Sustainability and advertising?

A case study on the advertising funded bike-sharing system Oslo Bysykkel

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Abstract

Bike-sharing systems are being implemented all across the world as part of cities efforts to achieve sustainable mobility. This research critically investigates the experience in Oslo of implementing a bike-sharing system funded by and operated by an advertising company. Prior research into the implications and performance of different governance models for bike-sharing is limited but will be increasingly important for any cities that consider implementing a system. This case study takes an explorative approach and uses interviews, news sources and public documents to inquire into the nature of the advertising funded governance model. The main findings are that the funding model puts limits on the physical development of the system and the possibilities of developing the system within a contract. Because of the model's dependence on the monetization of outdoor advertisements it also affects the accessibility of different actors to the outdoor media landscape.

Key words: Bike-sharing, Bicycle, Public-Private Partnerships, Sustainable mobility, Advertisement funding, Outdoor media landscape

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Abbreviations and Acronyms

APBS   Agency for Planning and Building Services

AUE   Agency for Urban Environment

BSS   Bike-sharing system

CHMO   The Cultural Heritage Management Office

NOK   Norwegian Krone

PRA   Public Roads Administration

PPP   Public Private Partnership

1   Introduction

 "There is no holy grail" said Gabe Klein, Chicago's transportation commissioner, in 2012, "but a public bike share is pretty close" (Kabra, Belavina, and Girotra 2015, 3). Perhaps it should come as no surprise then that bike-sharing systems (BSSs) have experienced explosive growth across the world since the turn of the millennium. From its origins as a radical idea proposed by Dutch anarchists, bike-sharing is now mainstream and is the obvious choice for public authorities striving for sustainable mobility.

BSSs are expected to help create a larger cycling population, increase transit use, reduce greenhouse gas emissions, relieve congestion, reduce pollution, improve public health and move cities towards sustainable transport. But to finance such schemes, many cities have opted to enter Public-Private Partnerships (PPPs) with large advertising firms— firms that seemingly have nothing to do with sustainability. Oslo was one of the first cities do to so back in 2002 when the city entered into an agreement with the multinational corporation Clear Channel.

Despite a lot of research into BSSs the last 10 years, there remains a lack of more thorough understandings of the impact of different governance models, their implementation and operation, and their implications for the success of BSSs (Büttner et al. 2011, 10; Ricci 2015, 30; Beroud and Anaya 2012, 290). Oslo had already had city bikes for 15 years and was about to launch a new BSS when this research was getting started. This made it a potentially great research object. As far as the author is concerned, there have been *no* extensive case studies looking at the implications of the advertising funded model on a BSS before.

1.1   Purpose and research questions

The purpose of this research is to increase the understanding of the advertising funded model in general by researching its concrete implications in the context of Oslo Bysykkel.

A few research questions have been formulated in the line of research:

1) What are the inherent traits of an advertising funded bike-sharing system?

2) What are the advertising funded model's "internal" implications (that which pertains directly to the bike-sharing system)?

3) What are the advertising funded model's "external" implications (that which is seemingly not directly related to the bike-sharing system)?

1.2 **Outline**

In the following chapter the topic of bicycle sharing will be situated in a historical context where *sustainable development* and *sharing economics* are increasingly ubiquitous buzzwords used by environmentally concerned actors. The chapter introduces the reader to the history and current context of bicycle sharing and the variety of governance models that have been implemented. An exposition on the history and current context for outdoor advertising finalizes the chapter. In chapter 3 the reader will find a brief summary of the prior research done on bike-sharing systems and their impacts, as well as the research that has been done on Oslo Bysykkel to date. Chapter 4 will outline the basic premises of the research and show how they relate to the choice of a case study. The chapter will present the methodological framework that allowed for an exploratory approach to research a topic that is not sufficiently inquired into today. Chapter 5 introduces the theoretical framework that has been used to explain the "external" implications of the advertising funded model. The framework touches upon different conceptualizations of public space and different actor's access to the outdoor media landscape. Chapter 6 will provide the empirical findings of the research that address some of the "internal" and "external" implications of the advertising funded model. Finally, chapter 7 discusses the main findings from chapter 6 and draws some general conclusions on how the advertising funded model impacts the physical development process of the BSS and how development of the system within contracts is restrained. The chapter also argues that the introduction of advertising funded agreements has lead to a monopolization of the outdoor media landscape.

2 Background

It is appropriate to situate the research topic in a historical context before we engage with the issue of bike-sharing and Oslo Bysykkel. This background will help us understand why bike-sharing has emerged as such a popular technological construct today.

2.1 Historical context

In the middle of the 18th century, Britain combined engineering science with new means of energy to arguably become the first country ever to achieve modern economic growth (Goldstone 2002). The capacity of newly developed engines to transform fossil fuel energy into useful work allowed for self-sustaining and accelerating growth, first in England and later in other parts of Europe, North-America and Asia. These parts of the world have since experienced drastic improvements in life expectancy, wealth and material standards[1]. In the last century, the economies of developed countries have increasingly been geared towards an ever expanding rate of production and consumption, leading some to argue that we have entered an age of 'hyperconsumerism' – an age which

> "demands that we make consumption our way of life, that we convert the buying of goods into rituals, that we seek spiritual satisfaction, our ego satisfaction, in consumption. The economy needs things consumed, burned up, worn out, replaced, and discarded at an ever increasing rate" (Botsman and Rogers 2010, 6).

The growth of industrialized economies has contributed heavily to the environmental pressures we now experience. In the last few decades we have managed to move beyond several planetary boundaries globally (see Rockström et al. 2009). Since the publishing of Rachel Carson's book *Silent Spring* (1962) and the release of the report *The Limits to Growth* (1972), environmental issues have increasingly been placed on the political agenda. The World Conference on Environment and Development published the report 'Our Common Future' in 1987 (WCED, 1987), commonly known as the Brundtland report, which introduced the term sustainable development to the world (Elliott 2006,

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[1] See Gapminder.org/data

7–8). The commission defined the concept as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development 1987).

Cities, where more than half of the world's population now lives, will be crucial players in the transition towards sustainable societies. Oslo is one of the most rapidly growing cities in Europe which brings with it specific challenges regarding pollution, noise, area usage, transport capacity and greenhouse gas emissions (Sykkelprosjektet 2015, 7). All of these challenges are inherent to and arguably best symbolized by the mass entry of the private car (see for example Eriksen, 2016). In spite of high usage rates of public transportation in Oslo, approximately 61% of the city's greenhouse gas emissions in 2012 came from the transport sector (Oslo City Government 2015, 30). Half of all trips with cars in Oslo is shorter than 5 kilometers and for trips under 1 kilometer it is more common for people to go by car (14 %) than by bike (12%) (Oslo Kommune 2015, 10).

Cities across the world are now reevaluating their pro-car policies by attempting to develop alternative transport systems to move populations (Shu et al. 2010, 1) and bicycle riding discourse is increasingly being integrated to states with the intention of obtaining sustainable mobility (Horton 2006, 54). Scholar Dave Horton notes that "as the car becomes increasingly constructed as 'the problem', the car's other, the bicycle, emerges as 'the solution'"(Horton 2006, 44). Oslo has for several decades stated its intention to create better conditions for bicycling, but such plans have turned out to be empty promises (Torvund 2010). Now, inspired by cities like Copenhagen and Amsterdam, Oslo is starting to make good on its promises to increase the use of bicycles as a transportation mode.

Bicycles have for a long time been used as symbols for different objectives in social movements; first by feminist and socialist groups in the late nineteenth and twentieth centuries, anarchist groups post-1960's, followed by the environmental movement up to this day (Horton 2006, 44). The bicycle is frequently used in environmental discourse and is constructed as a sustainable transport mode—a symbol of the society to which environmentalists strive for—in part because "cycling is an embodied performance of green politics; a personal action which demonstrates consistency with green values" (Horton 2006, 46). For environmentalists, "the bicycle is not a mere appendage to

'business as usual', but a vehicle which helps to re-evaluate, restructure and reorganize everyday life in contemporary societies" (Horton 2006, 51).

2.1.1 Collaborative economics

Botsman and Rogers (2010, 69) argues that the age of hyperconsumerism is on the verge of changing due to a "quiet yet powerful revolution of collaboration". The umbrella term for this supposed transition has come to be known as the 'collaborative' or 'sharing' economy. According to the Committee of the Regions[2], the sharing economy consists of four different forms, one of which is the 'access economy'. The access economy constitutes business models that provide goods and services based on access rather than ownership, or renting rather than buying (Brighenti 2015, 5). Historically, such access models have flourished in the non-profit sector or the public sphere in the form of museum visits or public libraries. Today, access-based models are increasingly becoming a part of the for-profit sector (Bardhi and Eckhardt 2012, 883), with companies championing values of environmental sustainability, variety and flexibility.

One of the most prominent examples of such business models is BSSs. Among other things, BSSs are expected to help create a larger cycling population, increase transit use, reduce greenhouse gas emissions and improve public health (DeMaio 2009, 43). But when the city bicycles are associated with a healthy and environmentally conscious lifestyle, it may seem paradoxical that they are funded by advertisers whose intention it is to sell more goods and services (Alsvik 2009); or as one journalist argued (Robert 2009) after JCDecaux had entered Paris to provide the now world famous BSS *Vélib*:

> "Industrial advertising firms like Decaux quickly understood that it was enough to surf the green wave of sustainable development in order to flood cities even more with advertising to encourage excessive consumption, on the basis of an economic model that has nothing to do with the environment or sustainable development" [as translated by Tironi 2015, 173].

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[2] The Committee of the Regions is an assembly of regional presidents, mayors and elected representatives from 28 EU countries that frequently comments on important policy issues.

2.2 **Bike-sharing**

In this section (2.2) we will look at the basics of bicycle sharing and its historical development. I will describe some of the different governance models for such systems and who the main stakeholders generally are. I will also provide some basic information on the context in Oslo with regard to bike-sharing.

2.2.1 What is bike-sharing?

Bike-sharing systems (BSSs) are known by many names; bicycle sharing, bike-sharing schemes, cycle hire, cycle sharing, public bicycles, smart bikes and more[3]. A BSS can be defined as "a self-service, short-term, one-way-capable bike rental offer in public spaces, for several target groups, with network characteristics" (Büttner, Mlasowsky & Birkholz, 2011, 10). City bikes are generally provided at designated stations. There is nobody working at the stations and users pick up bikes by themselves, usually through a designated card or a personal code. The bicycle fleet needs to be continuously redistributed between stations to correct imbalances in the system, as some stations quickly fill up and others are emptied of bikes. The term 'one-way capable' simply means that users can ride a bike from one station to another—they don't have to return the bike to where they got it from. Pricing regimes usually encourage short-term usage in order to allow for several users to use the same bike in a day. All of these traits distinguishes BSSs from traditional bike rental (Fishman, Washington, and Haworth 2013, 148). Furthermore, BSSs are often planned in concert with public transport as it provides a first-mile/last mile[4] solution to users (Toole Design Group 2012).

According to the OBIS project there are "three categories of influencing factors on the outcomes of BSSs". These three, in turn, fall under two categories; *endogenous* and *exogenous* factors. The physical design (hardware & technology and service design) and institutional design (type of operator, contracts and ownership, financing sources and employment opportunities) fall under endogenous factors. Exogenous factors are city-specific and not easily changed, such as city size, climate, population density, financial

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[3] Some of these will be used interchangeably throughout the thesis
[4] First mile/last mile are terms used in transportation planning to denote the issue of getting people to move to/from transportation hubs

situation etc. (Büttner, Mlasowsky and Birkholz 2011, 17). This thesis will mainly focus on the institutional design of Oslo Bysykkel.

2.2.2 History of bike-sharing

Bike-sharing has been around since the 1960's but it wasn't until the 21st century that the phenomenon really rose to prominence (Barquet et al. 2016, 525; Beroud and Anaya 2012). Lyon's BSS *Velo'v* became something of a pioneer in 2005 with the largest system at the time. Lyon's success inspired Paris to implement a similar system in 2007, *Vélib'*, which was even more successful than what was initially expected. The success of a BSS in an internationally recognized city like Paris created what some people have later referred to as "the 'Big Bang' in bike sharing" (Büttner et al. 2011, 10), and BSSs started gaining attention all over the world (Demaio 2009, 43; Cohen et al. 2013, 13).
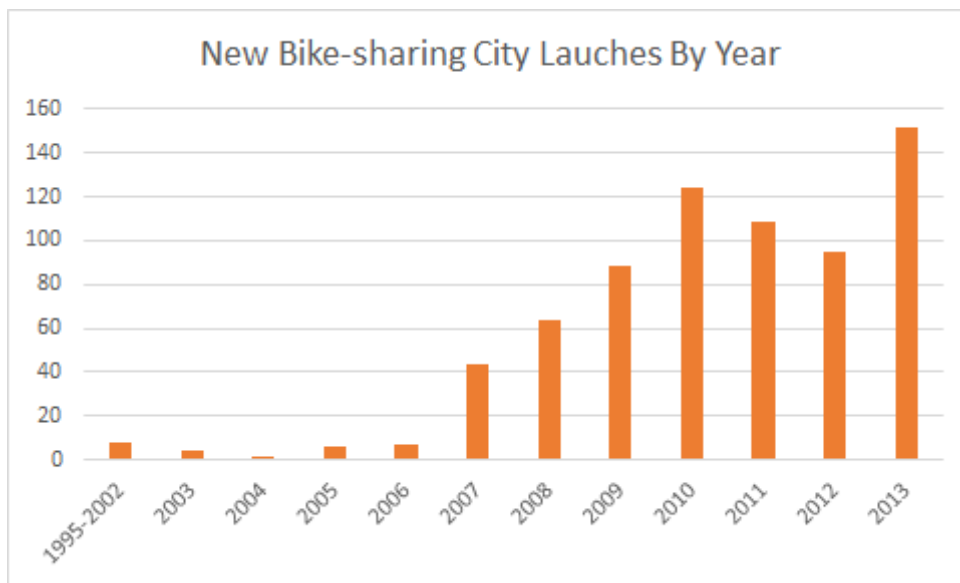
Figure 1. Bike-sharing launches by year globally[5]

The initial growth phase for BSSs was in Europe before spreading to the United States, Asia (predominantly China) and later to South America. China is now the world leader both in terms of amounts of systems and bikes, having seen unparalleled growth in the last few years as part of the country's efforts to reduce congestion and pollution. By the end of 2016, the world was on the verge of passing a total of 1200 BSSs. This can be

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[5] Figure from: http://bike-sharing.blogspot.no/2013/12/the-bike-sharing-world-end-of-2013.html

compared with approximately 675 schemes by the end of 2013 (see DeMaio & Meddin, 2017) and around 60 in 2007 (Demaio 2009, 43).

Generations of bike-sharing

Bike sharing is considered to have gone through either three or four generations. The *first generation* could be described as an idealistic attempt in the Netherlands where an antigrowth movement called Provo started supplying Amsterdam with free and unlocked bikes. It was done as a statement and criticism against rising consumerism, pollution and congestion—problems materialized and symbolized mainly by privately owned cars. Under the banner of 'Witte Fietsenplan' (White Bike plan), bikes were painted white and left for the public to use freely and without designated stations for parking. The effort didn't last long due to theft and vandalism, but it still managed to inspire subsequent developments of bike-sharing across the world (NVA 2016; Demaio 2009, 42).

Second generation systems originated in several places in Denmark in the early 1990's. They were all very small-scale until Copenhagen implemented the first large-scale second generation system in 1995 where bikes could be obtained from designated stations with a coin deposit (similar to how trolleys are accessed in grocery stores). Despite these systems being more formalized, with stations and a non-profit organization as operator, theft and vandalism of bikes remained an issue because of the anonymity of users. These issues pushed developers towards the next generation of BSSs (Demaio 2009:42).

Portsmouth University in England implemented the first *third generation* system in 1996. The issue of user anonymity was solved by having students use specific cards to access bikes. Third generation systems were technologically more complex compared to its predecessors. They allowed for mobile phone access and developed kiosks with screens that users could interact with (DeMaio 2009). The first city-scale third generation system was implemented in French city Rennes (Cohen et al. 2013, 20). There is disagreement as to whether there is a 4th generation or whether further developments should rather be considered as 3rd generation systems with increased functionality. In this thesis I will side with the second interpretation and refer to the latest systems as 3rd generation.

What is clear is that bicycle sharing systems are getting increasingly sophisticated by the introduction of new technologies and forms of governance. The diversity of systems is larger than ever. Innovations include universal cards (that can be used both for bicycle sharing and public transport), solar cell-powered and portable stations[6] (Cohen et al. 2013, 25), electric stations and pedelecs[7], new business models as well as better tracking of bikes (Demaio 2009, 49-50). Another development is BSSs that revert back to being station-less, albeit with the bikes themselves being connected to the internet and locked/unlocked through the use of smart locks and mobile technology (van Schaik 2016).

