year-old children who go to primary school to the Prime Minister. So everybody cycles! It's a very democratic way of transport, and it is fully acceptable for everybody to cycle. Moreover, cycling is very cheap for the government, not only for the user, but also for the government. Per kilometer that we cycle, the Dutch government spends way less money than per kilometer that we travel by public transport. So it is also healthy, cheap for the use of energy for the government solution. It probably also plays a role. What also plays a role is metro stations. Well, they are very controversial in the first place. This is because they take a lot of money to be built and there is a lot of uncertainty about the impacts on the city. In a city like Amsterdam, if they would build a metro line for example, they could expect big problems because of the soil conditions. Public transport and especially underground public transport would be a nice solution for an entire city, but it also comes with high costs, high uncertainties and a lot of problems. Cycling options are very cheap and we all know that you can use the existing streets.

Is this also the reason why the idea of cycling was taken so seriously by the politicians? That cycling it's cheap and environmentally friendly while not correlated with uncertainty or unpredictable events that may occur.

Yes, very likely. By the way, it's a misunderstanding that cycling was very popular in the Netherlands but not anywhere else in the world. Many Western cities had a fair share of cycling, but it went down and stayed at a very low marginal level. In the Netherlands, it remained, and it only dropped a little bit until the mid-1980s. But never as far as in London or Paris or many other cities. It has always remained to be quite popular in the Netherlands, and it was not fully constant. So, there was a decline until the mid-1980s, but since then, policymakers and planners reinvented the bike and they thought that they should do more for the bikes to make it safer, more attractive. In addition to this, environmental reasons definitely played an important role since the 1970s, or 80s. Probably the way to provide cheap flexible transport played a more important role already in earlier decades.

Is there something unique with Amsterdam that managed to keep the cycling share so high, or it is a model that can be potentially applied to other places to other cities in the world as well?

Well, first of all, Amsterdam is not really unique within the Netherlands. What happened in Amsterdam is quite common in other cities and towns, and actually several cities have done even better than Amsterdam. So Amsterdam is not unique in the Netherlands. But for a capital it is unique, quite unique. Copenhagen comes close. I do think that other cities and towns can learn, and this is actually already going on. The analysis of Amsterdam has often been a source of inspiration for other cities as well worldwide. In many cities worldwide, the more progressive local authorities have implemented Pro Cycling policies, almost never to the way that cycle bikes are used as frequently as Amsterdam or Copenhagen, but at least it is going in that direction.

Regarding Amsterdam, were there any other external factors that influenced the adoption of the cycling policies? And when I say external factors, I'm referring to maybe external actors who actively promoted cycling plans because they will be benefited from it as well.

I think the interest groups that we already discussed were at least very important. There have also regularly been people in the Ministry of Transport currently called Infrastructure and Water management. Some of them were the national minister, and also some employers who were a bit active in promoting cycling like Tom Velleman who was an advocate for cities to implement cycling policies. What also plays a role is the CROW, which is an institute providing practical guidance for a lot of things related to transport. They also have guidelines for infrastructure, including cycling infrastructure, how to program traffic lights, the width of the track of the separate bike lanes, the bike lanes that are part of the overall road, how wide they should be, what color they should have and so on. There are guidelines for cycling policies that definitely played a role and contributed to a relatively consistent way in which cycling infrastructure has been designed over the past decades. And environmental interest groups, of course, often emphasized the importance of cycling. Is not only about safety, but also the environment, but also in the urban area, livable cities kind of movements, People want to improve the livability of a part of the city. They've also often played a role to reduce car usage and to improve the role of the bike and walking in transport policies.

Were these guidelines from CROW available also back in the 70s?

I'm not sure when they were established, I think, at least in the 1980s. Maybe it's better to check their website.

On the other hand, was there a particular actor that was strongly opposing the development of the Pro-Cycling plans?

It was not necessarily that actors did want to downplay the role of bikes, but there were interest groups that did not want anti-car policies or what they interpreted as anti-car policies. It was more the objection against downplaying the role of cars, less paid parking, higher cost of parking, things like that. Car free city centers, that was the biggest problem, not the fact that people would then cycle. They especially did not like to downplay the role of cars. The ANWB (Dutch Automobile Club) originally was a cyclist union, the general Dutch cyclist's union. But then the people bought more cars, so they gradually moved their interest from bikes to cars. And now they are officially saying they are for mobility in general - but they used it in the 1970s and 80s. They definitely did support the interests of car users, not those of cyclists.

Based on your experience and your expertise in transport policy issues, do you believe that good timing and the right moment is a necessary condition for a transport policy to change and become more cycling oriented?

I would distinguish between the right timing with respect to the transport system and with respect to getting policies accepted by the political climate and a societal climate. For the latter, timing is very important. You need to have the combination of enough support from society and brave local authorities who propose these plans and know how to play the game to get them implemented. So yes, timing is very important about if, when and how policies are implemented. With respect to the transport system, I would, by the way, prefer to say the transport and the lunch system, then, of course also plays a role because it's way easier to cycle and implement cycling policies in a dense urban context with a lot of mixed use and short distances, like in Amsterdam. The transport system in the land use system also plays a role and depending on which land we use for transport plans, which infrastructures are built, it is either easier or more difficult to implement cycling policies. So there is both a policy societal aspect of implementation, as well as the transport and linear system characteristics that play a role.

And what about the politicians and the governmental authorities? Do they also play a significant role? Is their attitude towards adopting policy change or their willingness to do it important?

They definitely play a role. We also had a period in which local municipalities thought that transport planning was mainly about accommodating cars for parked and driving cars. And at the end, we also need to take care a little bit of cyclists and pedestrians but they were, well later on in their stage of design and thinking. So they often departed from the car and then the bike had to be added. There are some exceptions to the rule, like the City of Hamilton, which is first of all designed to provide access to destinations by bike, and the counter to that, and an inner city spatial concept on the same. The mindset of planners and local policymakers definitely plays a role in what has been done for cyclists in the past decades.

And the role of the media? How would you comment on their role's importance?

The role of the media is very poorly studied in the transport community, but they definitely play a role. I think that the media also plays an important role with respect to the social movements in the 1960s. The more leftist oriented media did pay attention to those movements, and to protests against building the metro line protests against demolishing buildings. So very likely, but I'm not sure if I can scientifically underpin this. But very likely, the media did indeed play a large role. However, in both directions, also the lobby of people with an interest in not downplaying the role of cars, they also got attention in the media. For example, the Telegraaf heavily protested against any policy downplaying the role of cars. So it goes in both directions. You have traditional media, social media, ICT base media, traditional media, television, radio, newspapers, magazines, and you have different interests, different political colors, so the media is not one homogeneous actor. But overall, the media definitely must have played an important role in which policies were implemented and when and where now.

And a final question about Amsterdam. How could someone explain the change in cycle policies based on the changes in infrastructure planning? For example, were there any particular projects or any infrastructure plans that were modified after the development of the cycling policies? Do you know examples such as the change of the plan for the subway in Amsterdam?

Very likely, but I don't know. I never studied those specific Amsterdam policies in detail.

A.2.2 Maartje van Putten

Maartje Van Putten was co-founder and chairman of the social movement of the 70s “Stop de Kindermoord” in the Netherlands and co-founder of the Only Dutch Cyclists' Union. The interview took place on the 22nd of May 2021.

It is clear that things changed between the 70s-90s in the transport policies in Amsterdam, and especially in the way that infrastructure was planned. Thus, I would like to ask you to help me go through time to see what was the role of social movement in formulating these policies and implementing them. To what extent social movements contribute to changes in policies and also in the implementation of the policies.

A journalist who was also the headmaster - the director- of a paper that was daily coming out had four children, and one of his daughters was killed on the way back to school on a bike in those rural areas of Amsterdam. Then he started to look at figures of how many accidents were happening on the roads every year. This happened in the early 70s, and these years were also the most active for the “Stop de Kindermoord”. So, there was an article in his own paper covering the whole front page with the title “Stop de kindermoord” and explaining about the increased number of accidents. The roads were not ready after the second world war to facilitate the explosion of traffic. The traffic was growing but nothing had changed on the roads as they were still very narrow and there were no biking lanes. And then there were also other big papers that took over part of it, also being alarmed by the figures. When I saw this article, I personally felt that something has to be done. I met with other people who were also aware of the accidents happening in the same area and soon we had a whole group. We had an economist from a bank, some students from TU Delft, some people who worked for city planning and also many mothers. So we had a group and we agreed that we have to start something to wake up the Netherlands, the city planners and the local and national authorities. So we formed a foundation but we needed money to do the work, for example to make some flyers. We decided to make a proposal for a very well-known Dutch fund collecting money from stamps for children. We wanted a specific amount of money but were advised to ask for the double in order to get less, but eventually we received the total amount that we asked. That was a huge amount of money, and we could therefore rent an office. We rented an office in Amsterdam South, we were all volunteers and we could use the money to have national actions. We were blocking busy, dangerous roads, drivers or trams had to stop, and of course they didn't like it. However, there was a picture made with us protesting for a magazine's front page. These years we were still in the mood of changing society. It was only 25-30 years after the end of the war, and the Netherlands, as most of the European cities, was building up itself. We were renewing the society, we were speaking up and things were always received very positively. We kept the name of the “Stop de kindermoord”. Later on, some people said that it was a too aggressive logo- and actually it is, but it really hits people's minds. We got a lot of media attention because it was new also for the society that people were coming into the streets demanding actions from the government to change the city structure. Then we went to the Parliament. You cannot think of it today, but these years we could call a member of the national parliament, they were even inviting us to come to The Hague and talk with them. Members of the parliament who lived in Amsterdam came on their bikes to our meetings, and the mayor as well. “Stop de kindermord” was not politicized in the sense of it was a social issue that everybody recognized as an important issue, and all the political parties-despite their beliefs-were in favor of that. In that sense it was easy for us to convince them. For example, even a minister from the Christian Democrats that we were actively asking him to stop the deaths, he himself lost a child in traffic. In 1973 there was also the oil crisis in the Netherlands and once per month there was a car free

Sunday, and that also helped us to arrange parties and take back the streets for children and families. We also received by people from TU Delft the ERF which was a plan on how living areas should look like. So although we were in the media, we had a very developed thinking about the city's infrastructure. Cities were growing, traffic was growing enormously, people were trying to find places in the green suburbs. And we contributed to the redesign of the public space, achieving road-connections and bike lanes from every village to the city center. We had the spirit of the Stop de Kindermoord, the willingness to change things, and with this city-design from the city planners of TU Delft we went to the Ministry and talked about it. It turned out that we were very welcome by the politicians.

How did you manage to influence the politicians? You already told me that you were very welcome and everything was perceived very positively. How would you explain this? You also mentioned the oil crisis of 1973. Do you believe that this also played a role, and maybe accelerated the changes in the policy for cycling?

We had a lot of actions. We made statements together with the environmental groups and bikers organization. We went to the new center in The Hague, always arguing about the city planning and the social consequences of all this growth of traffic. When the oil crisis appeared, it was the time that we were asking for permanent free Sundays to socialize in the streets again and meet outside. And finally it was happening for some period. We were highlighting the social aspect of the issue, but it was a good timing.

Did you get enough support? And how did the social movement change over time? We discussed the 70s but how was it in the 80s for example?

At this period there was already another organization, a formal organization, in The Hague about traffic safety called “Veilig Verkeer Nederland”, and they still exist. Their view-we were fighting against this view- was that we have to train children to adapt to the system, by giving them a yellow jacket to make them visible to the drivers. In simple words they were putting the blame in case something goes wrong to the kids, that they were not careful enough etc., and they generally made the children feel guilty for what was happening. They wanted to educate the children to adapt to the system that we were fighting against demanding the system to change. This organization was very much financed by the Ministry, and at a certain point we also got some money to run our work. This was a very crucial point, as the Ministry put too much pressure on the movement to integrate with this previous organization because of the funding, despite the different perceptions we had. And that was the time when the movement was lost.

Do you believe that the pro-cycling policies developed in that time would have been different if the social movement would not exist?

I think that yes I can say that. This whole structure of biking lanes all over the country, those traffic lights in areas with schools, the white lines in places where kids are crossing definitely had been influenced by us-and by the Fietzersbond. We were collaborating, we were meeting together, we were concentrating on the safety of children. I think we contributed a lot, but you can never really prove that. **Someone would argue that there have been social movements also in other cities. But these cities turned out to be only car cities. Do you believe that there was something unique with Amsterdam? Maybe a special contextual factor that was present in the case of Amsterdam and probably not in the other places?**

I don't know why people are focusing so much in Amsterdam. When we made our actions we had an office in Amsterdam because it was a big city but we were very active also in other places, such as Eindhoven, Rotterdam and The Hague for example. We were not focusing on Amsterdam at that moment, we were really focusing nationwide. Why Amsterdam has the most successful story, I don't know. It might be because of the media, maybe because it was easier as all of us were there, the journalist lived also there but I really don't have a clue.

Did “Stop de kindermoord” target the national or the local government? or both? And why?

The national government, the ministry in The Hague. We were aiming to change the nationwide laws, and we had these discussions with the officials in the ministries, in the Parliament. We talked much more on a national level rather than on a city level because we wanted to achieve changes for the whole country. Even the group that we set was a nationwide group, with members from different places in the Netherlands.

Do you feel that there are also some other contextual factors that are needed for a social movement to be successful? For example, the spatial scale, the existence of the historic center? Do you believe that these facts also played a role?

At the same time, we also had some actions against the subway because for this purpose they turned down a very old area in the center of the town. People were angry with that; it was a beautiful area in a bad condition. The result of the success is also evident today because there is only one “highway” in Amsterdam, and this is the only place where the historic center was destroyed. A contextual factor would be the support. We got support even from the Associations of doctors specialized in children, as they were treating the children at the hospitals after the accidents.

Were there any particular actors that were opposing these cycling plans? Or actively promoting them?

Nobody was against us, except for the automobile club who were trying to fight us but they were on their own. In a way you can also say that even the organization “Veilig Verkeer Nederland” was against us, because they had different perceptions. They were not agreeing with us, and they did not want to spread our message for change in the infrastructure. It could be possibly because they were financed by the automobile club. They were not open for a change.

How would you explain that in that time the governmental authorities decided to hear you-the activists, and not the automobile clubs?

It was not easy, we had to argue with them on the television, to actively fight. We were enthusiastic so we did it. We were not a political party, and this was very important and attracted a lot of attention. If today for example there is a group of people fighting for something reasonable and objectively correct such as road safety, it is important to have all the political parties behind you but not belong to any of them.

Based on the literature review that I have conducted I would like to ask for your reflection on the following Hypothesis 1: Social movements tend to define a certain condition as a problem or

frame a particular policy issue (problem stream in MSF), and then influence the public opinion in order to attract governmental attention and achieve policy change. Would you agree / disagree?

I think that I agree. The role of the media was probably the most important. The media liked the topic because we had massive actions asking for it. This media attention brought us closer to the public and made people aware. In one of the actions that we took over a part of the street, some drivers who were passing by were really frustrated and started screaming. But the surprise was that instead of us-the activists- the public on the side of the roads started being angry at the drivers, because they knew the magnitude of the problem. The public took over and the locals started joining. It is really important to have public support.

What about the next Hypothesis 2: As social movements are powerless, they aim to influence governmental groups and the politicians, in order to trigger a change in public policy.

This is mainly the issue today; in that period, it was different. It was easier to talk to the politicians, and we did not focus on a specific party because they were all open to us. We were not high-checked, but today you can easily be. If you have a sensitive issue that should be an issue for everybody then make sure that you don't become a tool for any party. It's dangerous because today they will try to take advantage of it. The best way is to keep an issue and also be open for criticism.

And finally I would like to hear your opinion on this final Hypothesis 3: Social movements are likely to be most effective, when there is a well-defined problem, politicians are eager to change, there is a feasible solution available, good timing exists and an actor who actively promotes this policy. This good timing would be the oil crisis then?

Yes, I recognize them all. I think that the momentum in our case was more the article by the journalist rather than the oil crisis. It is very rare to see only a nationwide well known paper with only one article in the front page. This article was a wakeup call for us, and it also pointed to the well-defined problem of the children's deaths on the roads. Regarding the actors who promote this policy in our case the medical sector was behind us and doctors really supported us, together with the people from TU Delft that provided us with the plan for the infrastructure design.