Sociologist Martín Tironi argues that public bicycles have moved from "their beginnings as a rebellious and isolated idea" to "a transnational system of production, transport and signification". The BSSs of today "represents an immense, sophisticated and competitive market, involving multinational companies, specialist consultants, regional governments, technicians and thousands of users" (Tironi 2014, 177).

Third generation BSSs generally share the same physical infrastructure. The illustrative photos in Figure 2 are all from Oslo.

1. Bike-share station: Constitutes the entire physical and technical infrastructure in picture 1. This includes advertisements and a digital touch-screen where users get information.

Figure 2. Physical infrastructure of Oslo Bysykkel.

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[6] Most bike-share stations require excavation which increases costs and reduces the ability of operators to optimize locations in line with revealed usage patterns.

[7] A pedelec is a bicycle where a small electric motor assists the rider's pedaling.

2. Advertisement: Advertisement space connected to the station. Constitutes standardized eurosize billboards—billboards that are 118,5cm wide and 175cm tall (133,3cm * 224,3cm including the frame and the "legs").

3. Docking space/docks: The contraption where bicycles are held in place. Bicycles are automatically locked when their "nose" is placed in the docking space.

4. The bicycles in BSSs tend to be specially designed, in part to discourage theft but also to build brand recognition for the system. The bicycles are normally heavier and more stable than regular urban bicycles, with a minimum of detachable parts.

5. Docking bar/Bike-share rack: The docking bar joins together the individual docking spaces into a larger structure. They either provide bike-parking on one or both sides. The term 'bike-rack' is sometimes used interchangeably with 'bike-share station'.

2.2.3 History of bike-sharing systems in Oslo

The history of proposed bike-sharing systems in Oslo goes back at least to 1988 when Anne Line Bergenheim from political party Venstre proposed a car free city center and public bicycles. Several politicians and associations raised similar proposals in the following years, but many were skeptical of such schemes due to a potential need to raise taxes and fees (Alsvik 2009, 51-52). By the end of the 1990's, the Municipality of Oslo was negotiating deals with advertising companies Clear Channel Norway AS (henceforth simply 'Clear Channel') and JCDecaux Norge AS (henceforth simply 'JCDecaux') for the provisioning of bus shelters and public toilets. During this process Clear Channel informed the municipality that they had previously implemented a 3rd generation BSS in Rennes. This prompted the City Council to ask for the city bicycles to be included in the discussions. They saw the initiative as an environmentally friendly scheme that would be good for the public, and a plan to introduce a BSS was later approved by The City Government (Alsvik 2009, 51–52; Lae & Barstad 2001). The Agency for Road and Transport (later incorporated under the Agency for Urban Environment) was put in charge of finding a viable model for the implementation of the system, under the precondition that any scheme would not burden the municipality financially.

They ended up suggesting a model financed by advertisements as the most appropriate option. It was deemed unrealistic to have the system funded only through membership payments, especially as the municipality had ambitions for the system to be accessible to all citizens. The proposed cost of 50 NOK for subscriptions was seen as symbolic and low enough to ensure access. A model of subscribing members was seen as the best to reduce the issue of anonymity that had made previous generations of BSSs vulnerable to theft and vandalism (Lae and Barstad 2001). The municipality would broker a deal with a private firm that would take care of the investment, operation and maintenance of the system in return for advertisements on bicycles, by the bicycle stations and on standalone billboards in the city center. The advertisements are mentioned as 'a price to pay' for the city, and the City Government stressed the need for both the system and advertisements to have good quality and fine aesthetic qualities (Lae and Barstad 2001).

The contract was awarded to Clear Channel. The main reason they won the first contract, according to interviewee Alex (see section 4.4.1 and appendix 3), was that Clear Channel's only competitor, JCDecaux, simply couldn't come up with a system that was good enough in time: "it was a time-race that they [JCDecaux] lost". The contract was for a total of 1200 bicycles with 1500 docking spaces, with a geographical extension out to Ring 2 [see appendix 1][8].The BSS was first tested in 2002, before the proper system was deployed in 2003. In 2003, the first entire season of the system, a total of 284.561 trips were taken. The system saw impressive increases in the following years, reaching over 1 million trips for the first time in 2012 (Eggesvik 2013). Trips stabilized at that level and in 2015, the last season of the first system, there were a total of 994.425 trips (Vestreng 2016).

In 2014, the City of Oslo initiated a process for a new service concession agreement to provide advertising funded city furniture (reading booths, public toilets and public bicycles). The Agency for Urban Environment was the municipality's representative in the process (Bymiljøetaten 2014). Up until this point Clear Channel had the contract for city bicycles and JCDecaux had the contract for public toilets and bus shelters. The service concession process was the subject of a lot of debate, not least on procedural grounds (Sigurjonsdottir 2014). The tender asked potential providers to bid for two

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[8] From an evaluation of the BSS by the City Government of Oslo. 10/06/08. Item number 119/08. Accessible at https://www.oslo.kommune.no/sru/default.asp

separate packages: I) Delivery of bus shelters and public toilets and II) Public bicycles. In addition, providers had to make a third, combined offer for both packages (Bymiljøetaten 2014). The tender was set up in such a way in order to guarantee competition between the two large advertising firms. The contract length for the BSS was for 10 years (02.05.2015 – 31.12.2025) with an option for the municipality to extend the contract for 2+1 years on unchanged terms (Bymiljøetaten 2014). The geographic scope was extended towards Ring 3 and the amount of bicycles was increased to 3000 (with 6000 docking spaces). None of the BSSs in Oslo have been open all year round yet. The system is only open in the months when there is no ice on the ground (usually 8–9 months).

Clear Channel won the second contract for city bicycles as well, but this time decided to subcontract Urban Infrastructure Partner AS to operate the system. According to interviewee Francis they won the contract because of the simplicity in using the new system, as well as the possibility to integrate technological developments in it. With the introduction of the new system in 2016, usage more than doubled from the previous year with a total of 2.150.658 trips (Bymiljøetaten 2017). The new system also had 35% more subscriptions and 43% more trips per subscription than before. Even the new operator Urban Infrastructure Partner admitted that it exceeded anything they had "dared to hope for" (Urban Infrastructure Partner 2016; Urban Infrastructure Partner 2017).

It is difficult to say exactly why the new system managed to increase usage so significantly, but some plausible reasons can be given. One would be the technological development of BSSs that has made them more user friendly, where bicycles can for instance be tracked and paid for with a mobile phone (Amundsen 2016). In the first system users had to register online and wait for a designated card to be sent by mail (Langfeldt 2011, 57). In the second system users can register either directly from their mobile phones or online. This means that users can enter and start using the scheme without waiting several days. Tedious registration processes have been shown to be a major barrier to obtaining a successful BSS (Fishman, Washington, and Haworth 2012).

It should be noted that both bike-share contracts in Oslo have been entered by center-right governments. More left-wing parties and the green party have generally been more skeptical of the advertising funding, even if most of them have ended up supporting the

implementation of the systems anyway. The representatives of Rød Valgallianse[9] were
the only ones to vote against the plans to implement the first advertising funded BSS in
the City Council. There might be a parallel to be drawn here with the experience in
Paris where the green party, despite being very critical towards the advertising funded
model, ended up supporting the project. The articulation of the BSS as a sustainable
transportation mode put the party in an ambivalent situation, where they felt they could
not credibly vote against a 'green bicycle project' in the eyes of public opinion (Tironi
2014, 175).

2.2.4 Public-private partnerships

While there is no *one* accepted definition of what a Public-Private Partnership (PPP) is,
Oslo Bysykkel is likely to be accepted by most as a case in point. The World Bank
(2012, 11) defines PPPs broadly as "a long-term contract between a private party and a
government agency, for providing a public asset or service, in which the private party
bears significant risk and management responsibility". Van Ham and Koppenjan (2001,
598) has a similar definition, but qualifies that the partnerships are joint efforts
characterized by *cooperation* where actors *share* risks, costs and resources.

PPPs are now a well-established form of governance. They are explicitly advocated for
in one of the Sustainable Development Goals (SDGs), adopted officially in September
2015. Under the banner of 'Multi-stakeholder partnerships', the SDGs "encourage and
promote effective public, public-private and civil society partnerships, building on the
experience and resourcing strategies of partnerships" (UN General Assembly 2015, 28).

Opinions diverge on PPPs, but most would argue that they may benefit both the public
and the private actor. Some are seemingly neutral in seeing PPPs "as a new governance
tool that will replace the traditional method of contracting for public services through
competitive tendering" (Hodge and Greve 2007, 545). Some see PPPs in a very
favorable light and hail them as "the main alternative to contracting out and
privatization [that can] combine the strong sides of the public sector and the private
sector" (Hodge and Greve 2007, 545). Others take a more cynical view of PPPs by
understanding the use of the term as part of a 'language game', in that 'PPP' works as a

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[9] Rød Valgallianse (RV) was a political party from 1973 to 2007, which joined forces with AKP and Rød
Ungdom to create contemporary political party Rødt.

cover term for words like 'privatization' and 'contracting out' that more easily invoke opposition. From this perspective

> "the language of PPPs is a game designed to "cloud" other strategies and purposes. One such purpose is privatization and the encouragement of private providers to supply public services at the expense of public organizations" (Hodge and Greve 2007, 547).

PPPs may be either publicly or privately financed (Hodge and Greve 2007). Oslo Bysykkel falls under what is generally called a Private Finance Initiative (PFI). A PFI is a "method of providing funds for major capital investments where private firms are contracted to complete and manage public projects" (Investopedia 2016). The private firm handles the up-front costs of the project, "removing the immediate burden from the government and taxpayers" (Investopedia 2016). Oslo Bysykkel is a project that demands considerable investment, especially in the starting phases of the project, which is one of the reasons why it has not been publically funded.

The government entity can also transfer some of the risks associated with projects to private entities. Some are critical of these financing models, claiming that future tax-payers bear the burden of such arrangements. Some also claim that they are an "accounting gimmick to reduce the appearance of public sector borrowing" (Investopedia 2016). Others argue that when things go wrong in PFIs "the costs [are] diffused throughout the public sector and onto the public at large, a travesty of risk transfer" (Shaoul 2005, 202).

Finally, there is an underlying assumption in this research that should be made clear at this point. Whereas some researchers focus on either public *or* private actors as the unit of analysis, I will, in line with Mahoney, McGahan and Pitelis (2009, 1034) argue that "public and private interests cannot be fully understood if they are conceived as separate […] Almost without exception, the public interest favors some private interests over others". Such an understanding of PPPs I believe to be fruitful in the context of Oslo Bysykkel.

2.2.5 Governance Models for bike-sharing systems

There are three main contracting structures when it comes to the ownership of the BSS-assets. One is where assets are owned and operated by a public body. The second is that the public body owns the assets but contracts a private actor to operate the service. The third is that a private actor both owns the assets and operates the service. However, "regardless of the structure, in all cases, the government, through the implementing agency, still oversees the system and is responsible for managing the contracts and monitoring the level of service" (ITDP 2013, 96). A variety of actors can operate a BSS. Paul DeMaio lists "governments, quasi-governmental transport agencies, universities, non-profits, advertising companies, and for-profits" (2009, 45). They all come with potential advantages and disadvantages. The government model allows the public body to maintain a greater degree of control over the program. The local authority can therefore ensure that the BSS is

> "being run in a way entirely consistent with its policy, to link with other transport services and so that it can respond to changes in the market without having to renegotiate a contract with a service operator" (Beroud and Anaya 2012, 289).

In other words, "the public authority can prioritize the desired goals of the system […] over other incentives, such as profitability" (ITDP 2013, 97). The downside is that the public body may not have the best experience and know-how on how to operate a successful BSS. In addition, the public authority maintains the liability for the system "which can be less desirable from a government's perspective" (DeMaio 2009, 45; ITDP 2013, 97).

When transport agencies (such as Germany's Deutsche Bahn) operate BSSs the main benefit is that the agency prioritizes creating a useful service rather than profitability. Additionally, public authorities can benefit from the experience that already exists within such agencies. However, the absence of a tendering process could mean that more qualified operators are not invited to compete for a contract. In the non-profit model, like the one in Copenhagen, the liability is taken off the public authority, but the non-profit will still be reliant on the public sector for most of its funding (DeMaio 2009, 45–47).

In the advertising company model, a company such as JCDecaux or Clear Channel offers a BSS to a jurisdiction in exchange for advertising space. This model is cost-effective and convenient for local governments. But depending on the revenue-model, the advertising companies may not be incentivized to perform optimally "regardless of what they agreed to in a service contract" (DeMaio 2009, 48). In the for-profit model, private companies provide the service with less government involvement. A benefit of this model is that private actors don't have to wait for local governments to start up business. The problem is that they, despite this, would usually require the local authorities support to use public space in order to provide a functional system (DeMaio 2009, 48).

According to DeMaio (2009, 48) "[t]here is no one ideal model that works best in all jurisdictions". The appropriate model depends on, among other things, the size of the jurisdiction and the availability of potential operators in the location. The size of the location is clearly relevant when it comes to the advertising funded model since advertising companies tend to operate in large cities where advertising revenue potential is the greatest (DeMaio 2009, 48–49). According to the Institute for Transportation & Development Policy's (ITDP) planning guide for BSSs, a "bike-share system can be completely public or completely private, but most successful systems are a combination of the two" (ITDP 2013, 89). And what remains true for all third generation systems, no matter what model is chosen or what funding sources are used, is that "successful implementation of a bike-share system requires strong political support to ensure funding, land use rights, and coordination between various city agencies" (ITDP 2013, 26).

2.2.6 Stakeholders in bike-sharing systems

Following Beroud & Anaya (2012, 277) there are generally four main stakeholders in BSSs; promoters, operators, providers and public space users.

Promoters are the initiators of the scheme and are ultimately in control of it. Promoters are usually a public body. If the promoter is a private actor, a publicly owned company or non-profit organization, they will still need to work together with the local government for effective implementation. Public bicycle schemes need to be of a certain

size to be successful which makes the involvement of public administrations necessary (Beroud and Anaya 2012, 290).

Operators are usually contracted to run the scheme for the promoter and "handles the day-to-day operations of the public bike-share system" (ITDP 2013, 91). The operator is in charge of maintaining bicycles and balancing the supply and demand of them. They provide relevant information to other actors about the BSS and are in charge of communications with customers.

Providers are the actors with the necessary knowledge and equipment (such as docking stations and communication software) to provide the BSS.

Public space users are simply users and non-users of the scheme. For users the scheme will offer another means of transport, whereas non-users will be impacted by increased bicycling and new public furniture in urban areas (Beroud and Anaya 2012).

2.2.7 Governance Model in Oslo

The Municipality of Oslo has opted for the advertising funded model for both of its BSSs. The municipality initiated tendering processes for contracts and set the standards (both physical and operational) for the systems. Both contracts have been won be Clear Channel. Clear Channel operated the first system themselves but decided to sub-contract the second one to Urban Infrastructure Partner AS, who now owns and operates the city bikes.

According to ITDP (2013, 98), arrangements with private operation and ownership comes with some risks with regards to potential conflicts of interest. One potential problem with privately funded BSSs may be that of universal geographic accessibility. While a municipality may strive for a well-distributed system across the city, a private actor may desire to optimize revenue by strategically placing stations and bikes in "high-revenue-producing areas or neighborhoods" (ITDP 2013, 98). Looking at the success of privately funded BSSs in the last 15 years, it is clear that they can be very successful systems in the most central areas of cities. The question is if the same private actors are willing to cover less densely populated areas with lower-income citizens. Urban planner Fábio Duarte argues that "it is still notable that low-income, medium-

density areas are more poorly served by BSS provision in comparison with other equally medium-density neighborhoods"; a dynamic that can be seen in the BSSs of New York, London and Rio de Janeiro, among others (Duarte 2016, 107).

2.2.8 Stakeholders in Oslo

In the next sections I will introduce the main stakeholders and provide some background to their interests and ideas in relation to Oslo Bysykkel.

The Municipality of Oslo

Oslo is the largest city of Norway with a population of approximately 660 000 people. The city is experiencing rapid growth and the population is expected to increase to around 800 000 by 2030 (Tønnessen, Leknes, and Syse 2016). With the introduction of a new red-green governing coalition in 2015, the city adopted more ambitious climate goals. The new goals state that Oslo should halve its greenhouse gas emissions before 2020 (compared to the 1991-level) and be fossil free by 2030 (Sosialistisk Venstreparti 2017). This is part of a plan to enhance Oslo's position as a leading climate city internationally (Oslo City Government 2015). The challenges and opportunities of population growth is the main theme of the municipal plan *Oslo mot 2030* (Oslo City Government 2015, 8). The growth is expected to put additional pressure on the city's transport system along with increasing challenges regarding pollution, noise and space availability. The bicycle is seen as a suitable transport mode that is up to the task of facing all of these challenges. In addition the bicycle is seen as part of a more general strategy to reduce greenhouse gas emissions (Sykkelprosjektet 2015, 7).

The climate effort in the municipal plan is divided in to three general categories; smart mobility, smart energy and smart city governing. Transport is said to be the largest source of emissions in Oslo and is therefore highly prioritized. The City Council wants to decrease private car usage while encouraging walking, bicycling and the use of public transportation (Department for Environment and Transport 2015, 8–9). In 2013 8,3% of all travels were done by bicycle in Oslo. The municipality, through their bicycle strategy, initially set a goal to raise that number to 16% by 2025 (Oslo Kommune 2015b:28). The ambition level was later raised and the goal is now to increase the bicycle modal share first to 16% by 2020 and to 25% by 2025 (Miljøpartiet

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De Grønne 2017). The bicycle is intended to become an important part of city life and city space. Also mentioned in the bicycle strategy is the vision of a biking policy that will in time be integrated more closely with public transport, and Oslo Bysykkel is specifically mentioned as an initiative that can solve the first mile - last mile problem. The city bikes are in addition seen as a symbolic representation of the policy to make bicycling for everyone, and they are believed to reduce the barriers to entry for non-bicyclists by being both visible and accessible (Sykkelprosjektet 2015, 35–37). The municipality sees the city bikes as a tool that could have a real impact on how people move around in the city (Carlsen 2016).

The City of Oslo has a parliamentary system with a City Government and City Council as the executive and legislative bodies (see appendix 2). They have delegated responsibility for the BSSs to different agencies in the municipality. The agency that is put in charge of the day-to-day work with the BSS is usually called the *implementing agency*: "The implementing agency is the government entity that oversees the planning, implementation, and operations of the bike-share system" (ITDP 2013, 90). The Agency for Road and Transport was first assigned as implementing agency for Oslo Bysykkel. In 2011 the agency was incorporated under a newly formed agency—the Agency for Urban Environment—which was created to coordinate the efforts of formerly separate agencies. The Agency for Urban Environment administered the tendering process for the second BSS and acted as implementing agency until January 1st 2017, when *The Bicycle Project[10]* took over the role.

The Bicycle Project argues that the efforts in Oslo to construct bicycle infrastructure since the 1970s has been very slow, and that the infrastructure is generally of poor quality (Sykkelprosjektet 2015, 22). In 2013, the Municipality of Oslo decided to give the Bicycle Project the task of forming a new bicycle plan for 2015–2025. The municipality's ultimate aim in initiating that process was to increase biking as a transportation mode and to create a working method to continuously improve the conditions for bicycling in Oslo. In the Bicycle Project's investigation leading up to the strategy, they found that the residents of Oslo generally do not think the city is safe for

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[10] The Bicycle Project (Sykkelprosjektet) was initially established as a temporary agency in 2010 by the City Council to get the municipality's biking efforts moving. In January 1st 2016 the agency was incorporated under the Agency for Urban Environment.

bicycling. The lack of real and/or perceived security is identified as a major obstacle to increasing bicycling in general. They also found significant demographic, as well as geographic, differences as to who makes use of bicycles. Two out of three bicyclists in Oslo are men, and 71% of bikers are in the age group 36-65 years. Among kids, youth and elders bicycle use is very low. In a survey conducted by the project only one percent agreed that Oslo is suitable for biking for kids and elders. Regarding geographic differences, the largest bicycle modal share is found in Grünerløkka (15%) and the lowest in Alna (1%). The municipality's goal is to increase the bicycle share of the underrepresented demographics and areas in their attempt at transforming the city into a biking city "for everyone" (Sykkelprosjektet 2015).

The bicycle plan resulted in three main goals; 1) the bicycle modal share should increase from 8 to 16 %, 2) bicycle infrastructure should be accessible, passable and safe for traffic and 3) citizens of Oslo should feel that the city is safe for bicycling (Sykkelprosjektet 2015). Interviewee Nore from the Bicycle Project says that the recent efforts to invest in bicycling in Oslo are quite impressive even by international standards. Still, one of the main conclusions from the Bicycle Project was that Oslo has a long way to go in becoming a proper 'bicycle city'. But there is a lot of potential to realize the vision. For example, 94% of Oslo's population support increased measures to improve conditions for bicycling in Oslo (Sykkelprosjektet 2015).

Clear Channel

Clear Channel has a history that goes back all the way to 1901. The U.S. based company is now one of the largest outdoor advertising companies in the world with "more than 650,000 displays in over 35 countries across five continents" (Clear Channel 2016a). In Norway, Clear Channel are the largest providers of outdoor advertising with a reach of 64% of the Norwegian population and 46.000 displays around the country that are exposed to 200 million "eye-balls" every week. The company has city furniture tenders in 25 Norwegian cities (Clear Channel 2016b).

Clear Channel highlights three main reasons for why advertisers should choose outdoor mediums over other media channels; f*ame*, *impact* and *value*. *Fame* implies that outdoor advertising is a mass medium which is seen by everyone and that "everyone knows that everyone sees". Fame also means extensive coverage and high frequency, i.e. that many

people see campaigns several times. *Impact* means that a campaign hits the market forcefully and that you "meet people where they are". *Value* simply means that the medium is cost effective for advertising buyers. Clear Channel promises advertising buyers that "you reach a lot of people, over a long time period, where purchasing power is the highest" (Clear Channel 2017).

In a telephone conversation with the author (28/04/17) a Clear Channel spokesperson says that the company uses a methodology called *Outdoor Impact* to estimate outdoor advertising value. The methodology includes some industry specific terminology, most of which includes measurement. I will mention some of them to give an idea of how the industry thinks and operates. *Coverage* for the advertising industry means the number of people who will see a campaign at least once (expressed either in terms of percentage of population or as a direct number). *Frequency* implies how many times an advertisement is seen on average. *Flow* means how many passages there are past an individual location, regardless of how visible it is. It is therefore a measure of "busyness". *Opportunity to see* (OTS) is the flow measurement adjusted for where a poster is placed. How a poster is placed will affect whether or not people in movement will have the opportunity to see it. *Visibility adjusted contact* (VAC) is the OTS-measurement reduced by a "visibility model" that tells the industry how many people that are likely to *actually* see a poster. *Share of voice* accounts for the proportion of the available media that a campaign constitutes. For instance, if a company has 10 posters in a region with 100 posters, that company would have a share of voice of 10%. Finally, many of the calculations (flow, OTS and VAC) are sensitive to the time of year, how many hours of daylight there is and hence the *illumination* of posters. A poster is counted as illuminated "if and only if there is a directly builton illumination device" (OutdoorImpact 2017).

This is the backdrop for why sociologist Anne M. Cronin (2008a, 2734) argues that the outdoor advertising industry produces city space as "calculable and hence governable". She argues that actors within the industry produces and circulates calculative measures as a form of currency that helps them to enact market relations. The industry "trades in producing and selling spaces on which to advertise outdoors" (Cronin 2008a, 2736). Furthermore, Cronin writes that:

"urban space was understood not as a fixed arrangement of specific locations but as spaces and times of *density*—that is, densities of people which could be translated by market research's classificatory practices into 'target markets'[…] Space is understood only as the support surface or medium for moments of visual contact with potential consumers" (2008a, 2737).

So why would Clear Channel engage with city bikes? In 1999, according to interviewee Alex, Clear Channel was looking for public contracts that could give the company more advertising space. They needed new products that could be sold and decided that third generation BSSs would fit the bill. Interviewee Orsa, who was involved in the process leading up to the first BSS in Oslo, was adamant that Clear Channel never did this out of charity. For corporations, public bicycles can function as a corporate branding strategy. The most obvious examples of this may be how large banking institutions such as Citibank (New York), Barclays and Santander (London) have decided to sponsor schemes. According to Orsa, "the medium itself [the bicycles] forms part of your brand […] That is a distinctive characteristic for outdoor advertising. That is why you never see advertisements on toilets — ever"![11]. Furthermore, interviewee Chris explained to me how Clear Channel can build an identity around the bicycles as something good that they are involved with.

Moreover, it is something the company can talk about when interacting with advertising buyers. As former general manager Mats Lundquist said in Aftenposten: "The city bikes are everywhere and has good exposure in the city. Furthermore, they provide goodwill, they're surrounded by a fundamental positivity that advertisers like to be affiliated with" (Kirkebøen 2016b). Clear Channel promoted the city bikes as a way to reduce pollution in the city center and as a healthy and environmentally alternative to other means of transport. At the same time, a Clear Channel representative is quoted as saying that "we wish to have it [the system] as centrally located as possible. We want as much visibility as possible, and do not hide the fact that we are dependent on getting advertising billboards to earn money on this" (Langfeldt 2011, 57). According to Trond Blindheim, who has co-authored a book on outdoor advertising, any advertisement has one goal in the end. They have to sell! He says that "the only thing that legitimizes the

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[11] The advertising funded public toilets in Oslo is financed by advertisements in connection with the bus shelters (APBS 2013, 28).

advertisement is that it works to its intention, and that is measured at the cash register"
(Blindheim 2005).

Urban Infrastructure Partner

Urban Infrastructure Partner was founded in October, 2014, in the midst of the
tendering process for the second bike-share contract in Oslo. The company is
subcontracted by Clear Channel to own and operate Oslo Bysykkel. According to
interviewee Mika, Urban Infrastructure Partner mainly focuses on "moving people" in
the city. Therefore the amount of trips in the system is a very important measurement to
them.

The investor Selvaag[12], who owns 50% of the company, says that:

> "For us this is an attractive investment, where we over time will see a
> significant upside. Not least by using the platform that is being established
> now in Oslo to expand to other places […] The venture is in line with
> Selvaag's ambitions […] to contribute to a positive urban development"
> (Selvaag Gruppen 2015)

The CEO of Urban Infrastructure Partner, Axel Bentsen, have ambitions of expanding
the company's efforts to other cities in Norway and in Europe (Selvaag Gruppen 2016).

ShareBike AS

ShareBike is the provider and subcontractor to Urban Infrastructure Partner in the
second BSS in Oslo. The company provides the equipment for the system, including
bicycles, docking stations, management software and the platform for a user app. The
company was founded in 2010. The bikes are designed by Frost, an Oslo based design
agency (Oslo Bysykkel 2016).

Public space users

Public space users include both members of Oslo Bysykkel and those who simply
inhabit public space. Interviewee Gabriele has used the city bikes for several years. S/he
argued that from a user's perspective, it is not very interesting to hear about the total

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[12] Selvaag is a concern primarily involved with housing (construction, rehabilitation and maintenance of
properties) and city development.

amount of trips that the system has. Users are more interested in a system that is reliable and which offers *them* a good service. This should be contrasted with Urban Infrastructure Partner who may have a more utilitarian approach (to create as good of a system for as many as possible to maximize trips).

This thesis has not focused on non-users of the BSS. An interesting research topic would be what implications the increased presence of advertisements has in the city, but this is a notoriously difficult topic to say anything conclusively about. For that reason such implications have been left out of this study.

An important side note here is that a lot of people do not know that the BSS in Oslo is funded by advertisements, even if this conclusion is admittedly based on a small sample of my personal interactions with friends and acquaintances.

2.2.9 Profitability of bike-sharing

Whether BSSs can be profitable on rider revenue alone or not is an important question, as the answer to it likely impacts what kinds of governance model any authority chooses. However, as mobility researcher Miriam Ricci notes:

> "…local governments can support bike sharing directly with a subsidy or indirectly by allowing operators to advertise on the bicycles, stations or other public spaces. Overall, the readily available evidence on the financial viability of existing bike sharing systems is limited and predominantly anecdotal or qualitative in nature. This may be due to the commercial sensitivity of such information and the specific BSS contractual arrangements" (Ricci 2015:35).

What does seem to be true, nonetheless, is that third generation BSSs are not easily turned into profitable ventures on their own. As Shu et al. (2010, 4) commented; "to the best of our knowledge, none of the existing bicycle sharing system [sic] have turned a profit, and most rely on government subsidy or private donation to sustain their operations".

BSSs demand quite considerable investment and operation costs. According to the OBIS project[13] the costs of a BSS "can be divided into two main categories: infrastructure & implementation and running costs". The bulk of the infrastructure and implementation costs consist of the physical development of stations (70 %) and the purchasing of bicycles (17 %). In large-scale systems, implementation costs add up to € 2,500 - € 3,000 per bike. If the BSS does not depend on stations or if the stations do not need any groundwork the costs are reduced significantly. The bulk of the running costs consist of redistribution of bikes (30 %), bike maintenance (22 %) and station maintenance (20 %). The running costs add up to € 1,500 - € 2,500 per bike and year[14] (Büttner et al. 2011, 26–27).

Achieving a profitable system is even more complicated when the public body involved wants to ensure universal access by making the system very cheap for the end user. This is the case in Oslo. With very low membership prices it will be more difficult to obtain a return on investment (ITDP 2013, 88). In addition, the Municipality of Oslo strives for geographical equality of access to the BSS. It would be is easier to make a scheme economically viable by constructing and expanding the system in relation to demand. This is also the reason why BSSs tend to be biased towards more economically privileged geographic areas (Duarte 2016). As an example, the BSS in New York has been a success in the central business districts. But difficulties emerged when people started calling for the system to be expanded to less affluent neighborhoods. The private company in charge of the system claimed that the system would not be economically viable with such an expansion without further funding. This situation pushed a lot of Council members to ask for the Mayor to subsidize an expansion (Meyer 2017). In Oslo, the municipality has not been close at this point to subsidizing the BSS, but a serious debate on the topic could potentially arise in the coming years.

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[13] OBIS stands for Optimising Bike Sharing in European Cities. The project was funded with money from the EU and was created in order to gather information and share knowledge about bicycle sharing to relevant stakeholders in the field.

[14] The estimates stated in terms of percentages here are based on the Bicing BSS in Barcelona. The estimates stated in terms of Euros come from a collection of European cities.

2.3 **Outdoor advertising**

The advertisements that fund city furniture and the BSS in Oslo are of a specific kind—outdoor advertisements. Outdoor advertising (or out-of-home advertising) can be defined as "any outdoor sign that publicly promotes a product or service, such as billboards, movie kiosks, signs on vehicles, etc." (Oxford Reference 2017) or "all forms of advertising that provide out-of-doors exposure" (Lichtenthal, Yadav, and Donthu 2006, 237). Outdoor advertising is different from other media channels in that its "market [people] circulates around the medium [ads]" rather than the medium being circulated *to* the market (Lichtenthal, Yadav, and Donthu 2006, 237). It is often held up as unique due to its steady presence where people are. The audience cannot simply zap, discard or 'click away' the advertisements (Lichtenthal, Yadav, and Donthu 2006, 238).

In the following sections I will first delineate the historical development of this advertising medium. I then move on to describe the current context and the connection to advertising funded street furniture. Chapter 2 ends with a discussion on the contentious nature of the medium.

2.3.1 History of outdoor advertising

Outdoor advertising is the earliest form of advertising. But the use of the medium has for a long time been quite limited. During the middle ages it was rarely used because of an absence of competition in the market place. Guilds controlled production, prizes, product standards etc., which limited the need for producers to distinguish themselves from others. With the dawn of the industrial revolution and increased competition this changed and producers started looking to outdoor advertising as a means to position themselves better in the market (Blindheim, Kunøe, and Stangeland 2001, 7).

Historian Laura Baker outlines the development and reactions to outdoor advertising in the US, where by the 1890s, advertisers and businesses rapidly increased the use of billboards in public space. Reformers saw the proliferation of outdoor advertisements as a commercialization of public space and the industry was quickly subjected to intense opposition (Baker 2007). Outdoor advertising was criticized as an "intrusion of crass commercialism in cities at the expense of civic beauty and order which embodies "the common good" (Iveson 2012, 158). One of the arguments made against the outdoor

advertisements where on aesthetic grounds. Many considered the billboards to be visually polluting elements. The industry tried to flip this argument on its head, arguing that outdoor advertising could help beautify some areas, as well as cover up social inequalities in the cityscape. As a way to improve its profitability and reputation, the industry early on decided to self-regulate by adopting the billboard as the standard format of outdoor advertisements (Baker 2007, 1190).