A.2.3 Marjolein de Lange

Marjolein de Lange is a consultant and researcher specialized in bicycle traffic and road safety. In addition, she is a mobility expert in bicycle planning actively involved in Amsterdam Cyclist's Union and the co-author of the book: *Bike City Amsterdam: How Amsterdam became the cycling capital of the world*. The interview took place on the 25th of May 2021.

My research proposes that there is a link between Social Movements, policy adoption and also policy implementation. One of my cases is Amsterdam, and here I would like to hear your opinion. I already had a very insightful discussion with Maartje van Putten and we covered much ground around the social movement set up, therefore I would like to discuss with you the story from the other side and not from the social movement perspective. My first question would be: Was the social movement the only factor that led to pro-cycling policy change in Amsterdam?

It's a combination of the social movement, the politicians, the slowly slowly civil servants in the city and another factor that is the city itself, the shape of the city. This was around the late 60s and early 70s. More and more cars came up, more people started owning cars and this quite soon became a problem, because the streets were quite narrow and there was not a lot of capacity to have so many cars in the city. That was already an issue in the 50s when the city was full of parked cars. A common example is that there was an accident with a fire but the fire trucks could not arrive because the streets were blocked by the cars. As I said it's also the city itself that made a contribution in the turnaround of the perspective of 1971. In 1971 the city council decided to build large streets right towards the city center, in order to provide more space for cars. That one was voted down by just one vote difference. In the plans was also to create a ring road for cars around the historic center. And there were many parties in favor of this plan, but this would mean to break down part of the old city, fill in canals. So there was also a lot of opposition and many citizens were against it. The majority of the citizens said that from the city perspective, there is no space for cars. We have to do other things and promote other means of transport.

How did the idea about cycling perspective arrive in the discussion table? Why did the government decide to promote cycling and not to invest in the public means of transport for example?

It's again a combination of reasons. One of the reasons is that at that time there were still quite a lot of cyclists compared to other cities. In the Netherlands all cities had quite a lot of cyclists, but especially in Amsterdam there were more. So that was a factor that led the government to quickly improve cycling conditions, but they also wanted to improve public transport as stated in the transportation plan of 1976. This initiative came from the national government because the national government was more left wing. Apart from the mobility problems that already existed in Amsterdam, the bad financial situation of the public transport company that was nearly bankrupt was another significant reason. So they needed money but the city did not have it. Then the state said that they could financially support them under the condition of drafting a plan to improve the public transport with measures such as the creation of free lanes, the redesign of intersections. This plan was the one of 1976, which included improvements for both cycling and public means of transport. The evidence is that several streets have been improved both for trams and for bikes. By taking an example in the ring road around the old city centre benefiting the inner city the lane for car parking was taken out, and this reduced the number of cars which means safer roads for cyclists and less delay for the tram. However, from the cyclist movements' perspective

on it, they believed that this was not sufficient, as according to their opinion it emphasized a lot in the public transportation but for cycling it still left gaps. In 1978, a new city council was elected and they announced that they would improve things around cycling.

There were any other reasons or contextual factors that you feel played a role in changing the perception of the government around cycling? Was there a particular event that switched their opinions for cycling?

Well, we have a multi-party government. And you can say that the more left wing parties such as the social-democrats and the greens were earlier in favor of cycling, and then the more liberal together with the christian parties followed. So the change firstly came from those left-wing parties. In 1978 these parties took the majority in the city council, after many years of the social democrat party leading. It is worth saying that also the social democrats in the early 1970s made a switch to their plans regarding urban development. In particular, instead of creating a combat city they promoted the development of suburbs with new houses around and outside of the city, and satellite cities at car distance.

In which way did the politicians interact with the social movement and the activists? Were they interacting with the advocacy groups because they recognized the importance of the issue, or probably because they were afraid that this could have an impact on their popularity?

In Amsterdam the more left wing politicians really agreed with the opinions of the advocates, so they saw the reasoning behind it. The support of the right wing politicians was not so much based on the same thinking. And nowadays, we know that even the Liberal Party in Amsterdam is Pro Cycling, but they are also pro cars. If you look at the national level, you can say that right wing parties are definitely more pro cars, the left wing parties are more pro bikes. But for Amsterdam, I think that most of the politicians from all the political parties cycle themselves, so they knew the problem. And they had children that go to school by bike. So they truly knew about the issues cyclists were experiencing.

How did the pro-cycling policy establishment work in terms of how the infrastructure or the urban design was planned?

Until the early 70s, the spatial system that was promoted was to have these satellite villages and cities around the main cities in a distance of 10-20 kilometers away from the city center. People were encouraged to work in the city but to move to smaller towns where they could have a home with a garden and a car in front. So this suburbanization was happening in the Netherlands as well. This plan also changed after the Pro Cycling policy was established. The new policy gave the possibility to have a combat city again, that means people both living and working in a city. For example, the open spaces in the city, or maybe the spaces of the old industries that had moved out of the city, were redeveloped into living areas.

Do you believe that the oil crisis of 1973 also played a role by providing the right timing for all these changes to happen due to the embargo of the Arabian countries?

It was one of the reasons that played a role, yes.

I spoke with Maartje van Putten and she expressed the opinion that although the oil crisis was a beneficial factor, the real momentum for all these changes to happen was mainly this nationwide

paper with the front article “Stop de kindermoord” written by the journalist who lost his child in the traffic. Do you agree?

Yeah, that was also an important reason, but again I believe it’s a matter of combination. People were really angry about this, it was a wakeup call for them, indeed. Everybody knew about it. Parents were really anxious about this. If a friend of your child has been killed or been injured in traffic, then you get more aware of and then you are more open to an organization like a call like “Stop de kindermoord”.

Were there any particular actors actively opposing the cycling plans?

Well, firstly nobody was opposing “Stop de kindermoord”. Everybody agreed on that. But when it comes to plans to actually improve road safety, this was opposed by many. If you want to improve the conditions in the streets you have to make choices to make things different, which takes time, you cannot rebuild a city overnight. So it takes a long time to rebuild to make the city safer. When the plan for the ring road was announced, there was a lot of opposition against taking out space for cars. The shop owner said that they were losing our customers. Sometimes there was opposition also from residents because they were losing parking spaces, for instance. That's one of the reasons why people are or why some people were against pro-cycling plans. Sometimes you also lose space for pedestrians while creating more space for bikes. An example in which I was really involved in, in the early 2000s, there was a plan to redevelop bicycle lanes and the best place for that would be the place of the trees. There was a really big discussion around it and the dilemma was: Are we going to cut down trees to make a bicycle path or not? Finally, it was decided, we are not going to cut down the trees, but then a bicycle path was created in the place where there used to be a footpath. So now the sidewalk is more narrow, and there's a bicycle path, which means that probably pedestrians are not very satisfied with this.

What about the automobile club and the car manufacturers? Were they also opposing the plans?

Actually we don't really have car companies in the Netherlands, and maybe that helped. But there's an industry of retailers of course, and they could have opposed it. Regarding the Automobile Club, yes they didn't think so much about the safety of cyclists and safety of children. They were more promoting good facilities for cars. So if you promote your own good, then you don't have eyes for road safety and for cycling.

And were there any actors that were actively promoting the pro-cycling plans, so they contributed with their powers or with their resources?

The Cyclist Union promoted plans with their knowledge, they didn't have a lot of money but they had a lot of power at that time. The “Stop de kindermoord” has been doing a lot, but this was more on the national level. The organization of the Cyclist Union was very much involved at a local level in Amsterdam, but in many other towns as well. And they discussed fiercely with politicians and civil servants about every road plan, every street plan that was made. Because they felt that Cycling is good for the city, cycling needs to be improved and they were annoyed by how bad things were for cycling. Then the association of the road safety in the Netherlands “Veilig Verkeer Nederland” also promoted cycling, and they got funding from the city for quite some time to have one or two officers to be involved in all the traffic planning from the city. So I think that the city recognized the reasonable things for

better road safety and good cycling. But also the city recognized the help to make things better for cycling, because it's not only the groups like the cyclist's union, but also civil servants in the city.

What about the media and the technological companies of that period?

The role of the media differs from the perspective you look at it. The media amplifies the voices that are heard in the street. So even the shop owners that were opposing the plan were covered as well. And of course the cyclists or resident's groups that were in favor of the cycling policies were also in the media. So it's mixed. The role of the media is mixed. There are also different media. Some were emphasizing the car perspective, and others on the cycling.

A.2.4 Ulf Eriksson

Ulf is a regional cycling coordinator and strategic planner in the Regional Cycling Office in Stockholm. The regional cycling office in Stockholm was set up in 2016 to make it easier for the county's road managers to expand the regional bicycle road network. The interview took place on the 28th of May 2021.

So as you are part of their regional office in Stockholm, as a strategic planner, based on your experience I would like to ask you in which way the city administrators interact with social movements and advocacy groups. Do they actively hear their perceptions? Do they receive consultation from these kinds of groups in Stockholm?

I will answer from the regional perspective, based on my experience with the organization. It is almost like a collaboration between the Swedish authorities and the Cykelfrämjandet which is the Swedish national cycling advocacy organization. So we actively collaborate with them, we know them very well, personally. We even invite them to some of our meetings. We have had workshops with them, together with all the municipalities (there are 26 municipalities). So we have collaborative workshops with the bike lobby, and all the cities in the Stockholm region. And I should say that this active collaboration influences everybody. We can influence them, and they can influence us. In this way they can also know what is relevant, what is doable, what is feasible, what's on the agenda. And also what we need. Because we - as Regional Cycling Office- want cycling to increase as well, a lot. And we also learn what we need to be able to do that? And that can be projects, new knowledge, research, a lot of stuff that is needed to help us increase cycling.

When did this collaboration start happening? Was there a specific moment in time that the government started actively hearing the perception of the cyclists on this issue?

The Regional Cycling Office has only been around for five or six years. I have been part of it the last two years, and during these years it's happening a lot. But even before, during the five years or six years, I know that it has been going on. Before the creation of this Cycling Office there wasn't such a strong focus on cycling as it is now. We can say that there was a bit of a shift there.

Do you have other examples of collaboration apart from these meetings and the workshops?

For instance, I'm a co-author on a research paper on cycling improvements that they have initiated.

Is this collaboration and interaction happening on a local or national level?

It depends on what you mean. It's regional, since we are a regional government. But the cycling lobby it's a national organization. They also have local branches, but we are working together with the national branch. Cykelfrämjandet (the Swedish national cycling advocacy organization) is strong on the national side. I'm not sure if the whole of Sweden is covered with local branches, but there are also many local branches. There is one in Stockholm, one in Guttenberg and so on. So it's both, but there are members, at least all over Sweden. The members of this association, I find them quite active in local debates. I think it's both but definitely it starts on the national level.

Do you believe that the contribution of these social movements, these activism forms is important in the policymaking process in cycling issues? Do you find their contribution useful and substantial?

Yeah, yeah, definitely. Very much. At least the last five years (before that I cannot know) they are really professional. They know how to talk to policymakers, they have good connections in the national parliament. And here I should say that I think stuff has really started to happen, not only because of this cycling organization. But overall they are good. A good power in this change.

Do you believe that the cycling policies that have been adopted and already implemented so far, would have been different in the case they wouldn't exist?

I can imagine that. Probably not totally different, but definitely different. I think they had an effect. Absolutely.

Do you have any knowledge of how they work? What kind of events do they organize, what kind of activities to influence the public to increase the awareness of cycling?

I know that this association has been around for many years. In Sweden, everybody knows about Cykelfrämjandet. Everybody knows about them, but I'm not sure if everybody knows what they do. Everybody is familiar with it. It's a very well established association. They've been here for a long time, and they managed to be so famous. They have both local and national activities. They have courses for new cyclists, for beginners, and for example they work with immigrants, trying to teach them how to cycle.

Apart from Cykelfrämjandet, my research found two other advocacy groups "the ad-hoc "Ghost Bike Sweden", and a very recent on-line group called "Bike Maffia". Do you also consider their opinion, are you aware of their existence and of their demands?

No, I don't know them.

Are there any particular actors, external actors that actively promote or oppose the cycling policies to be adopted or to be implemented?

Of course there's always people that like it, and people that don't like it, but more and more are in favor of more sustainable transport (Walking, cycling and public transport). For example, the Stockholm Chamber of Commerce has been a very old fashioned, car-oriented organization asking for more roads for the city to be able to grow. They were like that until just a few years ago. But now the past two, three years, maybe they have shifted, starting to realize the value of a livable city. Just a few days ago, I was interviewed by them as they are creating a report on how micro mobility and walking, cycling can enhance the city and the business. So, I think more and more are transforming into the more evidence based model of the sciences.

Is there a particular reason or an event that happened two years ago and changed their perception, or they just recognized the importance of cycling?

I think they just woke up one day and finally recognized it. It takes time to just change the culture. If you have a really strong idea about something and then you -kind of piece by piece- realize that maybe this isn't really the. I don't know much about the process of how they changed, but I'm glad they did.

Regarding the decision makers again, was there a specific moment in time that their perception around cycling started changing? Was there a transition period? A series of events, something that led the decision makers to take such a decision to promote cycling?

I think there was a shift a few decades ago where it started and then just accelerated. At the Regional level the municipalities are the ones responsible for building the cycling paths, except for some for which the national administration is responsible for. A few decades ago they felt that it was hard to coordinate. People in Stockholm ride long distances to get to work, for example, and it's not rare that they cross two or three municipalities on the way from home to work. So then the bypass needs to be coordinated and that's why my office was put into place five or six years ago. Now there was a regional cycling plan developed that points out where regional cycling infrastructure is needed.

And as far as it concerns the Cykelfrämjandet do you also get advice from them on how to implement the objectives of the cycling plan, or only while creating the objectives and statements on cycling issues?

The kind of work is done by the municipalities, so we don't plan the detailed infrastructure program. So we are on a very strategic level. We are pointing out on the regional level the type of network that is needed, but the specific details are not designed or worked out by us. It's not our task and we don't have any legal possibilities to do that. It's the municipalities that have the legal possibility.

How did the idea of promoting cycling arrive on the discussion table?

Almost every municipality in the region has a traffic plan or a traffic strategy. Almost everybody lifts cycling as one of the top priorities. We work for walking, cycling, public transport, transport for businesses and private cars in the bottom. So it's often established in the policy documents or the municipalities.

Would you find a reason to explain this interest in cycling? Is it just about the green benefits, or, for example, the authorities believe that is a way also to promote local businesses?

I am only thinking of a boring answer. Well there are some things that you're supposed to do. So if somebody does the opposite, (s)he will be thrown in the garbage. But a reason that led us to emphasize cycling is the environment. But especially in the city of Stockholm, or some other dense part of the region is the lack of space. So it's space efficient to cycle and walk. And of course public health is another very important factor.

Are there any other factors you feel that play a role in changing the perception for cycling policies? For example, their spatial scale, the existence of a historic center, or smaller narrow roads, the lack of space. Do these factors contribute to making cycling more appealing to the urban designers?

Stockholm is prognosed to grow pretty much in the coming decades. The public transport system and some roads are already quite packed today already. So that's one of the arguments to make just to make the transport system work. We need an efficient transport system and cycling plays a role in that. So that's one main argument. But of course, environmental, public health reasons and also equity is fundamental. Everybody should have the same possibilities to have access to services and everyday life. Cycling has some good effects.

What kind of activities does the regional office organize to promote cycling and bring people on their bikes?

Our main job is to target the municipalities, the national government, so our work has almost nothing to do with the common people. But the cycling community, the municipalities, the National transport administration, they work a lot with the people and the public. The main way to make people ride their bikes is by building adequate infrastructure, because it's lacking here. And also maintenance it's extremely important since it snows pretty often. And then there are some other efforts such as mobility management and campaigns.

Apart from the municipalities that are your main target, do you also target any external actors, like companies to find support?

It's something that maybe will happen in the future. We were put into place because of the discoordination in the municipalities in bike planning. So far, our job has been to work with the ones building the bike infrastructure. Since 2014, there has been a bike plan, and now we're revising it and a new one is coming this year. But our main focus has been on the municipalities and on the national transport administration.