Critics also challenged the basic idea that public space should be utilized as a medium for private capital accumulation. But more than anything, civic reformers felt challenged by the apparent power of outdoor advertisements to shape the public. To them, civic architecture was understood to have a civilizing effect by instilling a type of "higher culture" in the population (Baker 2007). The geographer Kurt Iveson (2012) calls this the *ceremonial normative model of public space*, where "good public space is space that privileges the civic order over and above private market interests". In this model, the public is generally seen as a passive spectator that internalizes the civilizing influence of great architecture (Iveson 2012, 159).

Outdoor advertising, on the other hand, was symbolically associated with the lower classes and the emergence of mass culture—a kind of mass consumerist culture different from the elite's genteel values and tastes. Reformers saw it leading to a mass consumer society, where citizens where addressed as consumers to always "embrace new habits, tastes, and values based on commodity consumption" (Baker 2007, 1194). With outdoor advertising increasingly dominant, they feared the emergence of a mass society that was slipping out of their control: "their primary concern was with the threat it posed to their own authority—to their power to shape public culture and, by extension, citizenship and nationhood by architectural means" (Baker 2007, 1188). Some outdoor advertisers argued that this was a good thing and that their products— rather than merely being a tool for corporation's greedy self-interest—were means to challenge an authoritarian past by speaking to people as individuals. They would argue that "the poster celebrated freedom from self-denial and submission, introducing the individual to new possibilities of self-expression and fulfillment through commodity consumption". Critics, on the other hand, argued that the advertisements simply "stimulated base senses, not the higher sensibilities. It cultivated self-absorption, not

civic consciousness. It encouraged self-indulgence, not deference and self-discipline"(Baker 2007, 1205).

In early 20th century U.S., the value of public space was defined "in terms of its expressive power, not in terms of its contributions to democratic political life or its support of social heterogeneity". Reformers did not believe that "public space's design and use should be subject to genuinely popular determination any more than it should be at the mercy of the vicissitudes of the market", but rather that it should be in the hands of a cultivated and enlightened citizenry of experts; i.e. by people like themselves (Baker 2007, 1200).

One of the main ways of reformers to combat the rise of outdoor advertising was through the regulation of height and other limitations on the billboards, alongside with zoning-laws that protected some areas from exposure. However, Baker (2007, 1195) argues that:

> "Exclusionary zoning was a compromise. While it established the legality of reasserting the spatial boundaries violated by billboards—of physically segregating, in zoning parlance, "incompatible land use"—it did not secure reformers' equally desired goal of establishing aesthetic regulation as a legitimate exercise of police power, an effort the courts had consistently struck down on the grounds that aesthetic considerations were luxuries, not necessities".

The industry was struggling for legitimacy and was generally very unpopular, but it used several tactics to improve its image: "In addition to emphasizing business ethics, individual bill posters often sought to enhance their local reputation through community service, including donating board space to religious and civic organizations" (Baker 2007, 1202). But perhaps the main way for the outdoor advertising industry to gain legitimacy was by offering its services to powerful constituencies in the country. Some civic reformers and intellectual elites were intrigued by the "universal salesmanship" of the outdoor medium and its potential to shape the public into a "unified citizenry" just as easily as it could be used to turn them into "a massified clientele". The most famous example is how New York journalist George Creel and his colleagues helped the Wilson administration ramp up support for the country to enter WWI, not least through the use of outdoor advertisements (Baker 2007, 1206). As Baker notes:

"Advertising trade associations, attuned to the promotional benefits of patriotic service, actively sought to convince officials that the methods developed for conveying commercial messages were also appropriate to conveying "public information," and industry leaders were ready to promote the nation's militancy when the United States finally entered the war" (2007, 1206).

In this way, the industry managed to gain increasing legitimacy in the eyes of reformers. From a history of conflict between reformers and the outdoor media industry, the relationship between the two became increasingly characterized by convergence. Baker finally concludes:

"The commercialization of public space precipitated a battle between civic and commercial interests over control of urban space as an expressive medium. Democratic accessibility was not an issue. Reformers' concern was for the symbolic integrity of the urban landscape, not the democratic integrity of the public sphere. Billboard reform, in fact, facilitated private enterprise's monopoly over the legal uses of public space for bill posting; as would become true of almost all modern mass media in the United States, participants in this public sphere had to pay"(Baker 2007, 1207).

2.3.2 Current context for outdoor advertising

Outdoor advertising today constitutes only a relatively small part (6%) of the entire advertising industry. However, the entire advertising industry is massive and recorded sales of \$493bn (≈ NOK 4,12tn) in 2016 (Letang and Stillman 2016). In Norway, since 2012, outdoor advertising has seen a slight increase while at the same time making up a larger share of total advertising sales, now representing 4,9% (NOK 447m) out of a total of NOK 9,169bn (Mediebyråforeningen 2017). This follows a broader global trend in the 21st century where outdoor advertising has managed to maintain or increase its share of total advertising, despite the emergence of new media channels. Some industry insiders claim this is due to the mediums ability to break through in an ever expanding 'attention economy' which enables it to reach customers in their everyday lives. Iveson claims that we should be somewhat skeptical of this explanation as it is self-serving for the outdoor advertising industry and is at best only partial. Rather, he argues that the industry has benefited from a "shift towards neoliberal logics and practices of urban governance" by the introduction of public-private partnerships "for the provision and maintenance of urban infrastructure" (Iveson 2012, 153–156). Similarly, Martín Tironi

argues that "modern urban infrastructures are more and more closely linked with 'neoliberal' political criteria relating to the way the city is governed and managed" where cities include "more and more private players in urban decision-making [by] relying on increasingly numerous public-private partnerships" (Tironi 2014, 168). According to Klassekampen (Smedsrud 2015b) approximately 30 Norwegian cities had entered advertising funded agreements over city-bikes, bus shelters, busses and metros by 2015. Many of the contracts last for 15 years or more (Venli 2012b).

In the last few decades the global outdoor media market has come to be dominated by a few multinational corporations. Some of them are part of larger media conglomerates, of which the most prominent ones are Clear Channel Outdoor and the JCDecaux Group (Iveson 2012, 153). Clear Channel and JCDecaux are also the dominating actors around the world when it comes to advertising funded BSSs (Tironi 2014, 166). According to Morten Kerr, a Norwegian advertising and signage consultant,

> "trends from abroad and pressure from the building authorities locally have contributed to advertising actors in Norway being acquired by foreign concerns, so that there are now only two main actors left on the Norwegian market [JCDecaux and Clear Channel]. These have in common that they invest millions on product design development and uses reputable architects to nicely package their products, through which they find a more natural place in the city scape, streets and natural landscapes" (M. I. Kerr 2002).

For example, all the advertising funded elements in Oslo were designed by architects specifically for the city. Aesthetics and functionality were central aspects of their design[15]. According to Deloitte, Clear Channel and JCDecaux together controlled 95% of the outdoor market in Norway in 2013 (Deloitte 2013, 20). The two companies compete for many different advertising contracts, including for city furniture like city-bicycles, bus shelters and public toilets, but also for advertisements in trams, the metro system and in airports. Finally, even if Clear Channel and JCDecaux are fierce competitors in the outdoor media market, they also share common interests. Mats Lundquist, former CEO of Clear Channel, is quoted as saying that:

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[15] Note 211/2004 to the City Council. 22/06/05. Item number 296/05. Accessible at https://www.oslo.kommune.no/sru/default.asp

"Clear Channel does not operate on the outdoor market, but on the media market, and the competition is really tough there in Norway. I think the main task now is to develop outdoor as a media channel and take market share from other media" (Jerijervi 2014).

2.3.3 Advertising funded street furniture

Street furniture refers to pieces of equipment installed in public space, including public bicycles, benches, public toilets, bus shelters and telephone booths. The first recorded use of advertising funded street furniture is from Paris in the 19th century (Gaffney 2009, 149). Despite this, the founder of JCDecaux, Jean-Claude Decaux, claims to have invented the concept of advertising funded street furniture in the 1960s when his company installed bus shelters in Lyon. He described it as a way to take on several challenges that would be of interest to public authorities, among them "to provide a service to public transport users; to remedy the problem of dilapidated equipment; to fight against surplus and unsightly advertising and, by revaluing it, make known the lively role that quality advertising can play". In other words, he presented such arrangements as a solution to the "chaos" of outdoor media (Iveson 2012, 160).

The history of advertising funded street furniture in Oslo goes back almost 30 years. During the 1980s there were debates about the poor maintenance levels of bus shelters, trams, benches and public toilets in the city. In general, maintenance of such infrastructure is not seen as a very prestigious political project, which may account for why the municipality had neglected such issues for some time. In 1988 the City Government turned its attention to other cities in the world to see how they had come to grips with similar issues. By 1992 they decided that they should follow the example from abroad to finance such maintenance needs by entering contracts with international advertising companies. But the process to actually enter such agreements was slow and cumbersome. The municipality struggled to find an implementation model for such advertisement agreements that they would find tolerable (Butenschøn 2005). The City Government attempted to divide the city into several zones for tendering, rather than releasing a single tender for the entire city. Jean-François Decaux, the son of Jean-Claude Decaux, claimed this was a unique attempt by the municipality to control the

advertisements and he argued that they should either accept or reject advertising funding and not engage in half-measures[16].

It was not until 2001 when *Viken Energinett* (where 2/3 of the stocks were owned by the municipality) entered into a 20-year agreement with JCDecaux for the maintenance of descent towers[17] that the model was put to use[18]. The towers had previously been poorly maintained which prompted JCDecaux to propose the idea in the first place (Aadland 2003a). By 2002 Oslo entered into agreements with JCDecaux and Clear Channel for the provisioning of bus shelters, public toilets and city bikes. In this way, the municipality in a short period of time went from being a main critic of advertisements to being the largest individual land owner responsible for placing outdoor advertisements in the city (M. I. Kerr 2006b).

2.3.4 Contentiousness of outdoor advertising and advertising funding

Outdoor advertising is a highly contentious issue. This is true historically as well as today. The medium's prominent visibility in public space makes it easily politicized and more likely to be subjected to regulation (Blindheim, Kunøe, and Stangeland 2001, 85). Outdoor advertisers have, according to Anne Cronin, "exploited cities' densities as efficient means of communicating with large numbers of people" and

> "the expansion of outdoor advertising in public space […] caused considerable consternation which was directed primarily at its perceived effects on public morality and decency, and on the impact outdoor advertising was having upon the aesthetics of the countryside and cities" (Cronin 2008, 97).

Ivar Johansen from political party Sosialistisk Venstreparti has been a prominent critic of the outdoor advertisements aesthetic impact on Oslo, seeing them as a form of "visual pollution" (Brenna Vollan 2015).

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[16] Information from http://www.stans.no/papir/dn-2005-02-05.png
[17] A descent tower enables access to underground electrical facilities. The ones used in the agreement between Viken Energinett and JCDecaux were 4,5 meter tall and illuminated.
[18] Information from *Klagenemnda for miljøinformasjon*. Item 2011/4. Accessible at http://www.miljoklagenemnda.no/Vedtak/Sak_2011_4_Hafslund.pdf

Åse Brandvold and Tage Wester from magazine *Vreng*[19] criticized the advertising funding of public services on the grounds that it leads to a commercialization and privatization of public space. They questioned why only commercial messages where allowed in the city and called for debates on the democratic legitimacy of the arrangements. In addition, they wanted to raise the question of who owns the city and who has the right to express themselves in it (Brandvold and Wester 2004). Outdoor advertisements (like all advertisements) are also criticized on environmental grounds. As Marthe Hammer from Sosialistisk Venstreparti said: "Advertising adds pressure [on people] to buy and consume. It goes against all environmental objectives to reduce consumption in society" (Smedsrud 2015a).

Martín Tironi bases his critical discussion on advertising funded BSSs on a case study of Paris' system Vélib (funded by JCDecaux). The inauguration of the scheme was met by boycotts from green party sympathizers, which may seem paradoxical. Tironi argued that "the general framework of the controversy relates primarily to the private sector impetus behind this new urban technology" (Tironi 2014, 171). Critics felt the BSS was being used as a "public relations tool" while reflecting a type of "neoliberal urbanism" where private actors had an increasing role in public space, and the model was seen to build up the advertising market and serve powerful economic interests. Some felt the scheme was intended to improve the image of JCDecaux, which according to Tironi was really poor in France. They also argued that the company's newly found enthusiasm for bicycles represented a 'hijacking' of moral ecological concerns (Tironi 2014, 170–177).

The degree of contentiousness of outdoor advertising is necessarily dependent on context. Different cities, areas and people will have different 'tolerance levels'. In Oslo the issue of outdoor advertising has arguably been quite contentious, but not as contentious as in Norway's second largest city Bergen. The history of advertising funding in Bergen is filled with conflict. The city's elected representatives had initially entered a contract with Clear Channel in 2002 for a 18-month bike-sharing trial scheme (Meland 2002). After the completion of the trial scheme, the municipality decided to release a tender for a 15 year contract in 2004 which Clear Channel won. However, a

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[19] Vreng was a magazine (2004–2008) that wrote about the 'mental environment'. It was published by the foundation Adbusters

variety of actors in the city virulently opposed the introduction of the outdoor advertisements and the municipality made a u-turn in 2005 and decided to cancel the contract. Clear Channel felt that the municipality had broken its contractual obligations and decided to take legal action and demand compensation for the company's economic losses, a battle that the municipality of Bergen ended up winning in court (Lura, Tufto & Mæland 2007; Kristiansen 2005). Interviewee Audun explained to me that Bergen has since struggled to find a model that could finance a BSS. In the summer of 2016 the city had a very successful trial scheme which had advertisements only on the bicycles. Audun mentions how this sparked a new debate about advertising funded bike-sharing and that most agreed that such limited advertising could be accepted[20].

People's opinions on advertisements are highly dependent on where it is placed, how it looks, what the advertisements are for etc. For instance, the advertising funded descent towers mentioned previously received a lot of criticism on the grounds that they dominated the city scape to an unreasonable extent and caused trouble for residents by being illuminated during the nights. In 2004, *Stans!*[21] started a campaign to rid the city of the towers. The campaign managed to have its way in the end when the Municipality of Oslo decided to do away with the towers (even if it took many years for this to actually come to fruition)[22]. It's clear that many actors consider advertisements more tolerable when "one gets something in return", so to speak. In an e-mail to the author on February 2nd, 2017, Håkon Wium Lie from Stans! says:

> "It's nice that one has access to bicycles in the city, but the advertising impression in the city has increased considerably because of the scheme. But the scheme is way better than the descent towers we have fought against for a long time. There, the municipality got nothing back".

The billboards used by Clear Channel, standardized as eurosize billboards, are different and definitely less physically imposing compared to the descent towers. Interviewee Theodore comments:

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[20] It should be noted that, as far as I can recall, I haven't found a single specific complaint about the advertisements *on the bicycles* per se; rather, people are mostly concerned about the eurosize billboards that are permanent facilities in urban space.
[21] Stans! was a citizen initiative in 2005 that was explicitly created for the purpose of ridding the city of advertising funded descent towers.
[22] See Stans.no

> "I think that these eurosize showcases are [more acceptable]. They are on a more humane level. And one has become accustomed to them. In whatever city you go, throughout Europe, America [you see them]. With these eurosize showcases the advertisement surfaces are a lot smaller than they were, and they are usually of higher quality than what one was used to"

After this exposition of all the ways that the model is contentious, one may ask why the municipality agreed to it in the first place. In her master thesis on Oslo Bysykkel, Arild Alsvik (2009) argues that BSSs have something that "everyone can like", including environmental benefits, health effects, another transport service for the local population and a generally "nicer" city to live in. In addition, the bicycles can be used by politicians as a sign of their commitment to act on environmental issues. The bicycles can both "say and do things" without hurting anyone in any straightforward way. But it would be a lot more complicated if the municipality were to fund the system itself (and there has not been enough political support to do so for neither of the systems) because the system would then be subjected to more well-defined performance criteria than it is now (Alsvik 2009).

So when a company like Clear Channel offers to pay for and operate the system, it is quite easy to say 'yes'. As interviewee Frøy explained, the municipality's economy is already quite strained, which leads many of the political parties to prioritize more crucial public services like health, welfare and education. Furthermore, Oldenziel & Trischler (2016, 87) may be right when they describe the "faith in public-private partnerships between local communities and multinational corporations as a way of avoiding the politically more sensitive issue of directly raising taxes for a more sustainable future". To considerably raise fees for the end-users is already ruled out as the Municipality of Oslo wants to ensure "access for everyone". Simultaneously, funding bicycles have "offered the multinational corporation a foot in the door and political leverage in the fierce transnational competition for outdoor advertising space" (Oldenziel and Trischler 2016, 90).

The contentiousness of outdoor advertising may be the reason why Clear Channel has allowed civic organizations advertising space. In 2015, for example, Clear Channel wanted to give away advertisement space to a value of 1 million NOK to a charitable organization. Organizations were asked to apply for the giveaway and Clear Channel would choose the organization that they felt needed the space the most (Kreativt Forum

2015).This echoes what some industry representatives did historically to legitimize the industry in the U.S. when it provided a platform for religious and civic organizations for free.

3 Prior research

As I have stated previously, thorough research on the implications of different governance models for BSSs seems to be lacking. For that reason this section will be fairly short and will focus on some main findings with regards to BSSs and some previous research done on Oslo Bysykkel.

3.1 Main findings on bike-sharing systems

Despite 3rd generation BSSs being a relatively new phenomenon a lot of research has already been done on them. Some themes have emerged from the literature. One is that users generally join bike-sharing schemes because of convenience and the value for money they feel they receive. Another (rather disappointing) finding in the literature is that bike-sharing trips primarily substitutes for walking and public transport, i.e. not car journeys, as might be hoped (Fishman, Washington, and Haworth 2013; Ricci 2015, 37). BSSs are expected to reduce car usage and that is also the case in most places. But in some places, like London, fleet redistribution needs are so heavy and the rate of car substitution so low that the system actually increases car usage (Fishman, Washington, and Haworth 2014). This fact leads researchers to conclude that there is a "need to facilitate bicycling through appropriate infrastructure (such as bike paths and bike parking), traffic calming, training and education programs, and other supportive measures" (Pucher, Dill and Handy 2010, 107).

Some of the other research findings for BSSs are, at this point, not robust enough to draw any far-reaching conclusions (Ricci 2015, 33). This is partially because BSSs are not implemented in a vacuum. The introduction of BSSs is usually done in concert with a variety of measures that are intended to increase bicycling as a transportation mode. It is therefore difficult to isolate the effect of the BSSs from other measures. What is clear, however, is that cities that have implemented BSSs see an increased use of bicycles (Pucher, Dill and Handy 2010, 116).

It is also difficult to assess to what degree BSSs have an indirect effect on bicycle usage. Some studies have looked at BSSs potential in normalizing the image of bicycling in the general population. The normalization is understood to happen through

the increase and diversity of 'role models' using bicycles in a city. For instance, research has shown that private bicyclists tend to use specific bicycle gear and clothing (e.g. helmets, high-visibility clothes and sports clothes) to a larger degree than users of bike-sharing. Such specialized clothing can function as a barrier to potential riders because of the seeming effort needed to 'get going' (Goodman, Green, and Woodcock 2014).

3.2 **Prior research on Oslo Bysykkel**

The most extensive prior research on Oslo Bysykkel was done by Master student Arild Alsvik. She approached the BSS from a sociological perspective and attempted to find out what the purpose of the scheme was, what effects that were expected with the effort and why the scheme was adopted by elected officials. Here I will just mention a few of her findings and arguments that have bearing on this thesis.

She claims that "there is no clearly defined goal or expectation that the service will have any *effect*, even though many potential positive implications are mentioned. Still, no quantifiable results are expected" (Alsvik 2009, 74). She argues that the lack of measurable goals is tolerated by the municipality because the BSS does not burden the municipal budget and is therefore less likely to be problematized. She also argues that the bicycles fulfill an important task for politicians: "The fact that the city bikes are really visible in urban space seems to be another important reason for why politicians like them. They [the bicycles] can signal that one has done something for the environment" (Alsvik 2009, 78). Finally, Alsvik claimed that:

> "For the operating company Clear Channel, the objective with the city bikes is to gain access to new places for advertising billboards, and the city bikes can therefore be said to act as a type of trojan horse that secures the advertisements access to places where they would otherwise not be allowed" (Alsvik 2009, 89).

Another Master student, Tuva Langfeldt, wrote about Oslo Bysykkel and other BSSs from the perspective of sustainable transport and urban identity. She identified some of the key challenges in the first system. One was that the system experienced capacity issues. The ratio between bicycles and docking spaces was too close (0,8 bikes for every docking space) which caused stations to fill up with bicycles. The physical development

process of stations took a long time, not least because of restrictions for where advertisements could be deployed. Clear Channel was responsible for the application process to the municipality, but lacked the experience with such procedures to fulfill the role properly. Clear Channel also lacked the proper experience from operating a BSS before. Finally, she speculates that the difficulties in expanding Oslo Bysykkel could be because of the advertising funded model and the contractual limitations it contains (Langfeldt 2011, 56–68).

4 Basic premises and methodology

This chapter will introduce the reader to the basic ontological premises on which the research is based and how they relate to the choice of a case study. This is done in order to provide transparency. The chapter will also describe the methodological framework that has been inspired both by Grounded Theory and abductive analysis. The chapter ends with an exposition on the concrete methods and data that have been used.

4.1 Case studies and critical realism

This research project is a case study. A *case* "connotes a spatially delimited phenomenon (a unit) observed at a single point in time or over some period of time" (Gerring 2007, 19). Moreover, "a *case study* may be understood as the intensive study of a single case where the purpose of that study is – at least in part – to shed light on a larger class of cases" (Gerring 2007, 20). Case studies are intrinsically "not perfectly representative" of all similar cases. They always carry "an element of doubt about the bias that may be contained in a sample of one or several" because social phenomena rarely exhibit consistency (Gerring 2007, 20). Case studies consists of "detailed, in-depth data collection involving multiple sources of information rich in context" (Creswell 1998, 61).

Marketing Professor Geoffrey Easton (2010) claims that the use of case studies is very seldom justified in research. Specifically, he argues that case studies generally lack a "philosophical validation, i.e. ontological and epistemological underpinnings" and that *critical realism* provides such underpinnings (Easton 2010, 127). A brief explanation of the perspective of critical realism, based on Easton (2010), will therefore be given as a justification for the use of a case study.

The main assumption of critical realism is that there is a world 'out there', independently of our knowledge of it. This separates it from pure interpretivists who claim that we can only put forth our *interpretation* of the world but never know what is 'real' (Easton 2010). This line of reasoning is usually associated with postmodernism, which dismisses any attempts by science to learn "the truth" as naïve. I disagree with that position. In agreement with Stewart (1998, 13–14), I believe that postmodernism

"commits the antirealist fallacy of trying to derive conclusions about reality from features of our representations of reality". Many interpretivists also reject the notion that we can use causal language (i.e. to say that X *causes* Y) to explain the world. In critical realism an assumption is that we *can* use such causal language and that it is possible to gain knowledge about the world. Critical realists recognize that the world is socially constructed, but does not agree it is exclusively so (Easton 2010, 120).

Furthermore, they believe that "our knowledge of the world is fallible and theory-laden" (Easton 2010, 119) but that reality has a way of 'breaking through' to dismantle certain stories, narratives and theories that researchers and practitioners might hold on to. At the same time, critical realists are skeptical of the positivist assumption that "there exist regularities or law-like generalizations in material or social settings that provide the basis for both explanation and prediction" (Easton 2010, 118). From a critical realist perspective "social phenomena are intrinsically meaningful" and meaning has to be *understood*, it cannot be measured or counted, and hence there is always an interpretative or hermeneutic element in social science" (Easton 2010, 122). Following this reasoning, a critical realist does not look for extensive observations in order to establish statistical inference. Rather, "a single case study must be able to stand on its own. The key opportunity it has to offer is to understand a phenomenon in depth and comprehensively" (Easton 2010, 119).

4.2 **Background to methodological framework**

After an initial review of the bike-share literature I noticed that a problem which had not yet been researched thoroughly, at least to the best of my knowledge, was the implications of different governance models for operating BSSs. I decided that an exploratory approach would be appropriate for researching the topic. Some analytical tools from the Grounded Theory approach appeared to me to be well suited for such purposes (see Denscombe 2007, 92; Engward 2013, 38). Because of the exploratory nature of the research I did not start out with rigidly specified research questions to be investigated (since these should emerge in the process of research), but rather with something that in the beginning was "more like a vague research curiosity: What is going on here?" (Strübing 2011).

4.3 **Methodological framework**

In this section I will describe the analytical tools that have been used in the study. The methodological framework has been somewhat influenced by Grounded Theory-literature. But I make no pretension to call this study an example of Grounded Theory, not least because I will not be producing any new theory[23]. What I have used from the Grounded Theory approach more specifically is the analytical method of constant comparison, theoretical sampling and theoretical saturation, as well as a specific coding procedure. I will also describe why an abductive approach has been chosen in this context.

Glaser and Strauss—the originators of Grounded Theory—argued back in 1967 that it was common practice in the social sciences to do highly empirical research, only to "tack-on" sociological grand-theories at the end of the research process, despite "dubious fit and working capacity" (1967, 4). In other words, researchers "would force data into the straightjacket of preexisting concepts" (Timmermans and Tavory 2012, 169). At the other end of the spectrum they saw "down-to-earth qualitative research" with "a less than rigorous methodology, and an unintegrated presentation of theory" (1967, vii). Especially ethnography, according to Stewart (1998), has been characterized by a lack of methodological standards. I have attempted to avoid falling into any of these categories by adapting a more rigorous analytical framework based on insights from abductive analysis and Grounded Theory. I will now proceed to describe how these two fit together and what methodological tools that have been used.

4.3.1 Abductive analysis

To close the gap between theoretical insights and empirical data, I have used an abductive approach. Abductive reasoning is an underlying logic and a creative process "aimed at producing explanatory hypotheses" (Timmermans and Tavory 2012, 167). The originator of the term, C. S. Peirce, "proposed that hypotheses originate in attempts

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[23] Grounded Theory was initially put forward by Glaser and Strauss (1967, vii) as an attempt to close what they saw as an "embarrassing gap between theory and empirical research". They proposed to close this gap through an analytical framework that was designed to enable researchers to produce theory that was 'grounded' in empirical data.

to explain observed phenomena" (Schvaneveldt 2012, 13). "The theories [or hypotheses] developed in abductive analysis denote an attempt to generalize causal links and descriptions of the world out of particular instances" (Timmermans and Tavory 2012, 174). At its formation, a hypothesis is only plausible and worthy of further investigation (Schvaneveldt 2012, 13).

Abduction is different from both deduction and induction. Deductive reasoning starts with certain premises and draws inferences from those premises, thus creating a rule. The researcher then proceeds into "the real world" to either falsify or verify such rules (Timmermans & Tavory 2012, 170-171). It moves from abstraction, or theory, to empirical data. Conversely, inductive reasoning starts with observations and proceeds to create rules based on those observations (Timmermans and Tavory 2012, 171). It is, in other words, strictly empiricist. With abductive reasoning the researcher instead starts with consequences (usually surprising findings) and proceeds to construct possible explanations that may account for them (Timmermans and Tavory 2012, 171).

Both deductive and inductive reasoning can still be used within the abductive enterprise: "Once a hypothesis has been formed, deduction helps work out the hypothesis by providing a plausible generalization or causal chain". In turn, induction "provides the data that should conform to the deductively delineated premises" (Timmermans and Tavory 2012, 171). Consequently, "the recursive and iterative nature of abductive analysis not only generates but also culls and narrows possible theoretical leads" (Timmermans and Tavory 2012, 180). As the reader will see in section 4.3.3, the abductive enterprise is crucial for the process of theoretical sampling that has been used in this study.

4.3.2 Open-mindedness

One of the keys to this research has been to keep an open-mind as to what might be encountered throughout the research process. Theory was not chosen beforehand and was not intended to be tested in the line of research (see Engward 2013, 37). Some theorists argue that in order for the researcher to keep an open mind, he should not perform a literary review before embarking on his research topic. Others believe that a literary review can be done before, but that the researcher has to be sensitive as to his or her potential biases (McGhee, Marland & Atkinson, 2007). My literature review on

BSSs was done early on in the process. As mentioned previously, this process highlighted some of the unchartered territory in BSS-research. Of course, no researcher comes to the field without any knowledge of potentially useful theories/hypotheses. What matters is that the researcher does not use these "to make sense of the data, remaining open to discovering new concepts and theoretical explanations from the study itself" (Harris 2015, 33). To remain open-minded has been crucial to this project. The clearest example of discovery in this thesis is the sections on advertising regulation and the outdoor media landscape (see section 6.2). This topic didn't emerge until a few months in to the research. I will now describe the methodological tools that have been used.

4.3.3 Theoretical sampling and theoretical saturation

In many sampling methods, sampling is done *before* data collection occurs in the field. This is usually done in order to enable the researcher to generalize findings (common in quantitative research) or to maximize the range of perspectives on a topic. Theoretical sampling is different. Data collection is rather steered towards those sources that can provide information on the theoretical insights that emerge in the line of research – sources that are likely to answer for whether hypotheses are correct or not (Harris 2015; Glaser and Strauss 1967, 49). Right from the start of the research process, when initial data is collected, the researcher systematically analyzes findings to induce the emergence of different hypotheses and questions (Harris 2015, 34). The emergence of these leads the researcher to the next data source – whether that source is an interview, official documents or something else. "The criterion when selecting participants is those who can provide relevant data", but the "criterion for inclusion will change as the study progresses, to test emerging theoretical constructs (Harris 2015, 36).

This recursive process goes on until the researcher reaches a point of theoretical saturation – "the point at which there are no new concepts or explanations emerging and the theory explains fully the concept being explored" (Harris 2015, 37). As the research progresses by the means of theoretical sampling, certain topics become relegated as "less important" with regards to forthcoming analytical insights, and are hence not pursued further (Denscombe 2007, 96). It is important to stress that theoretical sampling

have to be understood in conjunction with the constant comparison method, which will be addressed next.

4.3.4 Constant comparison

Constant comparison is the overriding analytical method used in this research. Constant comparison helps the researcher go through his material continuously so that no integral insights are left out. Many researchers collect data at the initial stages of a project, only to move on to analysis when all data is already collected. In the constant comparison method the researcher does not wait until the end of the research process to start analyzing, but rather codes and analyses data instantly in order to develop concepts. By continually comparing individual bits of the data, the researcher can refine concepts, identify their properties, explore their relationships to one another, and integrate them into an explanatory model (Taylor and Bogdan 1984, 126)

This process helps the researcher maintain a close connection between the categories he develops and the data he has (the ideas about what is happening and the data itself). Hypotheses do not only come from the data, but are "systematically worked out in relation to the data during the course of the research" (Glaser & Strauss 1967, 6). The process involves moving back and forth between data collection, data analysis and further data collection. In this project, analysis of the initial data guided me towards the next step of data collection (see Harris 2015) in line with the theoretical sampling method mentioned above.

4.3.5 Coding process

A pretty straightforward method for coding has been used in this research, consisting of two main stages: *open coding* and *selective coding*. Open coding is done "through a line-by-line analysis, attributing words or sentences of data to a heading or code" (Harris 2015, 37), sorting material by content, for example 'placement of stations' or 'operation issues'. This first round of coding is close to being merely descriptive by labeling "chunks of data in terms of their content" (Denscombe 2007, 98). Selective coding is when the researcher starts looking for "links and relationships between codes so that they can be merged under broader headings, known as categories. The key themes or substantive categories relevant to the topic being investigated, and the

properties of those categories, emerge from this focused coding process" (Harris 2015, 38).

The last few sections of this chapter are devoted to the concrete data collection sources used in this study.

4.4 **Data collection methods**

For practical reasons I have largely focused on the second BSS in Oslo. This is partly due to an intention to produce new knowledge and testimonies on the topic. Producing new information on the first system would be more difficult and problematic as interviews would be more likely to produce inaccurate information because of the "transience (loss of retention over time)" of human memory (Schacter 2013, 56). Therefore, the bulk of information regarding the first system is from prior interviews, official documents and news articles from the time. For the second system a greater emphasis has been placed on new interviews with key individuals.

4.4.1 Interviews

Primary data has been produced in the form of 19 interviews (see appendix 3). Most of them have been semi-structured to allow for open-ended answers and the emergence of surprising data (Denscombe 2007, 176). Respondents have been chosen on the basis of theoretical sampling, as described above. All interview guides have differed quite substantially, depending on whom I was talking to and what type of information informants could potentially provide. The first interview was conducted with a person from the agency that is at the heart of things—the Agency for Urban Environment—to learn about the main actors and to gain an initial overview of the subject area. 15 of the interviews were captured by tape recorder. The four exceptions are interview 8 and 9 (where consent to record was denied) and interview 14 and 19 (which were conducted by telephone).

One limitation to the use of interviews is that I have had to interpret information that is already being interpreted. It would, for instance, in some cases be preferable to have done participant observation instead of interviews. One practical example from the study would be in regards to the process of finding placements for the bicycle stations

(see section 6.1.3). There is a constellation of actors who constitute a group that is charged with optimizing and negotiating placements for Oslo Bysykkel. It would be preferable to witness this process in action rather than asking involved actors about it.