The reason for revising the previous cycling plan was because it was not up to date or it was proven that it was not sufficient and probably was not properly covering all the issues?

It's pretty common that plans are being revised or renewed with the times bouncing. So now it has been six years since to keep showing that it's an important question to work with, to speed up the development because things really need to increase faster than it does today. So that was the background of the decision to revise the cycling plan. But it also needs to be broadened. So to the current plan, or that old plan is very focused on commuting and also on infrastructure. It's pretty narrow. It's easy to learn until it influences the commuting trips. It's a good start. But it's also very narrowed when you're not looking at leisure, kids, and elderly. And also not looking at communication and campaigns and information to cyclists, mobility management, soft measures. So these topics will be broader than the old one.

While you will be revising and renewing the cycling plan will you also consult and collaborate with the cycling organization?

They have been very active and have given their inputs to the plan. they have not been part of development, but they contributed with their inputs.

A.2.5 Joan O'Connell

Joan O'Connell is fighting for safer cycling conditions after she was knocked off her bike by a 1.5-tonne seven-seater car. She is actively involved in I BIKE Dublin and recently became a member of Dublin Cycling Campaign. The interview with Joan took place on the 28th of May 2021.

My research proposes that there is a link between the social movements, the policy change and policy implementation. From my research so far I found that Dublin is a place where cyclists constantly demand governmental attention to actually implement the cycling policies that have been established on the papers. Based on your experience as a member of I-BIKE-Dublin, how would you comment on this?

That lack of enforcement or the lack of implementation of the existing laws and the existing rules that is happening at the national levels or national legislation, and also local levels is what led to the creation of the advocacy group. And I think it's part of what continues to drive the activism in me, and probably possibly others too. I think that it can be shown by evidence and my own experience, and maybe statistics - there would be some evidence to support that - but that's certainly been my experience. I had heard about I-BIKE-Dublin after a year they were set up. So I'd heard about them online on social media, I think it was on Twitter, possibly. And so they were doing protection of bike lanes. The law says that nobody should park in the park lanes, they should be kept free for cyclists to cycle on. But that law wasn't being enforced, and it wasn't being respected by drivers. That prompted the creation of I-BIKE-Dublin, and when I heard about these activities, I also became involved in I-BIKE-Dublin, I think it was maybe late 2017. And since then, as well, my own experience has very much, you know, solidified my interest in advocacy and whether it's a social movement type group, like I-BIKE- Dublin or something more formalized, like the Dublin Cycling Campaign.

Does this lack of law enforcement happen at the local or at the national level?

If you're talking about sort of the national legislation, there will be a role there for police to enforce that, but in my experience I find that it's very seldom that the guards will enforce the laws. For example, I use cameras on my bike to prepare the footage to give it to the guards and then all of this process goes through. So there is definitely that element that I have found that these existing laws aren't in place. And the same thing applies at the local level in my experience with the Dublin City Council. A lot of the local authorities would have traffic wardens so they would issue fines or tickets to illegal parking. And a number of years ago, the city council outsourced this to a private contractor. And the contractors are only looking at illegal parking where there's a revenue impact. So only where the parking payment hasn't taken place. And so they're not enforcing the laws, which also apply for something like parking on a footpath or parking in a cycling lane. So again, that doesn't seem to be anything like a priority for the government or for the contractors.

What is the main issue that causes this lack of enforcement? The guards, the police, the local authorities or also something else?

Since 2018, I have reported many instances to the police. They have not taken the reports, and they have not seen that an offence has occurred, so they only decided to speak to the driver and they gave them a caution (formal warning). There was no fine, no prosecution, nothing like this. So even though the law has come in, we're kind of seeing the same repeated problems, I guess, with the lack of the

enforcement of the law. Another relevant example comes from my involvement with another group in which a group of parents with their children, and maybe some volunteers to support them, cycle from their neighborhood to the local school. I explained to the police that, you know, we had dropped off most of the parents, but there was still a parent and a child with me when this incident occurred. However, he did not even sort of that type of detail, meaning that the guards would take action.

Now I'm also aware that part of the problem is that even if the police do proceed, they also face problems in the courts. And so depending on the circumstances, the judge might be sympathetic to the driver. And again, there's no research to prove this. There's no analysis of court decisions. But if you read the court reports in the media, you can see sort of the language that's used by the judges. For example, the person who hit me and he pleaded guilty to the criminal offense, he was fined 250 euro and there was no major penalty.

So there's a lot of levels I think there's the local, there's policing. And there's also in the judiciary, and possibly also juries. If there's a serious case it comes before the courts and in Ireland, we have the jury system and the courts. Those people can also perhaps be sympathetic, and you don't know how they come to the decision. There was a case yesterday where a verdict was given in relation to a woman who was killed cycling with a group and the cycling club. And the driver admitted to the court that he crossed the solid line, and in Ireland, that's an offense, (he was driving too fast over the speed limit, that's also an offense). So he admitted to these different offenses. And then he hit this woman who died. And even though he admitted all of these, they found that he wasn't guilty of the different offenses that the guard did prosecute him for. In the explanation of the jury's decision, we saw there wasn't even a difference of opinion within the jury.

So I think there's definitely a lot of that underlying thing and underside of Irish society that I think serves me and motivates me. And I think probably our other people too. And so all of that has happened since I joined I BIKE DUBLIN but it definitely perpetuates my involvement in it. And it certainly has perpetuated my involvement then in other groups as well, such as the one with the other parents and the Dublin Cycling Campaign.

I have also heard about the Dublin Cycling Campaign. I think they were set up in the early 90s, but it seems that during the previous 20 years, they didn't manage to achieve much or at least they didn't manage to influence the politicians as much as someone would expect. How would you explain this?

The Dublin cycling campaign is a more formal organization. It's a charity, it's registered and it's all very official. They contact and lobby politicians, officials in government or local government.

This is a good question. I am very new with the Dublin Cycling campaign, so I can't compare sort of what they have achieved over the years. Some other people who are more familiar and have been involved longer might disagree. I think that if you are from the outside looking in to Ireland, you would probably think that because you might compare it with the best examples like the Netherlands, or Copenhagen and countries where cycling infrastructure is very safe, away from motorcars. So in that sense, if you use that as your measure, you can probably say that by comparison, not much has happened. And then at the same time, you might say that it can be quite difficult to look at the positives when you are kind of trying to advocate for change. And so I think that there have been some changes, and over the years, maybe the lobbying in the past has contributed to the changes that are coming into place.

During the pandemic, here in Ireland, like in a lot of places, the local authorities and the government have rushed out a lot of sort of temporary ways to put in protected cycle paths. So again, it's a little bit ad hoc, it's not very complete, but they have put in some changes. Some of that you can tell that it's been influenced maybe by the lobbying, because you can see that versions of maybe longer term projects that come into place, are more similar to what has been argued for.

It's a very good question and it also makes me kind of think; has much been achieved? If you're looking at the best idea on how to measure change that would be; could a child cycle to school could an older person who was not very strong to cycle? And if you look at it from that perspective, then not very many places have that. Some greenways which are rural, they're not very linking. They're not they're not linking towns or cities, they might exist. But some of the new places and some of the new cycle paths that have come in over the Covid-19 pandemic, some of them are very good. So in south Dublin, the coastal mobility route, that has come in, and it's a two-way cycle path. And they've been very ambitious. And they have actually shown to the country what you can achieve very quickly for reasonable money when you consider the cost of road infrastructure. And, then you can also see just how popular it is, and the type of people who are using their stuff. It's not just people who cycled for sport, it's people who go to the shops, it's older people, it's younger people. I think that it's very much a mixed situation around there. There doesn't seem to be a very standard approach to how cycling infrastructure is implemented. And that's definitely one of the many problems certainly.

Do you target only the national or the local government, or both? And why?

It's both. In my case with I-BIKE-Dublin and the close passing law, that was a national piece of legislation. But predominantly, or mostly, I would look at local things, as I contributed to issues that come up and affect Dublin City. So in Dublin, we have four different local authorities. The dominant city has the more city center, the central area, so I'd be more concentrating on that. The reason for that mostly is because I live in the city center, and I'm biased in that way because I want better improvements for where I live. I also keep an eye on sort of the other parts of the job and local authorities. And again, that's partly because of bias, because now that I'm confident in cycling, I can go further and I can reach those areas. I kind of have a self-interest in it as well. And I also want to see more, more people and that example of South Dublin, the rule starts in place that just shows you what can be achieved. So that kind of pushes me on as well to want to see more of that in other locations.

And apart from it, my motivation as well is in relation to the equality aspects that can be achieved from bikes from cycling. So my interest will often be around the human rights of the individual, I will also take a road safety point of view, or the kind of gendered aspects of cycling and public transport and the impact of that. So part of what motivates me as well is the very good cycle route implemented in South Dublin which is a very wealthy part of Dublin. It's a really good piece of infrastructure. This also kind of gets me a bit angry, because it's a really nice part of the country, which has a lot of amenities and a lot of wealth in that part of the city. So part of my motivation is to have high quality cycling infrastructure everywhere, in as many places as possible. And it shouldn't depend on a very kind of nice, wealthy setting or coastal route or something like that. I think of the potential benefits from people who are maybe marginalized or not wealthy or who are maybe migrants, and the affordability of cycling is better. So the potential benefits for people who may not ordinarily want to cycle or think of cycling, that's kind of partly as well, what I want to push for as well. But it's something that can actually improve people's lives. Even if they also drive, that's fine, but they have the option of cycling.

In which way do you target the city planners or the administrators who are responsible for creating the infrastructure planning?

So there's probably a number of ways mostly, especially recently, because of Covid-19. It's emails with written correspondence. We would write that in the city council, we have elected representatives, as well as officials who are just like public servants. We would write to both elected officials and to officials about the same topic, but sometimes only to one of the two as it depends on how things are proceeding. If there's something in a particular part of the city where the representatives are elected, so it's only one small part, we would write to those particular councilors, the elected representatives. But then we might write to the officials who have oversight over the whole city, and if it's a very local project, maybe just a local official. There's so much within the city council, it's broken up into specific areas. So would there be a manager and an official for every particular area, so we might kind of target the email correspondence to that individual official. And part of what I'm still trying to figure out as well -it's also very difficult for me, maybe I'm just a lack of experience - who to target because sometimes it's better to, to target an engineer in an engineering section of the city council. In general, there's no one single individual responsible for cycling infrastructure for the city. And there is one senior person who is responsible for transport in general, but that person is also looking at buses and trains and things like that. So it's kind of hard to figure that out. Recently, in the last year or two, there has been a cycling and walking officer, another public servant who has been appointed. But again, as far as I'm aware, they're relatively Junior, not very senior within the public service hierarchy within the council which means that they don't have a lot of influence. Some of what they will propose to their more senior colleagues may or may not be accepted. So even though you target them for assistance, things may not be effective and you still have to look for who is the right person to target.

And then with the counselor, the elected representatives, it's often difficult to know how they'll respond, because they're also picking their votes. And they're thinking of the perception of their voters: everybody in my area drives, they will not support the cycling infrastructure, or they might be very vague and ambiguous on their way to see what way the public sentiment is going. And that can be skewed. That perception as well as the public sentiment can be skewed or kind of twisted, because you will have some organization happening as well amongst resident's associations, for example. So local residents in the neighborhood will come together out of their objection to something. They can be very successful in doing that, even though they may not be fully representative of the whole neighborhood. So potential projects can be derailed by this.

Do you have examples of cycling projects that have been stopped because of the citizen's objections?

Sure. This has happened with them with a very promising project on the coast and people objected there. They have taken court proceedings to put a stop to it, and the city council had to stop its work, although the council intended to proceed. One of the public representatives was opposed, along with this group from the neighborhoods. Even though they aren't a democratically representative group in the neighborhood, they have the influence that they have, probably because they have a lot of money in that area. Therefore, there's a slightly different way things are dealt with in different parts of the city as well.

Are there any particular actors that are strongly and always opposed or strongly promote the cycling plans? Are there any people that are strongly against the implementation of the cycling plans?

Amongst elected representatives, things change with every time there's an election as they may or may not come back into office. But certainly at the moment, there are very strong opposition voices, it seems to be kind of by political party grouping. The Labour Party, which is considered to be center left, would be very strongly opposed to a lot of the proposals. It's not clear why, but part of the reason might be because of the areas where they represent, they have been elected in these very well to do areas - which also seems contradictory because they're a left party but - , they have been elected in places where their population might be older or might be wealthier or more more settled in that area. These people might be more engaged with the politicians and able to kind of advocate for themselves about their issues - insistence on driving, for example, and the perception would be that the cycling infrastructure will somehow have a negative impact on their ability to drive. That is generally the opposition and rationale. It's surprising that you'd have a lot of Labour Party counselors very strongly opposed.

Regarding those that are in favor, will be generally the Green Party, which is self-explanatory.

The Social Democrats, which is a relatively new party and kind of left as well, will generally be in favor of cycling and walking proposals.

Then there are two big parties in Ireland, which are Fianna Fáil and Fine Gael that are much more established as parties and they're bigger. They are a bit cleverer about how they go on, they don't make it very obvious maybe, about how they'll proceed. They will see what ways the wind is blowing, what's the public mood to act accordingly. With the Fine Gael elected representatives, in years gone by, they have opposed a lot of this, but now, I think they're trying to get maybe younger voters, or they're appealing to people who live in the city. They're a lot more openly in favor of walking and cycling in their messages or their statements, but at the same time, they will also vote against something that comes through the council. I would call their behavior "sneaky" and they're a little bit more difficult to discern. I think they're very much looking at the votes as the political calculation is going on, they're not really motivated by the principle of the matter.

Similarly, with Fianna Fáil, which is the other big party there and they're conservative in different ways. These two parties are both quite conservative (Fianna Fáil and Fine Gael), but that's my own view. I think they would generally be opposed to things like cycling and walking as well. Partly because according to their perception their voters will be negatively influenced or impacted by cycling, or walking. I think that's where the motivations are in the various different parties, and the individual counselors tend to follow those lines.

What about the external actors? For example, the Automobile Club, the media or the technological companies, what kind of role do they play? And are they in favor, or do they also oppose cycling?

The Automobile Association is quite clever in their PR, messaging, making public statements and so on. They are trying to play the very middle ground approach saying very broadly that we're all in favor of cycling and driving. But you know, that they're kind of "coaching" their terms, but really, they are in favor of the status quo and no change. If you listen to them they sound very soothing and very reassuring, and it's very well presented. But at the end of the day if you go through what they say, they more or less say that there is no need to change, just share the road and it will be fine.

In my research so far, I also saw that it seems that they're fine with the government establishing statements, but when it comes to implementation, they put barriers. What about this?

Yeah, if there was a proposal to implement something that they maybe didn't like, they would object to that, and they wouldn't be so much objecting to cycling or anything like that. They would steer away

from that message. But they would say: Oh, the poor motorists will suffer, they would phrase it in this way. So this is the main kind of approach that they would take.

And what about the other external actors and stakeholders?

Other external actors will be the car Parking companies. They are a small number of businesses but they're very powerful because a lot of them are attached to big shopping centers. So if it's the same company, a lot of them have multiple sites within the city center. So one of the interventions that's coming for the city center was a suggestion for the pedestrianisation of an area - and I think the same would be also for cycling. All of the businesses on this street wanted the pedestrianized streets, but there was one car park on the streets, and they objected as they have an exit point at the very start of the streets. It's one-way so all the cars come out of the car park through the streets, and they would not accept us and they were not willing to change their setup. They've also come together with multiple different car park companies on these shopping centers together and they've called themselves the city traders. They are big companies and they have massive, solicitor firms representing them, making submissions to the council issue. I think a couple of them threatened legal action in the High Court. Yeah, they're very active in trying to block or prevent any changes or interventions coming in. And they've done that in relation to the case along the river in the center of Dublin. Although nothing major, nothing huge needed to change, just to make it safe for the existing space for cyclists, but they threatened to object to it. On that occasion, they didn't get their way, but they have been successful in blocking and opposing many other things - and they still are. So that's definitely a very powerful but small lobby or group that exists. They only represent a small number of businesses, but they have big money behind them, and they've got sort of interest there.