In addition, I have experienced some issues with regards to the willingness of some actors to share information openly and in trust. This pertains to the interviews and questions that touched on the interaction between Clear Channel and the Agency for Urban Environment specifically. I can only speculate as to the reason for this, but it is likely that part of it has to do with the need for these actors to maintain a "good" relationship in order to enable a smoother continuation of the project. Still, my experience with interviewing different actors has in general been surprisingly good, with some actors being more open to provide information than I initially anticipated.

4.4.2 Public documents

Another part of my data material constitutes public documents. These documents include propositions in the City Government regarding the public tendering process and the proposed bike-share contracts. The documents highlight the Municipality of Oslo's intentions with the BSS and their line of reasoning regarding pricing, accessibility etc. Public documents have also been crucial in delineating the progression of advertising regulations in Oslo and the reasoning behind it.

4.4.3 News articles

News articles have been a very important source of information. Luckily there have been plenty of articles written about both Oslo Bysykkel and outdoor advertising since these are two topics that seem to really interest people. I have used quotes from key individuals of the involved actors and have attempted to corroborate any information with other sources of information (interviews and public documents).

5   Theoretical framework

This chapter will go through the theoretical framework that has been used to explain some of the "external" implications of the advertising funded BSS-model. The framework consists of a discussion on the outdoor media landscape and different ideas about public space. It has been chosen as a result of the emerging insights and hypotheses in the line of research. A more empirical approach has been undertaken with regards to the "internal" implications of the advertising funding model, which explains the limited theoretical grounding here.

5.1   The outdoor media landscape

The term *outdoor media landscape* denote

> "the various ways in which urban outdoor spaces are used as media spaces by those who place text and images on urban surfaces and infrastructure to address strangers who pass through those spaces at other times" (Iveson 2012, 161).

The outdoor media landscape consists of many different actors. These include public authorities, commercial advertisers, graffiti artists and activists; in other words actors that use outdoor media in different ways and for different purposes. Some of this media is legally sanctioned and some of it is not. In some media channels one has to pay, in others access is free. The outdoor media landscape is necessarily contested as a result of the diverging interests of different actors and the limited amount of public space available (Iveson 2012).

5.1.1 Public space and the ceremonial model

Outdoor media necessarily forms part of public space. But according to cultural geographer Don Mitchell, "definitions of public space and "the public" are not universal and enduring; they are produced through constant struggle in the past and in the present" (Mitchell 2003, 142). The complexity of defining what public space actually is should make us attentive to how it is being used and understood by different actors. The definitional complexity is also the reason why a specific definition of public space will not be used in this thesis. Instead, the reader will be introduced to two different

approaches that have bearing on the outdoor media landscape; the ceremonial model of public space and a normative idea of democratic accessibility to the public sphere and outdoor media.

Kurt Iveson calls one of the main interpretative models of public space the *ceremonial model of public space*. Adherents to this model tend to consider "genuine public space to be space that represents the triumph of the public over the market, usually through state ownership and large-scale civic design". Public space is valued in the sense that it is a representation of public and civic good (Iveson 1998, 22). Furthermore, 'the people' "tend to be imagined by elites as a passive audience for ceremonial, monumental and architectural displays which might exercise a civilizing influence" (Iveson 2012, 159). Iveson argues that the ceremonial model is still at work today in that "the aesthetic integrity of the urban realm has been of most concern, rather than its democratic accessibility" (Iveson 2012, 159). Such aesthetic concerns are now more

> "typically expressed in the entrepreneurial language of place-marketing […] with critics arguing that outdoor advertising might detract from other landscape values (such as heritage or contemporary architecture) that might be attractive to residents and tourists" (Iveson 2012, 159).

The ceremonial model of public space can for example be said to have been at work when outdoor advertising was initially criticized in the beginnings of the last century in the US, and civic reformers were worried about their own power being undermined by the proliferation of outdoor advertisements. It was seen as undermining the ability of elites to shape culture by means of great architecture and design (Baker 2007). Reformers generally responded through regulations such as zoning-laws and clutter codes to put outdoor advertisements in their 'proper place' (Baker, 2007 & Iveson, 2012).

5.1.2 Regimes of publicity and the advertising funded model

Iveson (2012) addresses the issue of advertising funded street furniture through the lens of normative ideas about public spheres and access to outdoor media. He is particularly interested in the *democratic accessibility* to outdoor media channels when asking; "how are new governance arrangements for outdoor advertising affecting the capacity of different publics to access the outdoor media landscape"? Following Staeheli and

Mitchell (2008), cities can be understood to have different *regimes of publicity*. Regimes of publicity are "the legal and commercial arrangements which seek to govern access to the outdoor media landscape" (Iveson 2012, 161). The nature of such arrangements impact the accessibility of different publics to the outdoor media landscape (Iveson 2012, 161).

Iveson argues that the advertising funded model is likely to have a significant impact on the regime of publicity that public authorities embrace. He mentions how New York City initiated a clampdown on illegal but previously tolerated forms of outdoor advertising and how it coincided with the introduction of an advertising funded street furniture contract. This is because the funding model has some inherent needs in order to be viable: "The key ingredient to the "success" of these partnerships is the profitability of outdoor advertising" (Iveson 2012, 156).

In order to be profitable, the outdoor advertising industry has to monetize advertising space and sell it to advertising buyers. This poses some challenges for the industry. First, they need to provide advertising buyers with quantitative data about the audiences they can reach and what the likelihood is that they will see any advertisements. The quantitative data is dependent on a variety of complex measurements (see section 2.2.8). Furthermore, because outdoor advertisements can easily be vandalized and tampered with, as they are placed in a "chaotic space", the companies need to protect and maintain any installations continuously. Because of the fact that advertisers have previously accessed outdoor advertising space for free (through bill posting for example) the

> "monetization strategies of outdoor media space in part relies upon the capacity of outdoor media companies […] to commodify the places with the highest exposure by purchasing, and then monopolising access to, those places" (Iveson 2012, 157).

The advertising funded model's dependence on profitable outdoor media may push local authorities to regulate other outdoor media in order to boost pricing levels for "legitimate" sites. The public authority do so because they are increasingly reliant on outdoor advertisements to "provide urban infrastructure, so the ongoing profitability of outdoor advertising now appears to be a matter of public interest and benefit" (Iveson 2012, 170). Consequently, these forms of PPPs risk creating a more restrictive 'regime

of publicity' because of the increasing alignment of the outdoor advertising industry and public authorities. Iveson argues that they risk causing a "*monopolization* of the outdoor media landscape" by limiting the accessibility and diversity of outdoor media (Iveson 2012, 162–164).

> "The planning officers are helping outdoor advertising companies with their efforts to monetise their own spaces by reducing the amount of "free" space available to other advertisers and publics. This partnership arrangement appears even cosier when we take into account the fact that local authorities and other government agencies are themselves increasingly in the business of advertising […] As such, their interest in controlling access to the outdoor media landscape is often both as regulator and advertiser" (Iveson 2012, 162)

The regulation of outdoor media has historically had implications for the working class and counter-publics. These groups are fervent users of outdoor media because of its low cost compared to other media. But regulations have usually been justified on seemingly neutral concerns regarding aesthetics and safety (Iveson 2012, 163). Iveson concludes by saying that "once, urban authorities and outdoor advertisers were engaged in a confrontation over the aesthetics of the urban public realm. Now this confrontation is giving way to partnership" (Iveson 2012, 171). But the picture is not quite so simple:

> "New outdoor advertising arrangements might promise to contain advertising and other forms of public address to their proper place, but this is a promise that cannot be kept. As the failed wars on graffiti have demonstrated, it would be prohibitively expensive (not to mention politically repressive) for urban authorities to completely eradicate unauthorised uses of outdoor media" (Iveson 2012, 166; see Iveson 2010)

Finally, as a clarification, a "monopolization of the outdoor media landscape" does not constitute monopolization in the sense that no other actors have the ability to make themselves heard in the public sphere whatsoever. It simply means that a few actors dominate the scene while other actors have limited legal means.

6 Results

In this chapter I will provide the empirical findings from my fieldwork. The chapter is separated into two main sections; one addresses the advertising funded model's implications that are "internal" to the functioning of the BSS itself. With "internal" I simply mean those things that pertain directly to the BSS. The second section addresses the implications that are so to speak "external" to the BSS. With "external" I mean the implications which seemingly are not directly related to the BSS.

6.1 "Internal" implications

This section includes the contractual agreements, the question of development of the BSS as well as the placement strategies for the bike-share stations.

6.1.1 Contractual agreement

One may assume that the advertising funded model is somewhat uniform in results wherever it is implemented, but this is not necessarily true. Authorities want to limit outdoor advertisements as much as possible in any given contract and will have the capacity to strike different kinds of deals with large advertising companies. In other words, the power of the companies is always contingent upon individual authorities.

> "Urban authorities who are not experiencing severe fiscal pressures and/or who can promise access to a wealthy consumer base will likely find these outdoor advertising corporations more pliable than those authorities who are more desperate and/or poor" (Iveson 2012, 165–166).

The advertising-funded model *presupposes* a contractual agreement between a public authority and a private entity that will fund the scheme. This implies a process of public tendering and—in the case of Oslo Bysykkel—a negotiation phase. Getting the contract right is crucial for a well functioning governance of the BSS. Mika says that

> "The most important things really happen before and during [the contractual agreement]. If [the system] is defined and purchased in the wrong way, the following period will suffer. So, in a way, that is where the quality of the service primarily is defined"

The tendering process for advertising funded bike-share contracts in Oslo is similar to a public procurement process. But it is technically a service concession as the municipality does not pay anything for the service but rather allows Clear Channel urban advertising space (Sandved Nordli 2010). Francis explains that a service concession follows the same procedures as public procurement in that the municipality has to adhere to three principles; 1) competition 2) anti-corruption (it should be possible to determine if the process has proceeded correctly) and 3) predictability and transparency of the process. The process also has to ensure equal treatment of actors in order to provide fair competitive grounds.

The nature of 3rd generation bike-sharing is such that they demand large investments at the beginning (a former general manager of Clear Channel estimated a cost between 50–100 million NOK (Flugstad Eriksen 2014), and significant operation costs. This means that any service concession for such systems at the outset limit the range of actors that can reasonably compete. This is even more so when the BSS is to be funded by advertisements. The competitive process will be limited to large actors with financial clout. In Prague, for example, smaller bike-share operators that were already operating in the city could not even participate in the public tendering competition due to the nature of the contractual demands (Ježek 2017). In Oslo the contractual demands have narrowed down competition to two actors for both contracts; Clear Channel and JCDecaux. The two large firms were very aggressive in order to get both the first (Alsvik 2009, 71) and the second contract (according to interviewee Eli).

Interviewee Francis told me that the municipality expected only two competitors for the second BSS-tender, but was hoping for more. Due to a fear that the two large advertising companies might share advertising contracts between them to limit the competitiveness of tendering processes, the Agency for Urban Environment decided to design the tenders for bike-sharing, bus shelters and public toilets in an unusual way. All actors participating had to hand in three separate offers; one for the BSS, one for bus shelters and toilets combined, and one combined offer for all of it. In this way, it would be more difficult for the two companies to split up contracts between them – forcing them to hand in competitive bids. But to bundle the contracts in such a way will inevitably further limit the spectrum for who can potentially compete. Even Clear

Channel (suspiciously, it has to be said) criticized the arrangement on the grounds that it limited competition (Eggesvik 2014c).

Contract length and moving between contracts

In the process leading up to the first contract the municipality considered different amounts of bicycles (500, 1000 and 2000) and lengths of contract (5, 8 and 12 years). It was kept open in order for the municipality to be as flexible as possible "regarding the price the city has to pay by way of advertisements" (Lae and Barstad 2001). There were difficult trade-offs to be made. With a longer contract the amount of advertisements could be distributed over a longer period of time, which reduces the advertising impression in the city. But the municipality did not want to be tied to a lengthy contract for a system whose success they were not sure of. The City Government cautioned against contracts longer than 8 years in the initial stages of the process, as longer contracts were seen to reduce the municipality's maneuvering space.

Advertising companies, on the other hand, tend to prefer longer contracts. This is partially because they want to spread economic risk over time. According to JCDecaux's managing director Øyvind Markussen the companies know that they "will get their share of good and bad times" when contracts are between 15–20 years but "with 10 years you risk having bad times only" (Flugstad Eriksen 2014). In my interview with Chris from Clear Channel, s/he expressed the same sentiment. There has to be prosperous economic times for advertising buyers to continue to buy Clear Channel's products. Economic downturns like the financial crisis in 2007–2008 threaten the entire model to fund the BSS according to Chris. As Roar B. Sletner, managing director of *Mediebyråenes Interesseorganisasjon*, commented: "The advertising market is a sort of business cycle barometer in many ways. The market follows the general optimism in society" (Larsen 2003). The companies also want longer contracts because of the large investment costs associated with BSSs. The current contract lengths (10 years + three optional years) are good, says Chris, because Clear Channel do not want to be tied up to very long term contracts either.

In the first contract the Municipality of Oslo and Clear Channel agreed on 1200 bicycles and a length of 8 years. But it quickly became clear that the municipality couldn't live up to its contractual commitments. It could not provide enough advertisement space in

time to properly fund the system. The time to physically develop the system took far longer than what anyone had expected and a new starting date was set for the contract (01/05/2007)[24]. The contract was consequently extended to May 2015. Due to further delays in the second tendering process, it was not until 2016 that a new BSS was rolled out.

The details of the first contract were initially kept secret from the public. People could know how many bicycle stations and bicycles the contract contained, but not the amount of advertisements that would be allowed in the city's streets. According to former Commissioner of the Unit for Transport, Peter N. Myhre, the reason for the municipality to keep it secret was that releasing the information could weaken its negotiation position (Lundgaard 2004a). After scrutiny from the news media (among others) the arrangement was highly criticized and Clear Channel decided to release the details of the contract: "We don't want any more negative attention around this contract", said director Jan Tore Endresen (Lundgaard 2004d).

The second contract was more long-term than the first already at the outset (10 years with the option to extend by 2+1 year). Kim explained that the contract was so long because the authorities wanted to write down the value of the system throughout the contractual agreement. This means that when the contract is finally terminated, the "value" of the system will by contractual agreement be down to 0. Clear Channel argued in its bid to the municipality that such an arrangement is common—independent of the components "life-time". The system's components cannot easily be used in other places and there are significant costs involved with moving them elsewhere. This arrangement leaves the authorities free to do as they wish with the remaining system at the end of the contract.

At the end of the first contractual period, there was some controversy about what to do with the existing physical infrastructure. The infrastructure was owned by Clear Channel, who said they wanted to be able to use it again for the second system. The municipality ruled against this because they could not favor any of the actors involved in the new tendering process, and to allow Clear Channel to use the same equipment again would favor them (Eggesvik 2014b). Besides, Catrine Carlsen from the Agency

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[24] Memo from commissioner Jøran Kallmyr. 05/02/2010. Item number 200705245-26. Accessible at https://www.oslo.kommune.no/dok/Vedlegg/2010_02/926664_1_1.PDF

for Urban Environment said that: "We want new bicycles and bike racks. A lot of technological development has occurred since the city bikes came in 2002" (Vestreng 2014). The majority of the bicycles ended up being sent to Cuba through the *Bicycles to Cuba* project, while some of the bicycles were transferred to other BSSs with the same bicycle type (Karlsen 2015).

Perverse incentives and fulfilling contractual commitments

As mentioned previously, the advertising funded model risks creating perverse incentives that discourage the operating company from optimizing the usage of the BSS. Alex explained what the experience has been in Oslo:

> "Clear Channel did not have any active marketing of the system [the first system]. Urban Infrastructure Partner has to a much larger degree […] done well with marketing. […] Clear Channel never did that. They tried to hide the system, because the more traffic they had, the more costs they had to use. But now that has been turned on its head, and one of the driving forces behind that is that the income from users – in the current contract – goes to Urban Infrastructure Partner. In the old days the income went to Clear Channel, but it was regulated in the contract so that they were kept at a minimum. So there were no economic incentives for Clear Channel to have a successful BSS, whereas now, for Urban Infrastructure Partner, there's a contract that gives economic incentives to have a successful system, and that probably also affected how it has been marketed"

With regards to fulfilling contractual commitments, it is one thing to have a contract in place and another to actually follow up and enforce it. In October 2008, The Transport and Environmental Committee presented the City Council with its evaluation of the first bike-share scheme. They mentioned how 268 out of 269 advertising surfaces were deployed, compared with only 738 out of 1200 bicycles. They stressed that the municipality would have to work harder in order to ensure that the conditions of the contract were upheld[25]. Clear Channel was in charge of applications for stations in the first system. When the municipality called for more bicycles to be deployed in the

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[25] The Transport and Environmental Committee. 08/10/2008. Item number 109/08. Instilling/Vedtak. Accessible at https://www.oslo.kommune.no/sru/default.asp

system, Clear Channel simply referred to the slow administrative procedures in the city[26].