What about the technological companies that operate in Dublin?

I'm not too familiar with how they have been sort of approaching things. But I know that in Dublin City, there's a lot of tech companies because of the European LinkedIn that is headquartered here. So they definitely have a lot of employees who will be working and living in the city center. And my assumption is that many of them would cycle and I think they will be supportive of making the streets safer for their workers, basically, so that they can get to work. I'm not sure if Google was also one of the companies, but there have been a number of companies in Dublin, who signed up to the Cycling Works Campaign, which is an offshoot of I-BIKE-Dublin. They have received a lot of support and I think there have been some tech companies there. That's an indication to me that there is some level of support. There's also the tech companies currently being set up in Dublin and they are looking very much at micro mobility. They're looking at the use of e-scooters, electric bikes, bike hiring and bike sharing. So I do think that from a capitalistic point of view this is maybe an opportunity for them as well. There's probably that type of motivation, but anyway there's some level of support for safe cycling infrastructure

Is good timing important for the actions of I-BIKE-Dublin? Do you choose the moments that you arrange your actions, your activities to protest for something deliberately, or it just happens?

I think it varies or changes and it depends. Over the last year, we haven't really had many because of Covid-19. Sometimes we would choose a location and an event because of the repeated infringement and offenses to see if people park it in a cycle width lane, for example. So those wouldn't really be time sensitive. We might just say, we haven't done an action at this location for a while, let's pick this area and we will make the decision on that basis. But there are some things which are time sensitive. For

example, a couple of years ago the I-BIKE- Dublin group organized a die-in protest outside of the parliament buildings shortly after the death of an individual. This was a symbolic action where everybody's asked to lie down, so that the streets are filled with people lying down. And then somebody would read a statement maybe at the end. That type of thing will be time sensitive, but we also will be very careful not to cause any upset or to, we wouldn't want to make the family grieving, even more than trying to use this person's death. Sometimes we will not do it soon after the death of somebody, we might wait a while because we don't want it to be too horrible, basically. There have also been vigils held where another individual was killed by a truck, there was just a quiet sort of candlelight gathering. We are actually discussing whether we should do something, if it is right to do it now, or if we should talk to the family and ask for permission or let them know that we're thinking of this. These kinds of instances have to be quite sensitive and we should be careful. There was a concert hosted in one of the sports stadiums in Dublin, and there is a really good cyclepath nearby in this nice river area. But this is where all of the buses would park for all of the people coming to go into the audience and watch the concert, because it was a perfect size. So one of the actions was timed to coincide with this event. We kind of knew roughly what time the road would be used by these buses, and we just obstructed the way so that they couldn't park there. Overall some things will coincide either as a reaction or in anticipation of something, but there are some things not that time sensitive.

To what extent you believe that the social movements contribute to changes in policies and in the implementation of those policies. Do you believe that the current steps that the government is finally adopting would have been delayed or would have been different in the case I-BIKE-Dublin wouldn't exist?

It's very hard to answer that. I think that we have seen some changes come in as a result, or quickly after an event. In the case of the concert, very soon after this event the local authority installed bollards along that cycle path so that you couldn't drive on that area anymore. That has been a direct consequence of our action. In general, I think that it is multi-factor. A small intervention like that perhaps wouldn't happen without the protest. For something bigger, like legislative change multiple groups come together. It is very much kind of working together closely with different groups who have maybe different methods, I-BIKE-Dublin more direct, whereas Dublin cycling campaign maybe a bit more formal. The Dublin Cycling campaign used to have monthly cycling protests, going along the river, and demanding the cycle lanes along the river be installed. For many years that hadn't happened. But the city had proposed to put in some plans, but they were quite long term and quite in depth. I am speculating that partly what influenced the decision was partly these campaigns saying that the situation there was not sustainable. So I think I would like to think that those types of protests also kind of prompted the change in the city there. It's, it's hard to say but I would like to think that some changes have come in as a result of campaigning. In the end it's always difficult to know exactly how these processes go.

In January of 2018, I BIKE Dublin and other groups were trying to advocate for a new law coming into Ireland, for minimum passing distance. Although I was on a lot of painkillers (because in December 2017, I was hit by a driver of a car when I was going to work, ending up in hospital), I contributed to drafting the presentation that one of the bike advocates was going to give in Parliament, and it was used to advocate that this law needs to be implemented. And part of the reasoning was the fact of dangerous driving and existing laws aren't being implemented. So something specific for cyclists had to be introduced. Eventually a similar law was introduced a couple of years later, I think it was 2018 or 19. So, that did have eventually some kind of impact.

Do you believe that there are also some other contextual factors that are fundamental for a social movement to be successful to bring about a better cycling policy? For example, the existence of a historic center, the spatial scale of the city? Do they also play a role? Do they also help the conditions to become more cycling friendly? I already spoke with Stephen and told me that, for example, he believes that it can happen in any city? A group of people protesting for the same thing, the same moment, and finally, they achieve a change. But do you also agree that it is applicable everywhere or also some other factors should be present?

That's a big question. I think I would agree partly with what Steven says is that it is possible for people to come together to form a group and to push for change. Maybe eventually that change will happen. But I think what might be different for each country is how quickly that change happens. And so if I'm not thinking of Dublin, many places in Europe after the war were very much focused on cars and motorways. In Ireland, and especially in Dublin that mentality of everything car focused, is still there. Part of the difficulty is to challenge against that and push against that. If for example you compare Ireland to the Netherlands, they also had very similar problems in the Netherlands. The numbers of deaths prompted their social movements or their groups to form and to oppose the killing of children. And that was part of the main problem was the number of children being killed. And that really motivated people to come together and protest. But I think there is also definitely the contextual best, because if you don't have any officials, who are the decision makers, or elected officials or elected representatives, who are willing to decide and implement that change you cannot make it, you're depending on them. So I think that the Netherlands example also points to that for me, because they had a change in the government. I think that Amsterdam brought in some left-leaning people who were very in favor of this. So it depended on that as well. But also, I think that it couldn't have happened if those groups weren't advocating as well. The two things do sometimes need to line up, which is part of the difficulty, but also maybe it's partly why I think these groups have to keep going for as long as possible. Because hopefully, at some point there is the chance where we can make the change. If we keep lobbying and the right person comes in, who is willing and able to make that decision, and maybe the setup of the council or the setup of parliament will be just right that we can, we can go ahead and do that. Potentially it can happen anywhere, but I do think maybe those factors need to line up together sometimes

Based on the literature review that I have conducted I would like to ask for your reflection on the following Hypothesis 1: Social movements tend to define a certain condition as a problem or frame a particular policy issue (problem stream in MSF), and then influence the public opinion in order to attract governmental attention and achieve policy change. Would you agree / disagree?

Yeah, I think there's definitely some truth in that, because I think that, certainly with the example of cycling, it can be kind of hidden. So you have to be the one experiencing cycling, in order to know what the problem is. People who experienced that may look at it differently. But that's how I would view it as a road safety thing. So, there would be a problem that I've identified, I think, certainly in the Irish context, or, or my experience in Dublin. To be able to make change or to also create a kind of solidarity among other people who might not be aware they are not the only one who thinks there's a problem, then there might be a need to reach out to the general public. But also to other people who are maybe feeling the same way, and I think this is an important aspect. And I do think that does happen. It's necessary to mobilize support for change, and maybe to also potentially highlight for people who cycle and for people who don't. You will know somebody who cycles and, you will also know someone who

doesn't cycle. That helps to spread the word out that it's not too much of a niche problem, but a problem that affects everybody.

What about the next Hypothesis 2: As social movements are powerless, they aim to influence governmental groups and the politicians who are the power holders, in order to trigger a change in public policy.

For that, I might say no, and yes. On the one hand, people might not have formal power, like those in the council, in parliament, or in a government department, but I think there is power that's available to them too. So for example, as voters, when they're lobbying their own elected representatives, they can use that to push that power up and make the demand on them. It might be a little bit trickier, maybe with unelected officials. So in those instances you might need to rely on both lobbying your representative, but also writing directly to the public servants. It can be tough, but I think if there's enough demand there, the civil servants and the public servants, they can sometimes be responsive. I know that in Ireland, I think they call the civil service "the shadow government" because even if a government may come and go, the civil servants are always there with a general agenda, maybe for the country. So it could be a national action plan or something like that. But I think if there is enough of a groundswell of support, if there's enough support amongst the public, they might be willing also to modify those plans that are sitting in a government department or sitting in the Council's Offices. So that's where maybe the mix of the unelected officials and the elected representatives can feed in on one another. Finally, I do think that there's a type of power that ordinary citizens, ordinary people do have. The question is maybe to mobilize that together and then push the people who have the decision making roles to push them to come along with you. So yeah, so I would say no and yes to that.

And finally I would like to hear your opinion on this final Hypothesis 3: Social movements are likely to be most effective, when there is a well-defined problem, politicians are eager to change, there is a feasible solution available, good timing exists and an actor who actively promotes this policy.

Broadly, I would agree with each aspect as well. Identifying a problem is important and in the case of Dublin the difficult aspect that has been coming up over discussions with other activists is that the number of deaths is certainly a problem on the roads. But also using that as a measure, which is what the authorities in Ireland will use, this is also itself a problem. This is because it doesn't capture the other issues around injuries, or it doesn't count the number of people who are discouraged from cycling, and who otherwise would perceive it as safer. So that gap in knowledge is also a problem as well as the numbers of deaths. I think that it is certainly a problem. Regarding the other factors, I think that they are necessary to provide an opportunity to have a decision maker, like the example in the Netherlands where the decision maker is willing to make the change. In my own limited experience, there seems to be an obstruction or a block, where a decision maker is hesitant. And if they're in any way hesitant, they won't make the change, they would rather have everything stay the same. So I do think that's definitely true. The last point that you made about having an external actor, I think something like that is important, some kind of unusual advocate, I would call them "not bike person". Something that has been surprising over the last number of years, and especially now this summer has been the number of businesses who are supporting things like cycle and pedestrian streets, because maybe the council hasn't expected this. There was an idea about pedestrianisation of a street, but the council in Dublin was very reluctant to make a change on other streets. However, a very well-known owner of one of the bars on the street, who's also a celebrity drag queen, put out this call and said we need the street pedestrianized

because we have to be able to put our customers somewhere, and we can't use up the space with cars. So I think the city put out a consultation for this. It was one of the highest responses they ever received, almost 4000 people had contacted them asking for pedestrianizing the area. Something like that definitely was different about that particular interaction with the city and its people because of that one famous person. I definitely think that if you have the same people always, always always complaining about cycling and then you have somebody new saying that this is actually a good idea, that can really make people change their minds in public and also in the decision makers.

A.2.6 Vanessa Sterry

Vanessa Sterry is an active campaigner from the advocacy group I Bike Dublin. In 2019, Vanessa surprised the Irish Minister for Transport Mr Ross in front of the cameras when she donated him with 10 flowers representing the percentage of public transport funding they believe should be devoted to cycling infrastructure. This happened during his announcement of the launch of new safety legislation for South Dublin and was a symbolic action to express their skepticism that this incentive is really great but not enough (Hilliard, 2019). The interview took place on the 31st of May 2021.

To begin with, my research proposes that there is a link between social movements, policy change and policy implementation. I already spoke with Stephen and Joan (two other active members of I-BIKE-Dublin) and we have covered much ground on how the group was set up, what were the common interests that brought the activists together and so on, so I will skip this. From your experience as an active member of I-BIKE-Dublin, to what extent you believe that social movements and advocacy groups contribute to policy change and policy implementation if the policy already exists.

From what I found, currently, through the Covid-19 measures, Dublin City Council have put in cycling protections on the exact spots where we would have held our activism or we would have stood on the roads to prevent cars from parking illegally. So they've actually taken on board what we have done previously with their own bodies during certain times, and they've implemented small plastic bollards to prevent cars from parking there. Now, they're temporary measures in the sense that cars can drive over them. But for the most part, the majority of motorists don't. So I think currently, COVID-19 was an easy way for them to implement it without causing any serious issues because the traffic was reduced. But I do think that people from a grassroots movement, once the policymakers and the government see what can be done, and what people actually want, there is generally a focus for them to try and implement some change, without too much interference with the status quo. And in Dublin the status quo, we'll be maintaining motorists being a priority. So in that sense, from what we have done, when we stood out, and to stop illegal parking, we were able to see several months later that the local council had taken things on board. They have taken into consideration what we were doing, and implemented those measures through the use of bollards.

Do you believe that some of the measures that the government and the local authorities are adopting, would have been different or would have been delayed, or probably wouldn't even exist, in case I-BIKE-Dublin or a similar form of activists wouldn't exist?

I think, to some degree, a lot of the cycling proposals are implemented as a second thought as a tick box exercise. So they're mainly done by people who don't cycle themselves, and don't see cycling as a means of transport to get from A to B. So I think from an I-BIKE-Dublin perspective, when we did go and point out any issues along with the infrastructure, because we were the ones using it as citizens using on a daily basis, other people took a step back. They were able to say: Oh, we didn't realize that, this was an issue. Some people just see paint as infrastructure, whereas sometimes you actually need physical protection from dangerous speed motorized traffic. I would like to think that the government would have made some changes, but I don't think that they would have done to the extent that they have done over the last, say, 12 to 24 months.

Was there a particular moment in time in which you noticed a change in the perception of the politicians about cycling? Was there an event or a particular situation that led them to change or become willing to change?

I don't have one specifically in my head. But I do know that there was an increase. There was a decrease in funding towards sustainable travel and cycling in particular, which saw a huge increase in cyclist deaths. Over the course of 10 years, the amount of money that was allocated towards cycling infrastructure, decreased by 50%. And the deaths have increased by the same amount. So I think when we were trying to say to people that the roads are unsafe, some kids going to school were killed, some people definitely took notice of that. But there's no one main event. There was one where we had an event out on a famous road. It was the first segregated cycling in Dublin if I remember correctly, and basically it was being used with the permission of the county council as a carpark for coaches during rush hour when people are trying to get home from work. And it's the main cycle way to get from the one side of the city to the north side of the city along the coast. So you have all these people who would be cycling there on a daily basis just being pushed out on to traffic and chaos. And when we held an action there, I think there were bollards eventually put in place there. There are still issues with legal parking, but there's been a few things like that. Another event was when the Velo city conference was held as well, a couple of years back and the city council were hiring buses to take the cycling delegates to the opposite side of the city, because they deemed it too dangerous for them to cycle. So I-BIKE-Dublin held an impromptu cycling bus to get them from the conference center on the north keys to the Guinness factory. And I think that probably there was this particular moment where the city themselves thought it was too dangerous for the cycling delegates to just cycle. And we took our own initiative to get them there safely in one mass group of cyclists. So I think that's why they put bollards in place. It's not 100%, it's not totally safe, you wouldn't want your granny or child cycling there. That was something that was in process for the last 10 years and during Covid-19 they managed to put some things in place. It's not 100%. But it's better than what it was previously. Covid-19 was good timing.

Do you believe that there are also some other contextual factors that are needed for a social movement to be successful to bring about policy change? For example, the spatial scale of the city, or the existence of a historic center? Or even the eagerness of the politicians to also take action? Do you believe that they also play a role in the success of the movement?

I think for Dublin without politicians having a will or a want, or even being approached by people, they're not going to necessarily know that there's an urgency to try to change the city and make it more sustainable. There's a local council within a Dublin area and they allocated an entire laneway stretching six or seven kilometers to cycling. That's been heralded as a success and hopefully is going to be made permanent. A couple of kilometers away, it's Dublin City Council, a different kind of district and there's a high court action now against that type of change. The change has been prevented by one or two people, one was a counselor who's absolutely against everything. When you have 50% of the government or politicians or policymakers on board, 99%, there's always going to be one or two who are going to be against change. But I do think that with social movements, it has to always come from the ground up. Politicians love to take pictures, next to roadways that they've done certain things. But I think for those ordinary people, it's going to be very difficult to make any change. So I do think that change always happens from the people who put it in that sense. With Dublin especially there's a huge issue with the motoring groups and lobbies. Back in the day, those tax breaks, awarded to a private company to build multi storey car parks in the city center. Now those multi storey car parks in the city center are the ones who are trying to prevent pedestrianisation of the streets, because they want to

maintain their car parks as it is a huge revenue for them. The average citizen doesn't have the same lobbying power as a huge corporation or commercial. But overall I do have a lot of faith in social change from people. I think Ireland themselves over the last 20 years, even over the last five years, we've had huge changes socially, through people power. It has taken a long time to get there. Maybe in five or 10 years, we might have a fifth of what the Copenhageners or the Amsterdamers have in terms of cycling infrastructure.

So the biggest opponent of the cycling plans to be implemented, are this kind of lobby with parking companies, and, for example, car manufacturers- if you have any in Ireland?

Possibly yes. I don't know if we have any manufacturers in Ireland, but everybody drives here. We're the most congested city in Western Europe and our public infrastructure has been decimated by lack of funding. If you look at a map of Ireland and the beginning of the 1900s, there were just train tracks everywhere, whereas nowadays, you are lucky to be able to get a bus from down the road. The main focus of the current governments isn't necessarily to fund public infrastructure, unless it's a motorway. It's very hard to shift people from their old mindset of always taking the car because especially in rural Ireland there is no option. There's maybe three buses a day, and you're not going to get to your destination. It's years of not having funding for public infrastructure and not investing in it.

From my research so far, and also from the discussions with Stephen and Joan, I understood that finally, it seems that the city planners and the administrators are more open to discussion, they are thinking more seriously to take action to promote cycling. They are more eager to change. How would you explain this? Why now? Why didn't this happen 10 years ago, and it's finally happening now? Has something changed?

I think the main thing that may have happened is the recession. In Ireland, there were huge chunks of money taken from local councils because the funding centrally just wasn't there. When we have come out of recession, I think people understand and want to enjoy the outdoors more especially with a COVID-19. And I think there's, there's more of a focus on people wanting to enjoy the better things and simplistic things in life, like being outdoors, being able to walk and cycle with your family. Perhaps the funding that wasn't available 10 years ago because of the recession, is currently available now. And perhaps the mindset has changed a bit. Due to the mindset change and extra funding we're able to hopefully see the types of change that we want to have. Also people who have traveled abroad or lived abroad while coming home, they're bringing the ideas from other European cities back with them. They say if it can work abroad, it can absolutely work here. We just need to focus on trying to make it happen.

Does this funding come from the national government or from the local council?

From what I understand is that the government would allocate a proportion of money. Then local councils, depending on the area and population, get maybe a larger amount. But Dublin City itself has several councils, so they all have a proportion on their funding based on the population and the density. They would have X amount of money to spend, but I don't know the exact breakdown of what it is for sustainable transport and cycling, because they just have it as a blanket amount of money. It's taken down into segments. Each council has their own way of spending, they're fully in charge of how much money they spend and where.

With your activities and actions to activate people, do you target only the local authorities or the national government to take action and bring about better conditions for cyclists?

As we ourselves are mainly based in Dublin, we'd be campaigning for people to end up on what would be for all over Dublin. But ideally we are campaigning for it nationally. Some of our members have moved to different parts so they would be potentially setting up their own groups there. There are a few smaller groups, who've possibly seen what we were doing and have grouped off and made their own for their local community, which is great to see. But we wouldn't campaign nationally. On a day to day level, we would also campaign for our own areas and the commutes routes that we use. Ideally, we'd be looking for a national level.

Do you think that the role of cycling activism in Dublin changed over time? Like in the beginning, it was more concentrating on bringing better cycling policies, but now you are mainly focusing on implementing the existing laws?

In the 90s the Dublin Cycling Campaign was set up and they have been around before I-BIKE- Dublin. A lot of I-BIKE-Dublin dominant members would have been members of that. But we realized that they were kind of more policymakers, but we couldn't see anything on the ground. They were very nice and were speaking to the TVs, but we couldn't see any action on the ground.

Someone would argue that from the 90s until recently not much happened. I couldn't detect any significant changes, any great improvements, any major achievements. Finally, it seems that better things are truly happening. How did this work through time?

I can't talk much about what didn't happen then. I suppose everybody got wrapped up in the Celtic Tiger years (*a term referring to the economy of the Republic of Ireland from the mid-1990s to the late 2000s, a period of rapid real economic growth fueled by foreign direct investment*), but this is my guess. I don't remember too much happening in terms of cycling. I know that different councils were going to propose cycling infrastructure, I think 200,000 kilometers was originally envisioned for Dublin but that never materialized because of the recession. The funding was withdrawn and I think as the whole country basically was coming to a standstill and shutting down, there was not much campaigning to do because nothing could be done with the bank bailout and everything else. But you're right, though there hasn't been much done since the late 90s in terms of cycling the structure in Ireland, but I think it's possibly because of the recession. Maybe that's why there was nothing done, because there was no money in the country

Do you finally see improvements? Are there any actual changes where I-BIKE-Dublin had a positive impact in terms of infrastructure and road safety for cyclists?

Regarding road safety, I think it was only the day before yesterday, the first time in a long time that I felt very unsafe on the roads, because of other drivers. My partner got knocked down just before Christmas, from an inattentive driver. Currently -I don't know if it's because people have forgotten how to drive because of Covid-19 there's a lot of danger out there on the road for people who cycle, except on one or two cycle routes that have had safety measures put in place. Overall, without the provision of safe, segregated cycle infrastructure, I don't think many people do feel safe on the roads. There's still a huge stress for motorized vehicles. And until we do guess, the standard cycling infrastructure threat is still going to remain because we are mixing bicycles, with buses, with cars with trucks. Despite all the

work that we have done and the huge progress, there's still so much more to do. I don't think people are going to still find themselves feeling safe on the roads until we really see proper infrastructures. For example, local Schools have their own cycle buses where parents and children would cycle from one neighborhood to the other. I think the fact that we still require it proves that the roads aren't safe. And I don't think that the parents would allow their children to cycle to school unless they were with them. I personally don't feel safe on the Irish roads. I know plenty of people who do drive and who would love to cycle, but they don't, and they won't, because they don't feel safe. I think there's a culture on Irish roads especially, and people just act so differently when they get inside of the car and they don't see other people on the road as human beings with lives. Until that's addressed as well, I don't think most people will feel safe.

What about the media? Do you consider them as allies? Do they devote enough time to promote cycling to make people aware of the benefits of cycling, or do they have a neutral attitude or maybe they are against it?

I think there's a lot of shock jock radios. In order to get their listeners to listen they would say absurd things and they would accuse people who were riding. It's always been quite hostile. One of the main radio shows or radio stations, they would be heavily sponsored by the motoring industry. Anytime that they've asked I-BIKE-Dublin to go, we've been quite hesitant, because they're always quite hostile. When you're talking about children cycling to school or wanting to keep them safe, the first thing that they'll say is that cyclists will break red lights. The media in general, even while reporting of people who cycle who sadly passed away they don't mention that the car itself has been driven by a person. They just say cyclists are hit by car accidents. The language that they use is quite victim blaming. The first thing that you're asked if you're knocked down is: Are you wearing a helmet? Were you wearing a high vis vest? It's this continued bias towards people who cycle because they're not seen as important as somebody who would be in a car who drives and even people who are in car crashes. It's always called an accident. And it's the car that crashed, but it's not the driver. Yeah, the media wouldn't be very kind to people who cycle.

Based on the literature review that I have conducted I would like to ask for your reflection on the following Hypothesis 1: Social movements tend to define a certain condition as a problem or frame a particular policy issue, and then influence the public opinion in order to attract governmental attention and achieve policy change. Would you agree / disagree?

Yeah, I do think so. The main reason that movements begin in the first place is because they can identify issues. And I think, for most part, people who I've met through grassroots movements, they want the best for society. So I would agree with that. And then definitely arranging activities to make the common citizens aware of the urgency and the importance of this issue. We ourselves, we would have set up a Twitter account to put things out there. Social media is very important. We were also thinking about printing flyers at one stage, but it never happened. But we made little badges just to show that we want to make the road safer, safer for everybody, through campaigning there. We were on a couple of radio stations. We released a few press releases and stuff. We were on TV a couple of times. So yeah, I definitely do think that.

What about the next Hypothesis 2: As social movements are powerless, they aim to influence governmental groups and the politicians who are the power holders, in order to trigger a change in public policy.

I wouldn't agree that grassroots movements are totally powerless. I think everybody's voice is valuable. I do think that we do need to find an ally in government and most of the time we would find an ally through a more left leaning perhaps centrist government official or city council official. I don't believe that social movements are powerless. I think a lot of change and social change occurs because of people. But I also definitely agree that we need to find an ally with those who do have the power to potentially make the change, like those in government that have a voice to the government that might be greater than ours. But I definitely think grassroots movements 100% have a powerful voice. It is just who directs them in order to be heard.

And finally I would like to hear your opinion on this final Hypothesis 3: Social movements are likely to be most effective, when there is a well-defined problem, politicians are eager to change, there is a feasible solution available, good timing exists and an external actor who actively promotes this policy.

I definitely agree with that. In terms of businesses that are a potential external actor to promote cycling policies, at the end of the day, they want to have customers on footfall. So for example, in our streets, they want to make sure that their customers can still get to their businesses and property. I also think that it's very important that your voice ideas and issues and potential change to people who are actively open to such changes. There's some people who will be very apprehensive about any type of social change or pedestrianisation or cycling at all, because they're currently happy with how things are and they don't see any issues. So how you go about pinpointing and showing and addressing those issues and to make people aware of them was definitely important. I would 100% agree with that. And also, I think the more people who get on board, the better. So if you have businesses to support, policymakers and your day to day citizens, it's great if everybody can come to an agreement. Obviously, we're not expecting that everybody will buy a bike tomorrow, take upcycling and think that it's going to be okay, because it's not. But yeah, I definitely 100% agree with that.

A.2.7 Stephen McManus

Stephen McManus is a successful cycling advocate and activist, having co-founded I BIKE Dublin and Cycling Works Dublin. He is part of The Bike Hub team and his responsibilities are Finance, Product Development and Research (R&D) and Training Delivery. The Bike Hub is a social enterprise aiming to enhance citizen participation and stimulate economic activity through cycling, while promoting a culture of inclusion, a healthy lifestyle and environmental sustainability. Their overall mission is to accelerate the adoption of cycling as a catalyst for the transition to a more sustainable future (TheBikeHub). The interview took place on the 21st of May 2021

How did the advocacy group start? Possibly without calling it like that. How did the actors come together? Were only the common interests around cycling or something else?

David Norris posted a poem written by a famous Irish poet called Seamus Heaney for his niece when she was seven years old being killed by a driver when she was cycling back home. It's that kind of thing that makes people think. So, we basically started through social media. We were 12 and we were going to have a protest. In the first time, a truck driver wanted to go on the cycling lane, and there was a confrontation between a tiny woman and a big truck there which caused traffic chaos in the whole city center of Dublin. Even if we wanted to plan something that would attract the newspaper, it wouldn't be such one. Suddenly, it went really big and really quickly. People were starting to follow us and we suddenly had 1000s of followers.

I BIKE DUBLIN was created in 2017, when there was a lot of frustration online for cyclists, finding that the roads were too aggressive, too dangerous, inhospitable for cyclists. A lot of people were being killed by drivers. So in June 2017, someone took the initiative to say: we just have to do something about it. The proposal was we were going in the streets to stand on the white line painted on the road was supposed to separate a cycling line from a car line, which was never accepted as suitable infrastructure. And we tried it to see if we would run into trouble with the police, and the police actually tried to stop us a few times. But then, they realized that we were not breaking any laws, as we were not stopping or frustrating anybody, because nobody was supposed to legally cross that line anyway. That action worked very well, and the movement took off quite quickly. From a group of 12 in this first action, we became a group of 200 core members and maybe 2000 in the larger community. The group started getting a lot of attention from the media, newspapers, and TV coverage. Eventually the politicians started joining us on the line. There are four government ministers today standing with us on the line before they join the government, meaning that they are understanding the message. We were not aggressive, we were not violent, we were just very obvious about what we wanted. So things started happening.

Thus, I started another campaign to engage employers in Dublin to put direct pressure on the Ministry of Transport, and on the government agency responsible for investment in infrastructure to afford their workers or union members to commute safely by bicycle to work. In this process, we got over 100 employers, trade Unions, Universities and schools representing about 400,000 people involved. And this was still in the last Government. When the elections happened last year I was kept in the loop by members of the new coalition about negotiations on budget cycling. So we were consulted about what was being proposed for cycling, in terms of securing a commitment from the government to allocate a minimum amount of money into the budget. It is worth mentioning that in 2017 the national budget for cycling was 7 million euros, for this year it is 180.

My research proposes that there is a link between the SM and the way in which policies are being set up and implemented. Therefore, to what extent do you believe that SM/ advocacy groups contribute to policy-changes or in the implementation of the established policies, based on your experience with I-BIKE-DUBLIN?

I do think that we did change not only the perception of Cycling as a legitimate mode of transportation in the public, we achieved a change in the cycling culture and the Government now does listen to us. Government and politicians in general are scared of annoying activists. There have been projects sabotaged by opposition from some politicians, and they regretted it. They regretted it because they understood that people will remember at the next election, people have the power of the vote, and we as I BIKE Dublin now have the power to influence a lot of people.

Do you aim only for better cycling policy development or appropriate implementation?

The answer is both. We want the infrastructure but we also want proper policies and laws. Today things are reasonably satisfactory. Now what we need is time. We are heading towards having a proper network of secure segregated cycling infrastructure, which is still going to take 10 years or so. The council is hiring staff especially for designing and implementing cycling infrastructure, and there is also the national document called the cycling manual. The policies exist and are satisfactory, it is all about supervising the implementation guides on the streets.

Do you target only the national or the local government? Or both? And why?

At that time, we didn't know who the enemy was, we only knew that the police force in Ireland was a huge problem, because they were ignoring a lot of the traffic problems we had in the city. We thought that the government was probably a problem, because we had a Minister who did not care at all. He kept taking money out of cycling for funding bus projects. But we could not really understand the dynamics of what was happening. What we found out after many meetings and a lot of investigation was that the city cannot do anything without money being released by the Department of Transportation, which comes from the national budget. Even the police receive instruction and list of priorities, but it is very obscure and there is no transparency at all. So the police were and remain a problem. But regarding the council, although we now know that the council is very supportive, some of the counselors are very effective in undermining cycling projects. At the national level, it's already agreed what is going to happen. We got rid of the national level resistance. Now, we still have to be careful monitoring the behavior of local politicians because they tend to undermine the projects sometimes. The Department of Justice is still a problem, as the Minister does not have the influence over the National Police Force. Our aim is to get the Minister to restart a reform of the police force, and we know that he is not opposed to that, but just incapable of fixing it. Policemen should be on the streets, not behind the desks.

Do you believe that the current steps and the extra measures the government is finally adopting, would have been different or delayed if the advocacy groups would not exist?

Yes, definitely yes. To give you an example, we put so much pressure during the campaign for the minimum passing distance law, that all the parties in the country agreed that they were going to add it in their policies. None of the parties had a cycling policy before, and after our campaign all of them did.

So yes, I do think that the pressure was felt, and I absolutely believe that the results were directly related to our existence.

While searching for Dublin, I also found that there was another advocacy organization called Dublin Cycling Campaign. Why did you not team up with this one but you decided to launch your own movement? For instance, do you think that they were not acting sufficiently, or not correctly according to your vision?

I think they lacked ambition. This group is 25 years old and not much has happened during those 25 years. They were also getting some funding from the government, and they had a position in the council meetings in the committee for transport. We found that they were too “cozy” with the establishment. We needed something more dynamic, energetic, more on the streets, more kind of confrontational. They were just looking for subscriptions (20 euros per year). Once a month a protest at 9 o'clock in the morning on Sunday-when there is nobody there-nobody sees that your protest, and the newspapers were not looking at it either. They were an organization but for us it was important to have a decentralized structure, without managers. We used a tool called “Slack” to communicate and the decisions were made by group, and our projects were driven by volunteers.

Do you see a change in how the I-BIKE-DUBLIN movement is set up along the time?

Overall, we still work in a self-organizing, totally collaborative and transparent way. We took a step back now because we think the key achievements were reached. The infrastructure is finally being built, things are being rolled out. There are still some problems and we are still keeping an eye on them. But I think we were not necessary for a certain period of time to give cycle momentum.