For the second BSS the municipality took charge of coordinating the individual authorities that are relevant for Oslo Bysykkel. But the physical development process for the second system has also been quite slow, with bicycle numbers running behind expectations (see section 6.1.3). When I asked Francis about what kinds of means the municipality has at its disposal to pressure the commercial actor to increase the numbers, s/he was a bit reluctant to answer, but mentioned that there had been some heated discussions between the Agency for Urban Environment, Clear Channel and Urban Infrastructure Partner. One of the means the municipality has at its disposal is to limit Clear Channel's right to advertise. Chris confirms that there have been meetings, but that there have been no threats of the nature "if you do not do this, this is what will happen". There have rather been different degrees of insistence that the municipality "really wants more bicycles". The municipality also has the means to terminate the contract if Clear Channel severely fails to live up to its contractual commitments, but according to Kim this is not a very likely scenario because an entirely new, tedious tendering process would then have to be initiated.

6.1.2 Development of the bike-sharing system

Despite the cautionary approach of some actors when the first system was being discussed, there were calls even at an early stage to prepare for potential increases in both capacity and coverage of the system. The City Council decided that an evaluation of the system would be done after two years of operation[27]. Because of the slow physical development process the evaluation was postponed until 2008. When the scheme was finally evaluated the City Government concluded that it was generally working well and they supported an expansion of the system to outside of Ring 2 with up to 3000 bicycles[28]. Even before that, during the municipal elections campaign in 2007, the Governing Mayor Erling Lae promised to expand the system. He is quoted by

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[26] City Government. 20/01/2011. Item 12/11. Accessible at https://www.oslo.kommune.no/sru/default.asp

[27] City Council meeting. 20/06/2001. Item 313. Item number 2001/313. Instilling/Vedtak. Accessible at https://www.oslo.kommune.no/sru/default.asp
[28] From the evaluation of the BSS by the City Government of Oslo. 10/06/08. Item number 119/08. Accessible at https://www.oslo.kommune.no/sru/default.asp

NRK as saying that "we should be able to put this in place sometime early next year" (Kielland Jenssen 2007). The City Council agreed with the City Governments position and decided to authorize them to enter into an agreement with a provider to realize such an expansion. They did this under the condition that any expansion would have to be compatible with the already existing system[29].

But to develop the system proved to be difficult. The Agency for Road and Transport initially asked Clear Channel if they would be open to another provider entering the scheme somehow, but Clear Channel rejected this option[30]. That left Clear Channel as the only negotiating partner, and when the City Government entered negotiations with them the company initially demanded that the contract be extended before any more bicycles would be added to the system (Holth Hansen and Gimmingsrud 2011). Pål Grøttem from Clear Channel said that: "We would like to extend the agreement because we need a minimum of eight years to pay down the investments. Five years is not enough for such large investments" (Hauge 2010) He also said that: "We cannot invest tens of millions into an expansion when we do not know what is happening beyond 2015" (Sandved Nordli 2010).

As the agreement between the Municipality of Oslo and Clear Channel constituted a service concession, it was subjected to regulation under the Agreement on the EEA. That meant that the principles of non-discrimination, equal treatment and transparency applied. The Agency for Road and Transport felt that the amount of bicycles could be increased within the existing contract without violating any of the principles. But the contract time could not be extended without violating them—not without releasing a new tender. Clear Channel initially decided to reject any expansion of the scheme on such terms. An external law firm also advised the municipality not to make any changes to the existing contract without engaging in a new, competitive tendering process. This prompted the City Government to recommend that no changes be made to the contract and that the municipality wait until the existing contract had run its course[31]. However, The City Council insisted that the City Government re-entered negotiations with Clear Channel over expanding the first system as much as possible before the end of the

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[29] City Council meeting. 15/10/2008. Item 363. Item number 363/08. Instilling/Vedtak. Accessible at https://www.oslo.kommune.no/sru/default.asp
[30] Memo from commissioner Jøran Kallmyr. 05/02/2010. Item number 200705245-26. Accessible at https://www.oslo.kommune.no/dok/Vedlegg/2010_02/926664_1_1.PDF
[31] City Government. 20/01/2011. Item 12/11. Accessible at https://www.oslo.kommune.no/sru/default.asp

contract. The municipality was willing to allow higher advertising exposure to make such an expansion possible[32].

In 2011 Clear Channel changed its mind and offered an expansion of 600 bicycles in exchange for more advertising space (without extending the contract time). The expansion would increase the capacity of the already existing bicycle stations (Holth Hansen and Gimmingsrud 2011). The two actors re-opened negotiations and managed to come to an agreement similar to this proposal. They agreed on expanding the capacity with approximately 40% (from 1500 docking spaces to 2100 and about 450 more bikes). The expansion was not geographical, and all capacity increases came about on already existing locations (on approximately 40 of them)[33].

Such an expansion was not what Marian, the interviewee from the University of Oslo, had hoped for. The university was located outside of the designated geographical area (between Ring 2 and Ring 3). S/he made clear that the university's intention had been since 2009 to gain access to the public bicycles, despite some reservations about the advertisements. They had been in contact with the municipality and Clear Channel, but were told that the public procurement regulations made it difficult to implement an extension during the existing contract. The university would have to wait until 2016 and the second system to finally get access.

Rigid contracts

Mika said that a common issue during contract periods for BSSs has been that their service has deteriorated over time: "There are so many of these models were you [deploy the system], and then it gets worse and worse throughout the contractual period". The first system in Oslo initially saw rising amounts of trips, but it stagnated at a certain level of usage (at around 1 million trips) for the last years of the contract. In the second system the municipality attempted to fix such issues. One of the developments was to try and take steps to move away from a strictly hardware-oriented contract. Municipalities are used to public tendering where certain *things* are being bought and have an easier time in defining such contracts. But Mika thinks BSSs

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[32] City Council meeting. 16/02/11. Item 38. Item number 38/11. Instilling/Vedtak. Accessible at https://www.oslo.kommune.no/sru/default.asp
[33] The Agency for Planning and Building Services. 01/04/2011. Item number 201104550. Accessible at http://innsyn.pbe.oslo.kommune.no/saksinnsyn/main.asp

require another type of governance where a longer term service is defined, as in Ruter[34] where the focus is more on service demands and the amount of trips to be delivered rather than how many busses that are to be procured.

Kim said that the municipality focused a lot on innovation, which is the reason why the Agency for Urban Environment speaks of a so called "future-proof" solution. To future-proof simply implies that any technical developments over the contract period should be possible to implement in the BSS. It is a type of 'innovation-clause'. Francis said this was done so that "we in four years should not sit with a scheme that hasn't kept up [with technical developments]". Alex appreciates the intentions behind it, but is skeptical towards whether such contractual innovations will prove to work out in practice: "I am not entirely sure how one will make it happen […] By the end of the day, there's always another bill that has to be paid". For example, Andrea mentions how "one possibility would be to expand the scheme so that it does not only run in the summer or the spring-autumn period as it is now, but that it runs throughout the entire winter". Alex says that the wear and tear to the bicycles is 5–7 times higher in the winter than during the summer, which means that any such expansion will demand considerable extra costs for a few months operation.

6.1.3 Placement and physical development of stations

In order to ensure high usage rates in BSSs, it is generally accepted that the placement of stations (their exact location), their coverage (the dispersion of stations throughout the city) and density (the distance between individual stations) is crucial (Lin & Yang Ta-Hui 2011; ITDP 2013, 57; Shu et al. 2010, 5). There is no optimal placement strategy for all cities as this will differ slightly due to differences in context, but there are a few general guidelines. To start, stations should be somewhat evenly distributed across the designated area and there should be approximately one station every 300 meters. Cities are also encouraged to place stations in close connection to mass transit to enable sustainable multi-modal transport[35] (Cohen et al. 2013, 58-59). Additionally, technical reports stress the need to include considerations on trip distances, population density, topography and destinations (Toole Design Group 2012; ITDP 2013).

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[34] Ruter is the publically owned company responsible for public transportation in Oslo and Akershus
[35] Multi-modal transport refers to the combination of at least two different modes of transportation (walking, cycling, public transit, etc.) within one journey.

The process of finding suitable locations for the stations, and the subsequent physical development of them, has been one of the main issues in Oslo. In this section I will go through why this is the case, and what role the advertising funded model has had in this.

The interaction between the main stakeholders

In the initial stages of this research when investigating the second system, I assumed there would be diverging interests regarding the placement of stations, especially between the Agency for Urban Environment and Clear Channel. As Mika from Urban Infrastructure Partner said;

> "All actors […] have an agenda, right? Clear Channel wants to maximize advertisements, we want to maximize usage, and the municipality focuses on the physical development of the system."

The Agency for Urban Environment's number one concern in the physical development process has been to build enough stations in the city center before expanding the system towards Ring 3. In the first system this was not as much an issue because it only covered more or less central locations. As Duarte (2016) has shown, private actors are more inclined to fund BSSs that are centrally located because they are more viable economically. The key question is whether it is possible to expand a BSS to more remote areas where profitability is not likely to be as high. This question is even more relevant as the Municipality of Oslo seems intent on not subsidizing the system whatsoever.

So what happened in practice when the system was expanded? At the time of writing this, when it is not yet fully built, the distribution of stations is clearly geared towards central locations[36]. Kim explained why this is the case:

> "there has to be a certain balance between the center and outside the center, because experience tells us that the bikes move towards the center[37] […] And so we have a central area that half the system should be inside of [an

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[36] With a total of 144 stations having been built (as of 2017-04-16) according to the Oslo Bysykkel-map [https://oslobysykkel.no/en/map], 101 are placed inside of Ring 2 (with 26 more planned) and 43 outside of Ring 2 (with 17 more planned). In addition, many of the stations outside of Ring 2 are placed in close proximity (0-300 meters) to it [see appendix 4]. Part of the reason for this is that most of the placements for stations in the first system have been used again for the second system.

[37] This tendency is exacerbated due to Oslo's topography. The city is situated at the top of *Oslofjord*, enclosed by mountains. This encourages bicyclists to go downhill, towards the city center, but discourages them from going the other way (Kirkebøen 2016a).

area not much larger than Ring 1] […] Half of the system has to be [centrally located] to ensure capacity to receive bicycles there […] It has to be approximately one docking place outside [of the city center], and one inside"

That the agency chooses to build stations in central locations *first*, shows that they are concerned with actual usage patterns and are willing to adapt (to a certain degree) to them in order to ensure a well functioning system. As Mika explained, UIP also has an interest in building the stations in a way that maximizes the value for the system. As for Clear Channel, Chris explained that they estimate the economic value for each and every individual station depending on location. Their evaluation is based on traffic flow models, i.e. how many people that pass through an area that can see their ads (see section 2.2.8). The larger the flow and the more affluent population, the more money Clear Channel can charge. Naturally, this means that Clear Channel primarily has an interest in having many stations in the city center where a lot of people pass through daily.

Chris told me there is generally a convergence between Clear Channel, the Agency for Urban Environment and Urban Infrastructure Partner about placements of stations, because, in the end "everyone wants to be where people are". Theodore agreed with this sentiment, claiming that:

"There's not a lot of conflict between Clear Channel and the Agency for Urban Environment. Not the way I see it […] There were a few episodes to begin with, but the people involved with the implementation group have adjusted [to each other. They] know what the needs of the others are".

But some users are still not entirely happy with the physical development process. Kristen said there was a huge difference regarding access depending on where you live; if you live centrally, you have good access to both bicycles and stations, but if you live outside of Ring 2 you have to go long distances to find the next station if the first one is empty. Looking at a map outlining the placements of stations thus far (as of 2017-04-16, see appendix 4), it is clear that the not-so-central areas are clearly underserviced in comparison with the central ones. There are plans to increase the density outside of Ring 2 as well, but according to Kristen it has taken too much time (the pace of physical development is an issue I will get back to shortly).

The municipality has also been concerned with ensuring access to the system for everyone (only limited geographically by Ring 2 in the first system and Ring 3 in the second). For instance, the pricing policy was meant to be "symbolic" in the first system to ensure accessibility (Lae and Barstad 2001) and according to Eli the same was true for the second system. There is hence a *democratic concern* with regards to accessibility, and this also applies to system dispersion. One illustrative example of this is given by Kim:

> "Say for example that it turns out that «oh, the western part [of Oslo] uses Bysykkel a lot»; we still want to give the same offer to the users in the eastern part. Potential users! That is what we are concerned about [...] Some people want more bicycles in Sankthanshaugen for instance, an area where there are a lot of users. We could have, and we wish to have more bicycles there, but we couldn't do it at the expense of not being able to serve other parts of the city".

I expected to find a conflict of interest with regards to the dispersion of the system, at least in relation to Clear Channel, but it appeared that they were also preoccupied with coverage, albeit for different reasons. For the advertising industry, 'coverage' means the number of people who will see a campaign at least once. On Clear Channels home page[38], it says; "Clear Channel is Norway's largest provider of outdoor advertisements. We reach 64% of the population with 46.000 surfaces across the country" (Clear Channel 2016b). Coverage rates provide the company with a concrete, marketable number. Chris said that it is important for Clear Channel to be able to say for example that "Clear Channel reaches 60% of the population" in its interactions with advertising buyers. It is better to have dispersed advertisements than having them cluster in a few "high-value" locations. Clear Channel has an interest in being able to tell advertising buyers that they can reach broad customer groups, as advertising buyers look to address different audiences.

It is therefore possible to find converging interests (with some adjustments) between the main actors with regards to the placement of stations. However, this initial exposition has only touched on the interaction between *one part* of the Agency for Urban Environment (those at the agency's project division), Clear Channel and Urban Infrastructure Partner. As we will see later in this chapter, other actors have impeded the

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[38] As of April 3rd, 2017

physical development of the system due to their veto power, often because of their opposition to the presence of advertisements. But first I will describe how the advertisements connected to the bike-share contract have been located in Oslo, and how this has shifted over time. I will also describe *why* they have done so and what implications this has had for the system.

How to locate advertisements?

In the first BSS in Oslo, Clear Channel was allowed a total of 320 advertising surfaces on 160 double-sided billboards. 100 of the billboards were to be placed in connection with the bicycle stations, while 60 were to be placed as standalone billboards[39]. 50 of the surfaces were to be used for public information and the rest (270) for advertisements (Lundgaard 2004d). In addition, advertisements were placed on the bicycle's mudguards. It should briefly be mentioned here that the advertisements on the bicycles are not discussed much as far as the author has been able to find, but they still complicate the operation of the system in some ways. The advertisements are placed on the bike's mudguards in the form of stickers. In addition to the fact that the operator has to spend time on plastering the bicycles with stickers, they also risk getting slapped with fines if the bicycles lack them. According to interviewee Iben, this means that perfectly well functioning bikes may be confined to the workshop simply because they lack a sticker, thus limiting the amount of bicycles that are in circulation at any given time.

Despite Rød Valgallianse being the only party to vote against the advertising funded system in the first place, reactions were almost immediate from others when the advertisements actually started appearing around the city. Politicians from both Venstre and Sosialistisk Venstreparti complained about the scope and placement of the new advertisements (Aftenposten 2004). In a meeting organized by Norsk Form[40] in 2005, people criticized the amount of ads and the principle of using public space as a means of payment. Commissioner Grete Horntvedt from Høyre even admitted that the municipality was not entirely aware of what they said yes to when they decided to exchange bicycles for advertisements in public space (Lundgaard 2005).

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[39] Also referred to as Freestanding Units (FSUs)
[40] Norsk Form is a foundation that works to improve people's quality of life through design and architecture

But not all advertisements were equally contentious. It was mainly the standalone billboards (see Figure 3) that were criticized and the Governing Mayor, Erling Lae, said he regretted entering a contract with such billboards (Kolsrud Jåsund 2005). According to the Agency for Planning and Building Services, the standalone billboards were seen by many as "unfortunate, visual and functional barriers" (APBS 2006, 26). The agency had not been invited to give their opinion on the contractual agreement with Clear Channel. Per-Arne Horne from the agency said: "They [the standalone ads] are very towering and difficult to place in the cityscape with regards to aesthetic and accessibility demands. We feel we have to compromise the standards we otherwise want to have and that regularly apply". On the question of why they still approved them, he replied; "We have received clear notice from the municipality that they really want to see this carried out. The municipality is obligated by contract. We just have to do as well as we can" (Lundgaard 2004c). The reason for the inclusion of standalone billboards in the first contract was that "the prize, by way of advertising surfaces, was then drastically reduced[41]".