You mentioned that the politicians are now eager to change and very willing to support you. Why now? Why did this not happen in 2015 for example?

I really do not know. I was not involved in that time but I know that there was not much happening then. Nobody was complaining very much, and therefore nobody cared. The status quo seemed to be enough. But now, from our set up onwards we started making a lot of noise. We have approached almost all the leaders of the political parties. We achieved a very direct, active, dynamic and creative way of complaining and getting attention from the authorities. One of these ways was when the daughter of a member appeared in a ceremony in front of the Minister of Transport and gave him 24 roses saying: “Each rose represents a cyclist killed in the last 18 months and I don’t want to be one of those”. This was a really hard hitting action.

Do you believe that there are also some other contextual factors that are needed for an advocacy group to be successful? For example, the spatial scale, the existence of a historic center?

No, not necessarily. What happened in Dublin it’s now starting to happen in the whole country. In the beginning they were saying that in the city center there is no space for cycling lanes. But if there is no space, there is no space for cars as well. Traditionally in the past Ireland was a safe place for people to cycle, but this was not anymore. In terms of factors, I would point out the agglomeration of social media plays a huge role. The fact that people happen to be complaining about the same things in the same place and coming across each other, and suddenly agreeing on hashtags. And of those hashtags identified, there were a lot of us in it. But I really think I BIKE Dublin or a similar group could work

anywhere else. For example, in Brussels there is a group doing exactly the same thing we were doing three years ago here. It fits in any city, that's my lesson learned.

Are there any particular actors actively opposing the cycling plans or putting barriers in the implementation of them?

In the beginning there was a lot of resistance. There was a lobby in the background going on, a lobby from the motor industry, lobby of the people who would not make money out of people switching to bicycles. And we realized that this was a much tougher job than we had predicted. But now, this allocation of 180 million euros a year it's part of the governmental program, and it is non-negotiable. No matter what happens to the budget for transportation, this money is ready to be spent for cycling.

What about the role of the technological companies and the local businesses? Do you find them allies, or are they opposing or promoting your plans?

The Association of traders in Dublin were dominated by a small organization that owned car parks in Dublin. These turned out to be the biggest opposition we found in the private sector. They really tried to sabotage us, and also to convince the politicians to oppose our ideas. Eventually these groups are split into two. Because most businesses started realizing cycling was actually good for business. We managed to convince the Chamber of Commerce in Dublin to run a survey with their members to find out what was their perception individually about cycling. 75% of the people said cycling was good for business. Suddenly the Cycling Campaign became our partners in promoting cycling, and the biggest network of hotels decided to support the campaign. However, they were scared. They were supporting us but were also asking us to not make it too public because we were also involved with certain projects that oppose it. Today there is a list of companies signed up to support cycling. Several hotels, almost all of the Universities, trade Unions, Google, Facebook, Vodafone, big multinationals, hospitals. We get a more positive reaction from companies that are modern and maybe have a younger workforce. The way we approached these companies was not to complain to the companies, but we prepared all the materials and never said publicly that this cycling work was a subsidiary of I BIKE DUBLIN, because companies would never get involved with activists. We had to wear a suit when we were talking with these guys. We approached people asking: Would you talk to your employer and ask them to demand from the government safer infrastructure for you to cycle to work? People started knocking on the doors of their directors, their HR departments and actively asked them to sign up for this. Some companies refused to sign in because their corporate policy does not let them to get involved in lobbying-as they saw this as lobbying, although we were saying to everyone that this is non lobbying. We explained to them that what we are doing is to bring up a project that the government launched about 10 years ago, with lovely cycling infrastructure for the whole of Dublin and it was abandoned. So you are basically supporting something that the government already at some stage was in favor of. And that was acceptable for most companies. So that was very complimentary, because the government does listen to the corporate sector a lot because they are the main source of taxation.

Based on the literature review that I have conducted I would like to ask for your reflection on the following Hypothesis 1: Social movements tend to define a certain condition as a problem or frame a particular policy issue (problem stream in MSF), and then influence the public opinion in order to attract governmental attention and achieve policy change. Would you agree / disagree?

Yes, that's true. We wanted to create awareness of the problems, but more than awareness we wanted to educate people about the importance of sharing the road safely and respectfully. We wanted them to wake up to the importance of the cause. Our dynamic was focused on the fear of missing out. We wanted them to feel that if you are not with us, you are missing out. We launched campaigns like I BIKE- I VOTE. That was every time somebody went to vote, they would take a picture outside of the voting station with their bicycle, and just tweeted I BIKE- I VOTE. The message was going out to politicians, but this was happening through the common people. However, we knew that creating awareness is engaging more and more people with our campaign which was never going to be a realistic objective. Our best ambition in relation to public opinion was to remove the negativity and humanize the cyclists in the eyes of the public. We never expected them to start going into the streets with us and start thinking about the lack of structure. That would be too much and too ambitious.

What about the next Hypothesis 2: As social movements are powerless, they aim to influence governmental groups and the politicians, in order to trigger a change in public policy.

This is a very very good point. I would not agree completely with that, but I would agree that eventually that happens. I almost agree with this hypothesis but I have to say that individuals are not powerless. If you make the best use of technology, the best use of social skills and communications, you can act as a catalyst of opinion. And if you use it properly you can translate that into perceived strength. The politicians came to us after we built strength, as they realized that they had to join us. They were left with no option. Apart from the Green party that has always been absolutely pro cycling, the other parties only showed up at a much later stage. It's about moving intelligently, good tactical moves to make the most possible noise to politicians. The politicians saw that I-BIKE-DUBLIN had potential and the potential was realized through good tacticals moves and through coordination.

And finally I would like to hear your opinion on this final Hypothesis 3 : Social movements are likely to be most effective, when there is a well-defined problem, politicians are eager to change, there is a feasible solution available, good timing exists and an actor who actively promotes this policy.

In principle yes. The politicians are smart and adaptable. They react to the public because they are supposed to be a reflection of the public, the public's will, of their voters' will. Politicians adapting to the new perceived public-will was actually achieved through the campaign rather than the politicians being just open wanting something like that. They would have never initiated it. One of the biggest commercial media was radically against us. They covered us, but they covered us to make us look bad. This is because the biggest source of revenue is motor, car advertisers, car factories, car manufacturers. We helped people understand that there was huge bias in the media while the majority of the impactful media was opposed to us.

A.2.8 Klas Elm

Klas Elm is the chairman of Svensk Cykling (Swedish Cycling) which is an industry organization working towards the opinion formation to get more Swedes to cycle more often. Svensk Cykling is well known for annually awarding the politician prize, "Cycling Friend of the Year " to the politician who has done the most for cycling during the past year. The agency has also published Cykelsmart (full title Cykelsmart - quality of two-wheeled life, a guide for modern people), a handbook for anyone riding a

bicycle or considering starting to ride, which was nominated for the Swedish Version Award 2011 in the category handbooks. The interview with Klas Elm took place on the 1st of June 2021.

My research proposes that there is a link between social movements, policy adoption and policy implementation. Based on your experience, what is the role of advocacy groups in Stockholm in the field of cycling? Which role do they determine in the policymaking process and generally in which way they influence the policies that are being adopted for cycling by the government?

So firstly, my organization, the Swedish cycling, or Svensk Cycling editor is a national organization. We deal mostly on the national level, we try to look upon the different regions and the major cities, but due to lack of personnel and funds, we mostly deal with the national level. And actually, Swedish Cycling is an umbrella organization where we are doing advocacy for other organizations that share our goal, which is simple. Simply put, more people ride bikes in Sweden, so it's a very easy target. Not easy to achieve, but it's easy to say and a way to get more people to choose the bike before other ways of commuting. And the other organization is for the user side, from the industry, we also have an organization for the regions and the cities. We also speak for the competitive side, the Swedish organization for bike racing, and also a very major for exercise which is actually a race, but it's not the competition. So it's a major player in biker exercise. So we have established an umbrella to do the advocacy work, and I'm happy with that. But as we are a small country and maybe not in area, but in numbers, I am the only employed and I am not even doing this full time. We do as much as we can with the money we get, and the major contributor is the bike industry.

From my understanding of the literature review is that Sweden has a very decentralized way of governance. Therefore, someone would expect that much more is happening on a city level rather than on a national level. How would you explain this?

You're right. Most of the bike lanes are run by the cities or the regions, that is true. But the governmental authority, the road authorities on the say, also have a lot of infrastructure, but regarding the policy making the big money is coming from the government. So we have a situation now where the big funds are distributed from the government. The national government is putting the biggest part of the fund in the transportation planning projects and then each community or city must contribute with as much as possible. It's very important to run the advocacy on the national level anyway, because that's where the policy and the big money comes from.

Do the city policies change also as a result of national level changes?

Absolutely. But you are totally right, that if one community doesn't want to put any money in bike infrastructure or any other activity regarding bikes, they are free to do so. So it differs a lot between the different regions and different cities and communities where some of them are doing a great job, while others don't do anything different.

Do you believe that some of the policies of the measures that the government or the local governments had already adopted would have been different in case such kind of advocacy organizations wouldn't exist?

Yes, absolutely. We have a big role in pushing the policy towards a more bike friendly political environment. Definitely. I think it would have happened anyway, but not as fast and not as such the

same impact. I think it's very important. We have been doing this for a long time, more than 10 years. The climate in the discussions has changed radically. 10 years ago, or 15 years ago, there were actually political parties arguing against cycling. There are no such politicians today. The public opinion has changed and thus also the political environment has changed in our favor. And that is, of course, due to health issues, environmental issues, pollution, need for friendly cities, livable cities, and a lot of things. That would probably have happened, hopefully, anyway, but I think the organization's and the NGOs are part of pushing this process forward.

You said that the politicians started becoming more eager to adopt pro-cycling policies. Was there a specific reason? How would you explain this swift? Did they just recognize themselves the importance of sustainable traveling and the benefits that are associated with cycling, or were there also other reasons that prompted this change to happen?

Good question. I can't say that there was a specific year or a specific event that changed it. I think it's due to repetitive information regarding the benefits of more cycling in the cities, in Sweden, and in the society as a whole. Step by step, it was adopted, from the political level, and also from the decision making at the authorities' level. It was already a couple of years ago, probably five years ago, something where we got all our arguments through and everybody accepted them. But from there to actually get things to happen, it's another step, it actually requires to be the founder and have the economic possibilities to do the things. That struggle is still ongoing, of course. So even if we, we can hear from the political side, and also from the decision making side, very good arguments, there is still very much lack of funds and the regulations that we want to see happen.

Were there any other factors that you believe that also played a role in this positive change to happen?

It is a combination of both the environmental arguments, as well as the population's health arguments, which are both very much in favor of biking. And also our cities are being quite crowded. I think you have the same situation in the Netherlands, but urbanization is going on. People are moving from the countryside, and we have vast countryside here, but they are all moving into the cities. The cities are becoming more or would have become even less friendly if we just kept the private car ratio in traveling on the same trajectory. So we had to do something.

For example, the spatial scale or the existence of historic centers, do they also play a role in making the site more cycling appealing?

Yes, definitely. These are some other factors.

You mentioned that the bike industry is the main supporter of your organization. Thus I am taking the opportunity to ask you which actors are strongly opposing -if they exist- of course, and which actors are strongly supporting the cycling plans?

Well, from the opposition side, it's mainly the way there is a difference between the Netherlands and Sweden, and that's the common views upon cyclists. There is a lot of aggression in the Swedish traffic environment with a lot of testosterone and shouts and very nasty behavior. We also have had two major car companies in Sweden but they are both gone and sold to the Chinese or being reduced. However, we still have four trucks and lorries industries that have been, of course, very promoted for motor

vehicles. But the general opinion is divided in Sweden. We see an increase in bike commuting, and a lot of people actually ride their bike where the numbers are getting up, especially in the urban areas. But there are still quite many core drivers that are very much against it.

What about the local businesses or technological companies, do they also contribute to promoting cycling or they tend to be more neutral or they are even against it?

They're actually changed. We have, for example, the Stockholm Chamber of Commerce, they have been very much in favor of the car, the private car riding, but they have actually changed. They realized that the shops, the stores, the restaurants and the pubs actually benefit from more people on bikes or walking than in cars. Maybe a problem is that in Sweden we have a lot of big shop centers outside of the urban areas where you more or less need to have a car together. So the city centers are struggling to remain popular.

Do you have any examples that your organization or a similar one managed to influence a particular policy and some plans changed because of an action that was arranged by you?

Several examples. Maybe our biggest success was 2-3 years ago when we managed to get a subsidy for electrical bikes, where you get 1000 euro kick back, if you bought a pedelec. That was a big success. The government put quite a lot of money into that scheme, and it was very well received. A lot of people bought their first electric bike and started commuting, commuting by bike instead of a car. Unfortunately, that became an issue to the political struggle. We had an election and they had to scrap that idea just after one and a half years. It should have been running for three years, but it was scrapped. Now we have a proposal from the government for another subsidy for buying a bike if you ride to work. That was an idea from us, it was actually very much influenced by us. And of course we have had success in different regulations which benefits cyclists.

What kind of regulations for example (did you manage to influence)?

One -maybe it doesn't look much- but on a principle side it is very important and there were actually a band for bikes to use the road if there were bike lanes. We pushed the government for years to get rid of that and the parliament finally did it. Now it's not illegal to ride on the road even if there's a bike lane nearby. We have also pushed for different regulations within the traffic to make it easier for bike riders to actually be in the traffic environment.

In which way do you interact with politicians when you want to push them to think of potential cycling measures? In which do you collaborate?

One of our major achievements was that we have set up a network for bike interested politicians in the parliament. We meet them four or five times a year, where we can discuss with different political parties. Actually, all political parties in the parliament are part of that network. And that's a very good arena for discussing policy or regulations or laws that will contribute to greater biking in Sweden. We also have a lot of advocacy, we run in the corridors of both the government and the parliament all the time. And also, we have very good contacts with the different political parties. They come to us when they want ideas or when they want to have support for an idea or when they just want information about the situation in the Netherlands or Denmark or other good bike countries.

Do you also have interaction with the common public?

Not that much. We don't have that kind of economic strength to do that. We have some events. One of our main public events is the bike day of Sweden and it is the third of June. We started to promote it last year, and it was very successful and now we are in the final steps of doing this thing as well. So we have two, two events, appointed to the public. The one is the winter Bike to Work Day, which we do in February, and the bike day on the third of June.

Based on the literature review that I have conducted I would like to ask for your reflection on the following Hypothesis 1: Social movements tend to define a certain condition as a problem or frame a particular policy issue, and then influence the public opinion in order to attract governmental attention and achieve policy change. From your experience with Svensk Cycling Would you agree / disagree?

Not exactly. We don't have the means to wake the public in that way. So for us, we are working there directly to the policymakers and the politicians. But there are of course, other groups, especially on the social media arena, a lot of groups advocating for bikes. I am not sure how much they actually reach out to the general public or they are just in their bubble or bike interested people, but they are very active. But we, of course, have a lot of media outreach, to try to get the media to talk about cycling to show or write about cycling to get the general opinion, of course. But our main focus is the policymakers and general media. This is the way we do our policy.

Maybe this is in accordance with the next Hypothesis 2: As social movements are powerless, they aim to influence governmental groups and the politicians who are the power holders, in order to trigger a change in public policy.

Yes, definitely I agree with this. As I said this is the way we do our policy.

And finally I would like to hear your opinion on this final Hypothesis 3: Social movements are likely to be most effective, when there is a well-defined problem, politicians are eager to change, there is a feasible solution available, good timing exists and an external actor who actively promotes this policy.

I could probably agree with most of them. Since I've been doing advocacy for many years, you shouldn't rule out that there is a political benefit for proposing a change. No politicians ever want to propose something that is not well received. Their job is to get reelected and obviously they want to have the public support. But of course, there are always two sides of the coin. Some people will like it, and some people will not. But if there was a major consensus that this is the wrong way to go, then it would probably be very hard to get the policy through Parliament or through the politicians. So now, I think the public opinion forum for the cycling issue has changed so much that there isn't a major opposition against it locally. If you, for example, in a city take away the possibility to park your car, to get new bike lanes, the people living there will go bananas. All the people who can use that space for commuting are very happy. So also that has changed. But just for the parking situation, for example, it is tricky. They are afraid of angry car owners, and therefore they take it step by step. And for good timing, yes it's absolutely important. For example, now with the pandemic a lot of cities around Europe have actually done wonderful big things. Sad to say Sweden hasn't joined that punch, we are lagging behind. But that was a very good opportunity and another opportunity is of course the big push for

environmental changes. We want our children to have a planet to live on. Good timing serves as an opportunity.

A.2.9 Emil Rensvala

Emil Rensvala is the operations Manager of Cykelfrämjandet and the Secretary of Riksdag's bicycle network. Cykelfrämjandet is the Swedish national cycling advocacy organisation that works towards improving conditions for cyclists in Sweden and convince more people to choose bicycles for their travels. He is also the executive officer of Svensk Cykelstäder (Swedish Cycling Cities) which is an association composed of Sweden's most ambitious municipalities and organizations dedicated to working for increased and safer cycling. The interview took place on the 4th of June 2021.

My research proposes that there is a link between social movements, policy change and policy implementation, and one of my case studies is Stockholm. Therefore, I would like to hear your opinion based on your experience as a member of cycling organizations.

To begin with, I think you contacted me through the Cykel Framjandet which is the Swedish cycling advocacy organization, and this is where I am employed. But I don't speak for them, I speak for another organization, which is called Swedish cycling to get started. We are an NGO with municipalities and regions as our members, so we are not a grassroots organization like Cykelfrämjandet. They are more grassroots, they have cyclists as their members, but we have cities and regions as our members. We advocate the interests of local and regional entities, against the national level. So we advocate this sort of national legislation, increase national funding, and those kinds of issues. We also - through our organization, which is kind of a network of planners and politicians from the cities and regions - influence even ourselves, our own members. But in a way we also advocate at the local and regional levels.

So you target only the national level, or also the local authorities?

We are working in different ways. When we do Policymaking, we contact the national authorities and national politicians to say we want this kind of legislation, for example. So this is more like the traditional advocacy. In terms of the local and regional level, those people are part of a network, so we organize exchange meetings and things like study visits. So it's not like traditional advocacy, that we have demands, it's rather that we get people together and help them get knowledge and share information with each other and so on.

My understanding based on my research so far is that Sweden has a very decentralized way of governance. Therefore, someone would expect to find much more happening on a city level than on a national level. How would you reflect on this?

In terms of cycling in Sweden, we have the national level, which is responsible for traffic and planning legislation. And we advocate in both those two arenas as we want at national level to have better legislation, which enables local planners to build better infrastructure for cycling such as signage and local traffic rules. For example, we want legislation that makes a motorist not overtake cyclists with a close distance. We know that the national level has the biggest pool of money, which they invest in national infrastructure. That's why it is also important to target the national level. Then we have the regions who are responsible for regional roads, and they have funding for that. That is their main field of work in this topic. For example, the regional cycling plan established in 2014 for the period 2014-2030 for the Stockholm area is a soft plan, it's not mandatory, it's more strategic and more oriented towards the municipalities without imposing much. When it comes to the roads that the regional plan

points out, a lot of those cycling paths are not regional in the regional road network, but they're rather local. So the region can influence their own roads as the regions are responsible for, and those cycling paths the region can invest in, but in most part, that's a municipal responsibility.

In which do you collaborate and interact with decision makers and urban planners for example. What kind of collaboration do you have?

With national decision makers, we usually submit formal documents and proposals for the national cycling plans which are under development. We also meet them informally. We speak with politicians from all the parties in our parliament, who are responsible for traffic issues and inform them what we would like to say on cycling issues.

Do you also target the common public or is it not part of your vision and therefore you mainly target the politicians and those that have the power to change stuff for cycling?

Mainly. It depends on what we want to achieve success in. In some issues it is very important to have acceptance from the general public. Sometimes we also target the general public to try to influence them and bring light on the need for investments in cycling or whatever. For the most part of our work we will target both. Actually there are very few people who have the power in their hands. For us only 20-30 are really important to convince.

Do you believe that some of the policies or some of the measures that have been adopted by the power holders would have been delayed? Or would they have been different or wouldn't even exist in case you wouldn't influence them to take cycling more seriously?

Absolutely. Since we are three major national advocacy organizations for cycling, I guess it's not only up to us. Speaking for the Svenska Cykelstäder (Swedish Cycling Cities) we are a young organization, formed only six years ago. So we can probably take credit for some of the latest developments, where at least we have been part of those successes. But it's not only about us, there are a lot of advocacy organizations that influenced the policy change to happen.

I am referring to social movements and advocacy in general. Do you believe that these groups as a whole substantially contribute to the policy making process in favor of cycling?

Absolutely. If there weren't any advocacy organizations at all, nothing or probably very little would have happened. But I have to say that I feel that some of the decision makers are also those who push our agenda to the national parliamentarians. They also feel part of our community. They are representing a party in the parliament, but perhaps they are also members in our organization or they have a background in our organization. One of our recent successes has been that the parliament has adopted something which is called the bicycle streets. Now the municipalities finally have the option of building what is called the bicycle Street, which is something that we have been wanting for a long time. But it's difficult to say where the idea came from and by who and I guess, in the end, there's a lot of people who have seen what is going on in the Netherlands and were inspired. It's not only our organizations like the formal advocacy organizations, but also common cyclists who have been cycling there and seeing this, people were also inspired by the social media that this would be a good idea to have. And sometimes these ideas are picked up, or even originate from the parties themselves. So a single party could also be a strong advocate of some certain change as an advocacy organization.

Do you believe that there are also other external factors, or some parameters that are fundamental for a cycling change to happen? If we assume that social movements influence is not enough itself, what kind of external parameters and other conditions should be met in order to achieve better cycling conditions?

If we try to separate people from their primary mode of transport, there's only a minority of cyclists in Sweden. I think there's like 12% of all journeys, which are used on cycle in Sweden every day. The majority of people, they never ride a bicycle, they only drive a car. If everyone would only have one mode of transport and if they would only want development within their own field of transport all people who usually drive a car only would like to see car friendly development. That would be democratic in a way because a lot of people use their car in Sweden. So what I'm trying to say is that there can be a difference between what the public wants, and what and why policies are implemented. Nowadays there is a push for cycling in all countries, but it's very complex. If you look at where the money goes to Sweden, it's only 1% of the national funding, which goes to cycling. So I guess in a way the national government is investing more in making the car a more vital option than cycling. It's also this issue that people might be convinced in other ways. I mean, it's not only cars against bicycles against public transport. What we should think as a factor or reason for promoting cycling is what kind of city do we want? We often say that if we would have that vision that we want, we would save 1000s of lives every year who die now because of poor air quality from cars. We would also have more child friendly series; children could play out on the streets in a better way than now. This would be achieved if we would have less cars, which probably means more bikes. Finally, I would like to say that there's also this difference between people who really want something for the general public, and those who just go on with their lives and don't care. And I guess there are more people perhaps, who really feel like we should invest more in cycling. So this is also important, to have more people who will want to achieve something better for the public.

Do you believe that there was a special moment in time when the politicians started becoming more cycling oriented or at least they started considering cycling more seriously?

Although I am not a historian, from my point of view, I think that everybody rode a bicycle in Stockholm in the 30s, and 40s. You can see these black and white images of Stockholm in the 1940s, where the streets are just full of bicycles, everyone rides a bicycle. But then, in the 50s, and 60s, the engineers and politicians decided that the people shouldn't use the bicycle, they should use the car. Even though we weren't part of World War Two, they turned down a lot of the Stockholm area to make waves for highways and urban sprawl. That development has been continuing. I don't think there's like only a certain point in time, but I think it has grown gradually. I think that from the 90s, cycling was really low; perhaps that's when changes started coming. There have been social movements for cycling in the 70s, 80s, and 90s, and so on. And I guess during the last two decades, in professional circles, like planners, there has been a rise in the status of cycling. This is because there have been cyclists and environmentalists appointed in charge of traffic planning and started incorporating such issues in their policy making.

Do you believe that they just started organizing the importance of this means of transport or was it another event that probably prompted this change to happen?

I think there has been a slow incremental development in Stockholm and in Sweden, perhaps punctuated by certain events? The first Stockholm bicycle plan came about in the 70s and this could have been influenced by the Dutch movement or the oil crisis in general. I think those kinds of disruptions have definitely influenced cycling. For example, in the 70s there was a big park, where the government wanted to cut down trees but a lot of people protested. And that sort of, in a way, became the end of the modernization of Stockholm, like the willingness to turn down the Old City and replace it with modernist housing developments and urban highways. That also greatly influenced the situation and there have been social movements and protests against car oriented development, in favor of cycling during the 70s 80s and 90s. All these collectively contributed.

This was a call to the government to also take cycling more seriously?

In the long term it had some kind of influence, I'm not sure if it affects development in the short term. During the shift of the millennium, that's when around that time, late 90s, early 2000s, Stockholm started to build cycling paths, for the first time in modern history in a structured and large scale manner. So it has been going on for two decades now. And I think the really big shift happened 8-10 years ago when the city of Stockholm had the cycling plan in the end of 2013. And with that plan, I think, development really started to happen. And there's also been a political will, with which all the parties have been in favor and have invested a lot of money in cycling infrastructure. And that is still going on.

Based on the literature review that I have conducted I would like to ask for your reflection on the following Hypothesis 1: Social movements tend to define a certain condition as a problem or frame a particular policy issue (problem stream in MSF), and then influence the public opinion in order to attract governmental attention and achieve policy change. Would you agree / disagree?

I'm not sure if that's the case. My organization now is not very grassroots, but personally I have also been part of these kinds of grassroots groups. I believe it depends a lot upon the person and the context and the possibilities. It also depends on your knowledge and so on. I think it's very individual. The former president of the Cykelfrämjandet (the Swedish national cycling advocacy organisation) has always been an active political actor. So I think for him, his activism and lab work, it has been easy for him to get in touch with politicians, administrators and decision makers. That has been very natural for him. But I think other activists were just cyclists or whatever, they don't know perhaps about how planning works, they don't know who to contact and they don't know the chain of events. And I guess then it's easy to start to try to influence the general public, if that's what you know about.

What about the next Hypothesis 2: As social movements are powerless, they aim to influence governmental groups and the politicians, in order to trigger a change in public policy.

I think it depends a lot. I think, actually, that the majority of those who really involve themselves in advocacy, are actually to a larger extent than the general public knowledgeable about the planning system and be in politics. I know a lot of people who are activists, they are perhaps also researchers on cycling development. But although they have the knowledge, maybe they don't have the power to influence the policy that is under development. Sometimes the people get hold of power, but often not. I think most politicians are starting out as activists in their youth. I guess most people in the Swedish parliament, from most of the parties, have been activists in various areas. So some people with power - not the majority, but a few have- have been pushing for planning issues before they got all the power, I guess.

And finally I would like to hear your opinion on this final Hypothesis 3: Social movements are likely to be most effective, when there is a well-defined problem, politicians are eager to change, there is a feasible solution available, good timing exists and an actor who actively promotes this policy.

It sounds perfect and I truly believe that this explains both success and unsuccessfulness.

A.2.10 Emilia Sternberg

Emilia is Project manager at Cykelfrämjandet (the Swedish National Cycling Advocacy Organisation). The interview took place on the 9th of June 2021.

My research proposes that there is a link between the social movements or advocacy organizations with policy change and policy implementation in the field of cycling. I would like you to help me to go through time and understand the role of Cykelfrämjandet on how it influences the policymaking process of cycling in Stockholm.

I can backtrack a little bit, because my answer is a little bit dependent on that. And maybe start with saying what I work with, which I think will give you a little bit of a context about where my perspective is coming from. I work as a project manager, project Coordinator in Cykelfrämjandet which is a national organization that represents cyclists in Sweden. It works to make cycling safer, more attractive and to increase cycling in Sweden, and sort of be the voice of the cyclists. We have the national level office where I work, and we also have local groups that are active locally. I work with several of our projects that are correlated to urban planning, and often with a focus towards municipalities and also towards integrating public health into urban planning.

Several of our projects that I work with are directed at many different municipalities in Sweden. For we have an annual national, with municipalities, examining what work they have done for cycling in the past year, where we look at a bunch of different factors. That's based on municipalities volunteering to participate, because we need them to fill out a survey. So that's what they have done. And on the flip side of that, we also have a cyclist satisfaction survey of what cyclists think of cycling in their municipality, where they cycled the most. And then we create a study and a ranking and the takeout results for municipalities based on that. So in that sense, my relation to policy is both broad and specific, at the same time, in the sense I work very closely with these two projects. So it's more directed at the municipal level, and kind of spread out all around the country. (I can't say that I'm specifically a Stockholm expert, because I really have this kind of national focus.) We also had projects based in the Stockholm region, specifically that I worked in, in the past two years.

This already partially answers my next question: if the focus of your group is only on a national or also on a local level. But you also have local branches, as you told me, right?

Yes, we have local branches. For example, we take out municipal specific results in both of these two surveys that we do. But they're based on a big, big type of study.

From my understanding, based on the research that I made so far, is that Sweden has a very decentralized way of governance. So someone would expect to see much more happening from on a city level or on a regional level. But it seems that there's still a lot happening on the national government that provides the guidelines for municipalities and regions.

Yeah, I mean, there's national laws, of course, that set the scope of what you're able to do. But then, the actuals in terms of cycling such as the infrastructures, are determined at the very local level. In terms of municipalities, those are based on municipal budgets and municipal planning and municipal cycle strategies. There's also regional level cycle infrastructure where the national Swedish transport administration has regions and they coordinate with regions in Sweden to do regional cycle

infrastructure. And then there's also the national level policy, and it's just a straight state on cycling infrastructure. So there are these three different levels.

Do you believe that some of the cycling policies that have been adopted would have been different or would have been delayed in case Cykelfrämjandet or a similar organization wouldn't exist?

I worked in the organization for a little over two years, so my perspective is based on that. And regarding policy changes, they're very long processes. It takes time. So it's hard to see things happen very quickly, sometimes.

Do you target only the governmental authorities and the city administrators or also the common public? I mean, the individuals, the citizens to find support within the community and to make people more aware of your vision.

I would say we work in both directions. We definitely direct some of our communication towards the general public or towards cyclists in general. I'd say towards the general public in the sense of spreading information and educating people about the health benefits or the environmental benefits or just the joy of cycling to get more people on bikes and to get more people wanting to ride a bike. I would say we also direct some of our communication and our work towards existing cyclists and trying to engage them in cycle politics or cycle issues. We spread what are our issues that we work with Cykelfrämjandet, how are we working towards legislation or towards policymakers to improve conditions for cyclists and also in some instances to get them involved. And then we direct some of our engagements towards the policymakers to then create that change to make it better.

Do you have any examples?

For example, when we do a winter cycling campaign, which we've done in 2020 and 2021, to some lesser extent, for Winter Bike to Work Day, the communication is partially directed at non cyclists. We communicate the message that it's still possible to bike in winter, and make more people get out there and ride their bikes. On the flip side of that, that communication is also towards policymakers. If we all need to get more people out there biking in the winter to help deal with this climate crisis and public health crisis, then we say to politicians: You also need to make sure that the roads are clear, there is good and solid infrastructure. So it's kind of two sides of the same coin in communication.

And with the policymakers in which way you communicate, in which way you interact? Do you have annual meetings or probably a close interaction on a monthly basis or whenever is needed? Whenever there is a problem that emerges?

I would say we have external communication, through debate articles, or press releases, or just general communication. With politicians in particular, we don't have meetings with them on a monthly or regular basis. I know, you talked with someone from Svenska Cykelstäder, and they are really engaging with local politicians. They have the parliamentary Cycling Network and we are members of that organization. There are four annual seminars with politicians in the Parliament's, but otherwise, it's more through different events or conferences, or sometimes invitations to come meet and discuss a certain issue with a politician.

Based on your experience, do you believe that there was a specific moment in time when the politicians started really recognizing the importance of cycling? Or was there a particular event that triggered this change to happen and prompted them to enhance cycling and improve the infrastructure?

That's a hard question. Whenever I see Dutch presenters they always talk about the "Stop de kindermoord" movement in the Netherlands. This was a really clear catalyst and I don't think we really have that in Sweden. We are kind of still waiting for it. I think that movement, obviously, was based on the situation being really bad, and there was a really big change. But in terms of what I know about the history of cycling in Sweden, we don't have one of those really clear before and after situations.

So in Stockholm, and maybe in Sweden in general, there was a more gradual change?

Yes. I'm kind of speaking at the national level, because of course, it depends a lot. In some municipalities, there are very engaged politicians. In other municipalities, they're more car oriented. In Stockholm, perhaps they are quite engaged in cycling issues, and have been spending a lot of money on cycling and have been really applauded. Sometimes also criticized, but they are doing comparatively a lot for cycling. But I'm not really an expert on Stockholm, so I don't have the historical perspective to know how it was before and after.

Are there any external influences that are also promoting cycling in Sweden? And in Stockholm, for example, are there any technological companies that also believe Cycling is good also for businesses? Or maybe the media?

In terms of cycling, I think there's quite a few cycle blogs that have a big, big impact. There are some activists with blogs that are very influential, very active, and they get their voice out there. And in the Stockholm region, too. There's an initiative that's called local cycling. There are some super local cycling ombudsmen, and they do a lot on social media, of documenting issues in traffic, and calling the attention to the local, the people who are in charge of that particular road to get them to, to fix issues.

What about the companies for example? Do they also take a position either in favor or against cycling? Or do they remain neutral?

The cycling industry is part of Swedish cycling. So in that sense, they're represented through that organization. There might be examples but I can't think of any right now.

I'm also examining Dublin, and for example I found that there is sort of technological companies, high tech companies that they've started actively funding and promoting cycling two years ago, because they also recognized that cycling could be good for businesses as well. And I was thinking whether a similar example exists also in Stockholm, in Sweden. And on the other hand, are there any external influences that actively oppose the cycling plans to be implemented?

As I told you, I don't know specifically about Stockholm, but, in general, one common theme that I hear from many municipalities is the following: When you want to institute for instance car free roads for the summer, in many times it's kind of a pilot project to see how it goes before deciding to actually rebuild or restructure a city sector. And then often there are a lot of issues with the local shop managers and shop owners that they're very afraid of losing these parking spaces. There can be a lot of resistance.

But then we also hear lots of examples from municipalities that have gone ahead and done the change and when they see business go up as pedestrians and cyclists start coming into the street. So a lot of times people are quite keen only afterwards to have maybe even more. So that's an example. I know, there have been some of those summer streets in Stockholm.

Do you have any examples that your organization managed to influence some policies that have been adopted? Or have been implemented so far for cycling?

I think Cykelfrämjandet had a role in the e-bike subsidy, that was a few years ago, but that was before my time. So I don't know the exact details. It's really hard to say “we did that”. We are one of several organizations where we work on a broad front, we push for more investments in infrastructure, we push for getting bikes on trains, we push for cyclists being able to have tax benefits through their employer. For example, this is something that we've been working on for a few years now and now, there's a suggestion out for that. They are looking into it at the national level. We've also been pushing for several years for a national goal for cycling, like a mode share goal. Now, that is something that might come. It wasn't the most recent infrastructure proposition, but they're gonna look into it. It's a small step forward. And it's very hard to say this is just because of us. We're a part of several different organizations and social movements for better climate, better infrastructure, more livable cities, and I think all of them influence. But of course, I like to think that what we do has an impact.

And if we say that social movements and advocacy organizations were just one of the factors that led to adopting cycling policies, what kind of other factors do you believe that should exist as well? For example, what about the funding? Is it necessary? Or the existence of historic city centers in some cities? Or even the spatial scale of a city? Do you believe that they also play a role in bringing about cycling policies?

It's an interesting question. I kind of want to say no, I kind of want to say yes. I believe that wherever there's a will, there's always a way. It's all about how you prioritize as a politician. It's easy to say maybe there's lots of other things that need funding and are important to take into consideration. But I think if there's a will there's a way and if you want to prioritize cycling, then you will figure out how to do that. And if you can't figure it out, then maybe you should look at the norms. For example, the car norm that people easily say there's no space in our streets for cyclists. If you have parking spaces all across the street, there's obviously something that is being prioritized and is taking that space. So you have to question those assumptions.

Is the good relationship with the policymakers important for your group? Are you trying to make them allies and promoters of your plan as well? Or do you specially target the public opinion and on the opinion of the cyclists in general?

I think we want to keep a good dialogue with legislators at all levels. I think it's helpful to keep the conversation going. I think that there are other actors that are maybe more critical and very black and white sometimes in their communications. But I think we want to keep an open dialogue, have a relationship and a conversation ongoing.

Finally, based on the literature review that I have conducted I would like to ask for your reflection on the following Hypothesis 1: Social movements tend to define a certain condition as a problem

or frame a particular policy issue (problem stream in MSF), and then influence the public opinion in order to attract governmental attention and achieve policy change. Would you agree / disagree?

It's hard to say based on the fact that I've been working only for two years and Cykelfrämjandet was established in 1939. So I've come in at a time where like I mentioned, those two projects that I work with were already well established and have been around. We've already been at the phase where we are directing a lot of our communication towards policymakers or towards politicians or decision makers. I can't really say how it was done in the past.

The second hypothesis says something similar. As social movements are powerless, they aim to influence governmental groups and the politicians, in order to trigger a change in public policy. They are just common citizens without any form of power. They are not legislators, they're not policymakers, so in order to achieve something they have to directly target the governmental actors, the city planners, the city administrators, and closely interact with them.

Absolutely. For example, in the case of cycling infrastructure, where we see there needs to be a lot more and better infrastructure for cyclists in Sweden. We don't have the budget to do that, we don't have the mandate to make that happen. All we can do is push for it and try to get the people who do have that decision making power to make those decisions. And I think that there is a lot of power in having a voice and advocating for an issue. When it's dependent on a public authorities' decision, then we don't have more than our individual votes as citizens. As individuals we have the power of the vote.

And finally I would like to hear your opinion on this final Hypothesis 3: Social movements are likely to be most effective, when there is a well-defined problem, politicians are eager to change, there is a feasible solution available, good timing exists and an actor who actively promotes this policy.

I think they all sound like fairly reasonable conditions, but I would like to think of them for a bit to dig into them before I could say this is it or something's missing. Regarding the problem stream, if you want to change something, you will have to point out why it needs to be changed, and what the issue is. Of course, if a change is dependent upon a politician making a decision, then you need to get them on board, if they're not already on board with that understanding. That's probably why you have all these other conditions. But sometimes everybody knows something's a problem, but it's not being prioritized or followed up. Admitting there's a problem is definitely a good starting point. The timing probably also plays a role. I think there are many timing factors that could influence whether or not something happens. Sometimes there are very specific windows in time when a change can happen.

B. Extensive analysis of case studies selection

In the Netherlands, about three quarters of the population live in urban places, while the vast majority of the jobs can be found there. Generally, the cities are densely populated, there is a polycentric urban structure and short urban distances (Cities in the Netherlands, 2016). The latest national cycling plan has been set for the period 1990-1997, while regions are in charge of cycling (European Cyclists Federation, 2021). The Dutch GDP is 907.1 billion USD (2019), while per capita it is 52,331.32 USD (OECD Data).

Amsterdam is the capital city of the Netherlands, and presents the following demographic characteristics (StatLine, 2021):

- City area is 219.32 km²
- Population of the city is 872,680, and of the urban area it is 1,558,775
- Urban density is 4,439 /km²

Rotterdam is the second largest city in the country (StatLine, 2021) :

- City area is 324.14 km²
- Population of the city is 623,652, and of the urban area it is 1,160,000
- Urban density is 3,043/km²

Country	Cities
Netherlands	Amsterdam, Rotterdam
United Kingdom	Glasgow, Leeds, Endinburgh
Denmark	Copenhagen
Sweden	Stockholm, Malmo
Norway	Oslo
France	Strasbourg
Finland	Helsinki
Germany	Karlsruhe
Ireland	Dublin
Slovenia	Ljubljana
Belgium	Antwerp
Spain	Seville
Austria	Vienna

Table 7: Possible case studies for the research

United Kingdom: In the UK, each of the countries is responsible for following its own cycling plan. In England, in 2016 the Department for Transport launched a national Cycling & Walking Investment Strategy. In Wales, the first official strategy started in 2008, while another one followed in 2016 by the Ministry of Economy, Science and Transport. In Scotland, the government published an action plan called “Cycling as a form of transport” in 2017 (European Cyclists Federation, 2021). The British GDP is 2.829 trillion USD (2019), while per capita it is 42,330.12 USD (OECD Data).

In the 19th century, women were fighting for equality and challenged their spatial limitations. In Britain, by 1890, the Cyclists' Touring Club had 60,000 members, and more than one third were women. Close to this, cycling was one of the activities with the largest female presence (Lloyd-Jones, R. and Lewis).

This is a first indication that feminism was a key factor for the bicycling deployment in the UK, and it will be further investigated in the research.

Leeds is the third biggest city of the UK, presenting the following characteristics (World Population Review, 2021):

- City area is 487.8 km²
- Population of the city is 793,139
- Urban density is 1,430/km²

Glasgow is the most populous city in Scotland, and the third most populous in the entire United Kingdom. Below the characteristics of the city (World Population Review, 2021):

- City area is 175 km²
- Population of the city is 612,040
- Urban density is 3,555/km²

Edinburgh is the capital city of Scotland, with the following characteristics (World Population Review, 2021):

- City area is 264 km²
- Population of the city is 518,500
- Urban density is 1,828/km²

Denmark: The Danish Ministry of Transport published in July 2014 a new cycling strategy for Denmark: 'Denmark on your bike!' to promote cycling as a daily mode of transport, by focusing on education and safety. In 2013, the government invested €25.5 million in the cycle highways construction in many Danish cities (European Cyclists Federation, 2021). The Danish GDP is 350.1 billion USD (2019), while per capita it is 60,170.34 USD (OECD Data).

Copenhagen is the capital city of Denmark and the most populous one, presenting the following characteristics (Statistics Denmark):

- City area is 179.8 km²
- Population of the city is 632,340, and of the urban area it is 1,330,993
- Urban density is 4,600/km², while the metro density is 1,200/km²

Sweden: In 2017, the Swedish Ministry of Infrastructure published the "National Cycling Strategy for Increased and Safe Cycling" focusing on safety and a sustainable development of society (European Cyclists Federation, 2021). The Swedish GDP is 530.9 billion USD (2019), while per capita it is 51,615.02 USD (OECD Data).

In Sweden, the recent literature states online-based (activist) initiatives can formulate critical perspectives on everyday cycling and in other words shape or change cycling policies (Balkmar, 2020). This perspective will be analyzed along the research.

Stockholm is the capital city of Sweden and the most populous urban area in Scandinavia and presents the following characteristics (SCB statistics Sweden):

- City area is 188 km²
- Population of the city is 975,904
- Urban density is 4,200/km²

Malmö is the largest city in Sweden, included in the most bicycle friendly cities in the world. It presents the below characteristics (SCB statistics Sweden):

- City area is 332.6 km²

- Population of the city is 344,166
- Urban density is 4,049/km²

Norway: In 2012, the Norwegian Ministry of Transport and Communications published the National cycling strategy: Get on Bikes! offering subsidies and VAT exemptions for electric bikes purchases, with a commitment to build 10 broad two-lane bike paths (Norwegian Ministry of Transport and Communication, 2012). The norwegian GDP is 403.3 billion USD (2019), while per capita it is 75,419.63 USD (OECD Data).

Oslo is the capital city of Norway and the most populated one, presenting the following characteristics (Statistics Norway):

- Area is 450.75 km²
- Population of the city is 697,549, and of the urban area it is 1,019,513
- Urban density is 1,645/km²

France: In 2018 the French Government presented a Bicycle and Active Mobility Plan which envisaged road safety improvement, theft reduction, aiming to create a cycling culture. Similar actions in the past were an amendment to the law in 2012 on the installation of new road signs for cyclists, and in 2014 the Ministry of Transport issued an action plan to promote walking and cycling (European Cyclists Federation, 2021). The french GDP is 2.716 trillion USD (2019), while per capita it is 40,493.93 USD (OECD Data).

Strasbourg is the capital city of the Grand Est region, formerly Alsace, in northeastern France, considered as the French capital of cycling, presenting the following characteristics (Insee):

- City area is 240.2 km²
- Population of the city is 284,677, and of the urban area it is 467,438
- Urban density is 1,900/km²

Finland: In 2018, Finland launched a new strategy to promote walking and cycling, focusing on infrastructure development, funding and shaping public opinion. The finnish GDP is 269.3 billion USD (2019), while per capita it is 48,782.79 USD (OECD Data).

Helsinki is the capital and most populous city of Finland, presenting the following characteristics (AdminStat Norvegia):

- City area is 480.75 km²
- Population of the city is 693,494
- Urban density is 1,400/km²

Germany: The German ministry of Transport and Digital Infrastructure adopted in 2012 the “National Cycling Plan 2020 – Joining forces to evolve cycling”, calling for an increase in "e-mobility" and aiming to achieve a 15% share of cycling by 202 (European Cyclists Federation, 2021). The german GDP is 3.861 trillion USD, while per capita it is 46,445.25 USD (OECD Data).

Karlsruhe is a city in southwestern Germany, and according to European Cyclist Federation it is Germany's most Cycling-Friendly City, presenting the following characteristics:

- City area is 173.46 km²
- Population of the city is 312,060
- Urban density is 1,800/km²

Ireland: In 2009, the Irish Ministry of Transport presented a "National Cycle Policy Framework", planning to establish a cycling culture and invest in infrastructures (Smarter travel - a sustainable

transport future, 2009). The Irish GDP is 388.7 billion USD, while per capita it is 78,660.96 USD (OECD Data).

Dublin, is the capital of the Republic of Ireland, considered as eminently cycle-friendly city, and presenting the following characteristics:

- City area is 117.8 km²
- Population of the city is 554,554
- Urban density is 4,811/km²

Slovenia: From 2005, The National Cycling Network Development Strategy in the Republic of Slovenia has focused on the development of safe and comfortable cycling infrastructure (European Cyclists Federation, 2021). The Slovenian GDP is 54.17 billion USD (2019), while per capita it is 25,946.18 USD (OECD Data).

Ljubljana is the capital and largest city of Slovenia, which in 2015 was included in the list of the top 20 cycling-friendly cities in the world (City of Ljubljana, 2017). It presents the following characteristics (Republica Slovenia, 2021):

- o City area is 163.8 km²
- o Population of the city is 295,504
- o Urban density is 1,712/km²

Belgium: In Belgium, a national plan was set in 2004 while the regional states have adopted and implemented their own cycling strategies (European Cyclists Federation, 2021). The Belgian GDP is 533.1 billion USD (2019), while per capita it is 46,420.66 USD (OECD Data).

Antwerp is a city in Belgium and the capital of the Flemish Region, presenting the following characteristic (Statistics Flanders):

- o City Area is 204.51 km²
- o Population of the city is 529,200
- o Urban density is 2,600/km²

Spain: Spain has shown a particular commitment to cycling at national level, while cycling policy falls mainly within regional and local authorities (Miyake & Crass, 2004). The Spanish GDP is 1.393 trillion USD (2019), while per capita it is 29,600.38 USD (OECD Data).

Seville is the largest city of Andalusia, according to The Guardian Seville is the cycling capital of southern Europe and presents the following characteristics (World Population, 2021):

- o City Area is 140 km²
- o Population of the city is 702,386
- o Urban density is 4,900/km²

Austria: In 2015, Austria launched a national Cycling Master Plan, pushing for investments to promote cycling, awareness campaigns and optimize coordination with other modes of transport (European Cyclists Federation, 2021). The Austrian GDP is 445.1 billion USD (2019), while per capita it is 50,137.66 USD (OECD Data).

Vienna is the capital city of Austria, which was steadily promoting cycling, and it presents the following characteristics (Statistic Austria):

- o City area is 414.78 km²
- o Population of the city is 1,911,191
- o Urban density is 4,326.1/km²

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