Figure 3. Standalone billboard from Clear Channel (at Lille Grensen)

Some of the standalone billboards were facing pedestrians, and blind people literally ended up walking in to them. Per Forrestad from *Oslo's Association for the Blind* commented in disbelief in newspaper Aftenposten: "Here the Agency for Road and Transport aims to sort out the illegal pavement signs that blocks the sidewalks. And

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[41] Note 211/2004 to the City Council. 22/06/05. Item number 296/05. Accessible at https://www.oslo.kommune.no/sru/default.asp

then they put up signs that are a lot worse themselves" (Lundgaard 2004e). The billboards were not compatible with the municipality's ambitions for universal access. In the same time span, Clear Channel's director is quoted in Aftenposten as saying that: "We are going to make money off of the advertisements. The signs have to be visible. The alternative to one sign crosswise would be five lengthwise" (Øyehaug 2004). This clearly outlined the conflict between the company's needs and the interests of the general public and the municipality. Furthermore, former Commissioner of the Unit for Transport (2007–2011) Jøran Kallmyr said in 2010: "People are initially negative towards advertisements in the cityscape. For that reason it is not smart to put up advertisements without people getting a bicycle rack next to it" (Hauge 2010).

In short, it quickly became clear to many actors, including political leaders and public agencies, that standalone billboards were not an acceptable price to pay for the city. The City Council decided to reevaluate the contractual agreement and implemented a new policy. Guri Melby, another former Commissioner of the Unit for Transport (2013–2015), announced in Klassekampen that "the City Government is now sorting out the advertisements. Standalone advertising billboards and advertising towers will be done away with, and all advertisements will be on bus shelters, bicycles and bicycle racks" (Brenna Vollan 2015). Similarly, interviewee Eli explains that

> "our [a majority of politicians in the City Council] opinion was that, as long as advertisements finance bicycles they should be connected to those bicycles. And therefore it was okay with advertisements on the stations but not in other places".

The transition towards placing all advertisements in connection to the stations (and bicycles) is not entirely unproblematic. I will go through why that is the case in the following sections.

The vetoing of station's placement

One of the major issues in both systems has been the time consuming processes to physically develop them. The first system was initially planned to be fully developed sometime during 2004, but after almost six years activity in 2008 only 750 (approximately 60 %) of the bicycles had been deployed. The contract had to be

extended, with a new "starting point" set to the 1st of May 2007. The following excerpt is from the evaluation of the system in 2008:

> "the approval of advertising objects and placements for bicycles has taken considerably more time than initially assumed […] Several of the places were not approved out of aesthetic, antiquarian and traffic safety considerations […] The work to establish advertising surfaces that finances the scheme has been prioritized […] The Public Roads Administration has not accepted bike-share racks with advertisements along Oslo's state owned roads […] Applications for deployment of advertising surfaces has been especially time consuming and difficult to get approved"[42].

As we will see in the next few sections, more or less the same story is true for the second system as well.

The CEO of Urban Infrastructure Partner, Axel Bentsen, stated in May 2016 that their goal was to have 2000 bicycles in the end of the first season (Løken 2016). Almost a year later, at the start of the second season in 2017, Nora Fredrikke Falck Holmen from the company announced that "approximately 145 stations are open from the start of the season on April 3rd. The goal is to have around 1600 bicycles out at this point" (Kjelstrup 2017). This constitutes just about half of the stations (145/300) and bicycles (1600/3000) agreed upon in the contract. Many users have complained about what they perceive to be a very slow physical development process and lofty promises regarding the launch of the new system. For example, Kristen said:

> "I think they [referring to the Agency for Urban Environment and certain politicians] have created the expectation that when the season starts in 2016, with the new tender, we would already have 3000 bicycles and 6000 docking spaces […] It has been marketed one way, that it will be up and running, and then they have not lived up to what was expected"

The main reason for the time consuming process seems to be Oslo's parliamentary political model which allows different actors to veto the placements of stations. The process towards a finalized bicycle station has to go through several authorities. The tedious process is described on Urban Infrastructure Partner's webpage, where they outline the 13 steps (including all the actors that has to give approval in the process) that

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[42] From the evaluation of the BSS by the City Government of Oslo. 10.06.08. Item number 119/08. Accessible at https://www.oslo.kommune.no/sru/default.asp

applications has to go through before physical development (Bysykkel 2017). That UIP brings this up is self serving, as they have received criticism for the lack of stations and bicycles[43], but many other actors painted a similar picture. Francis for instance notes that many public agencies and politicians like the bicycles, but are skeptical towards advertisements. And because of their inability to see the bigger picture in the city, politicians have managed to take individual decisions that counteract each other in relation to Oslo Bysykkel. This contributes to delaying the physical development of the system.

Some people argue that it is not necessarily a bad thing that building processes like these have to go through long application processes. For example, while Sandy acknowledges that "there are concrete issues regarding the placement of different stations, and especially advertisements" s/he also argues that "it should be a bit difficult in the city", implying that other political objectives, such as antiquarian consideration, are also important. However, even if you agree with the general sentiment of this statement—that there should be some democratic controls over construction projects in the urban environment—the presence of advertisements on the stations has contributed to more delays than would have otherwise been the case.

I will now describe concretely what agencies and authorities that are slowing down and restricting the physical development process and on what grounds they decide to do so.

The Agency for Urban Environment

The Agency for Urban Environment (AUE) was the result of a consolidation of formerly separate agencies (e.g. the Traffic Agency, the Agency for Road and Transport and the Agency for Outdoor Activities). It was operative from May 2011. Before the consolidation, the individual agencies posed a challenge to the physical development of Oslo Bysykkel.

> "The Agency for Planning and Building Services gave an account of some
> of the biggest challenges they've had up until now with the city furniture,
> namely internal conditions in the Agency for Road and Transport and the

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[43] The amount of bicycles are also more limited in the second system due to a better understanding of the optimal docking space/bicycles ratio. The previous system had a ratio of approximately 0,8 bicycles per docking space but experienced too many full stations - which is perhaps the main frustration for users. The current system tries to maintain a ratio of 0,5 bicycles for every docking space.

relationship to the Agency for Outdoor Activities. With a consolidation of the agencies one envisions that most of these challenges can be solved internally before applications are sent to the Agency for Planning and Building Services"[44]

The Agency for Outdoor Activities was for a long time skeptical towards placing bike-stations within or in connection to parks, which significantly restricted possible placements for them. At one stage in 2006, when Clear Channel threatened to withdraw the bicycles altogether because they had so many of their applications rejected, the municipality was prompted to change some of its practices. Among other things the Agency for Outdoor Activities loosened its stance somewhat by starting to allow stations in connection to the parks (Waaler Lier 2006).

Even if the AUE later consolidated individual agencies under one agency, their mandates remained the same. As Kim explains,

> "The Agency for Urban Environment [consists of many different working groups]. There are those working with investment projects [e.g. Oslo Bysykkel], but it is also those working with traffic safety, those working with parks [etc.]. The Agency for Real Estate and Urban Renewal is another digression, but approval from all of them is necessary before application to the Agency for Planning and Building Services".

The project still runs up against those at the AUE who are working with parks. One concrete example is given by Kim who explains that a park in Oslo was granted protective status after bike-share stations had already been approved there. If the AUE were to apply for a station in such a place – or reapply to expand an already existing one – no advertisements would be allowed there and Clear Channel could then decide to reject such a placement.

According to Theodore, those working with traffic safety at the AUE also have the ability to reject certain placements close to public roads. As the advertisement billboards constitute the most notable distraction on bike-share stations, they are principally responsible for reducing the chances of certain locations being approved. However, the traffic safety concerns from AUE are not held up as a major inhibitor

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[44] Brief from a meeting at the Agency for Urban Environment. 25/10/2011. Item number 201104550-8. Accessible at http://innsyn.pbe.oslo.kommune.no/saksinnsyn/main.asp

compared to other factors. Its interpretation of traffic safety is more lenient compared to the Public Roads Administration, which will be addressed now.

The Public Roads Administration and the road law

The Public Roads Administration (PRA) is in charge of the "planning, building and maintenance of state- and county roads in Norway". It is authorized to enforce the road law in connection to these roads (Statens Vegvesen 2017). The road law §33 states that "advertising signs or similar installments may not be placed without permission next to state owned roads nor placed such that they are targeted at road traffic or visible for road-users". The regulation is in place to ensure safety on roads by limiting potential distractions for drivers (Samferdselsdepartementet 2017). The map in Figure 4 gives an approximate representation of the roads in Oslo that are affected by the state regulation[45]. It includes Ring 1, Ring 3, E18 and a few other roads. It is mainly the most
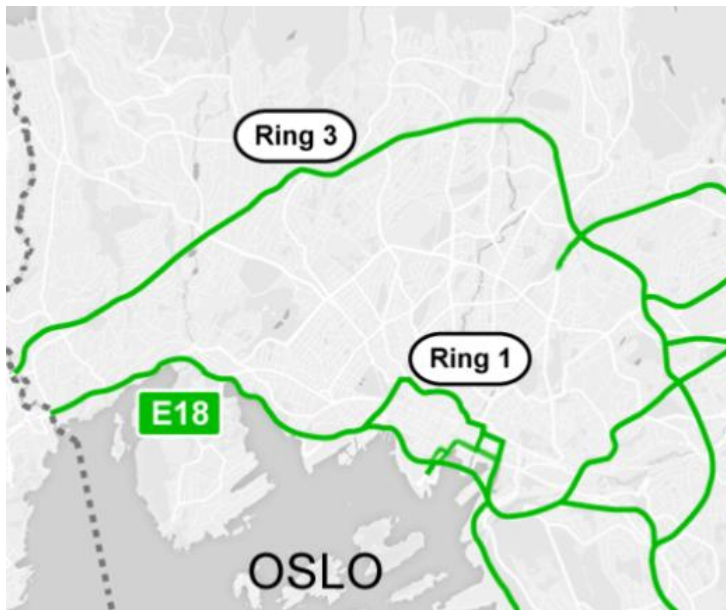

central parts of Oslo that are affected, but this area is crucial for Oslo Bysykkel because the density of stations should preferably be a lot higher there than less centrally located areas. The AUE aims to have "one rack every 100 meters" in the center to optimize the functioning of the system according to Kim.

Figure 4. State owned roads in Oslo

What do the road law regulations mean in practice then? According to Chris, the PRAs restrictions mean that you are allowed to place bike stations in some places, as long as you do not have any advertisements connected to it. On this note, Kim explains:

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[45] The map was originally made by Øyvind Engan in a piece in newspaper VG about the one day diesel car ban in Oslo. The roads in green represent the roads where diesel cars would still be allowed to pass through (state owned roads or European roads). The map has been slightly altered by the author to include parts of Trondheimsveien and a couple of streets around Ring 1. It is included here to give an idea of the areas affected by state regulation.

> "In the application process […] the Public Roads Administration [at times] commented that they didn't want advertisements, for instance. Then the provider [Clear Channel] can decide not to build, because they have to control the advertising value themselves".

The PRAs interpretation of traffic safety is described by Theodore as being very strict compared to that of the local traffic authority at AUE, which frustrates the actors involved with Oslo Bysykkel. As a result, the PRA manages to impede the physical development process and restrict the possible locations for stations in a significant way, despite controlling a lot less roads than the local authorities.

The Cultural Heritage Management Office

The Cultural Heritage Management Office (CHMO) is "the Municipality of Oslo's academic advisor concerning all questions of preservation of architectonically and culturally valuable buildings, facilities and environments". They put forth advisory statements on proposed construction projects in order to protect such values (Byantikvaren 2008). The office comments on all applications to establish bike-share stations before a final ruling is made by the Agency for Planning and Building Services. The office uses a so called "Yellow list" (see appendix 5) which outlines prioritized environments as a tool to fulfill this mission. The Yellow list is comprised of a map of Oslo which shows the protective status of buildings, facilities and environments. It is divided into three categories; red-marked implies protection by the cultural heritage law (the strongest protective status), orange implies protection by the Planning and Building Act and yellow implies that something is not formally protected but simply listed by the municipality as being worthy of preservation (Byantikvaren 2014). In an e-mail to the author on February 16, 2017, the CHMO says that:

> "It is decided politically that there will be advertising funded city bikes in Oslo. Therefore we have prioritized [protecting] the most important areas in central Oslo, and areas which are regulated as special areas for preservation in the Planning and Building Act [orange areas] or protected by the cultural heritage law [red areas]".

The CHMO was consistently brought up by informants as one of the main actors that complicated the physical development of Oslo Bysykkel. Chris felt that they rejected

stations "mostly out of hand" and wished for a more lenient interpretation of the regulations for Oslo Bysykkel. Alex claimed that:

> "In Oslo, it's like, if you want a bike share station outside of Norges Bank [the central bank], they say «no, we can't do that because the façade is protected, so the bike station will have to be hidden away at the street corner here»".

Some think the BSS should be prioritized whereas others think that the cultural heritage and the beauty of the city is more important, and Alex acknowledges that there is no right or wrong in this dispute—only differing views. But s/he is still adamant in that "one of the biggest obstacles to develop the bike-share system in Oslo is the CHMO, who says «no no no» all the time, because he doesn't think the bikes look nice, so they should not be visible". There is obviously a downside for the BSS in not being able to optimize the location of stations due to other interests in the city, but for the purposes of the research it was important to find out whether the presence of advertisements had any crucial impact on CHMO's rulings. This is their response to the author (16/02/2017):

> "The Cultural Heritage Management Office has commented on all suggestions for placements. In particular cases we have discouraged from bike racks even without advertisements [...] Our evaluation is primarily in relation to whether it [bike stations] is unsightly in relation to the surrounding cultural sites, i.e. if the bicycle rack/advertising billboards will reduce the experience of the cultural heritage/cultural site. In our assessment it is generally the advertising billboards that visually pollute the cultural sites due to the large advertising surface that quite clearly is more visible than the bikes because they are higher and illuminated. They are generally also placed for high visibility from the street to gain a higher advertising value".

The CHMO, as a result of their mandate, also complicates both the physical development process and the optimization strategies for Oslo Bysykkel's stations.

In their response to the author (16/02/2017), the agency explained that "it is the Agency for Planning and Building Services that has the main responsibility for aesthetics", and it is to them we turn next.

Agency for Planning and Building Services

The Agency for Planning and Building Services (APBS) is responsible for the municipality's area planning, planning and building services, and map administration. It is the last agency to approve the physical development of bicycle stations. The agency is in charge of enforcing the Planning and Building Act. The Act was altered in 2009 which slightly complicates this exposition.

Before the changes, there were a few key paragraphs in the Act that impacted on Oslo Bysykkel. The first was § 2 which described the general purposes of the Act, which partly was to ensure that aesthetic considerations were taken into account in physical development processes. § 74-2, commonly referred to as the 'beauty paragraph', stated that any construction works that fell under the Act were to be planned in such a way so that it satisfied reasonable beauty considerations *in itself,* in relation to its *functionality* and in relation to its *surroundings*. § 107 stated that advertisements and signs should generally be approved by the municipality before they are deployed outside. Approval is dependent on whether or not the equipment is unsightly or causes a nuisance on its own, in relation to the surroundings or for traffic[46]. Since the changes to the Act in 2009 it is mainly § 29-2 and § 30-3 that upholds these regulations[47].

The APBS does not have any statistics over how many applications for locations they have approved/disapproved. But Jon Erik Reite Bang from the agency commented in general that:

> "They [Clear Channel] naturally wish to find places for as many advertisements as possible, especially in places with a lot of traffic like the city center and by hubs where a lot of people move about. We have to balance this against other considerations, like for example to shield kids in close connection to schools and not to disturb the streets visually, especially in places like Kvadraturen, along Karl Johan and by buildings with high cultural heritage values (Gimmestad 2016).

That a central area like Kvadraturen is strictly protected makes it more difficult to achieve proper coverage of the system. As Kim said, a station by Bankplassen in Kvadraturen is somewhat isolated in the area which forces people to walk a long way to

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[46] Accessible at: https://lovdata.no/dokument/NLO/lov/1985-06-14-77
[47] Accessible at: https://lovdata.no/dokument/NL/lov/2008-06-27-71?q=plan-%20og%20bygningsloven

get to the next station. The fact that a bike-share station was established in the area at all is because it did not have advertisements connected to it[48].

According to Theodore, the major problem with the administrative procedure to approve station locations is that individual agencies interpret the advertising regulations differently:

> "And I'm thinking especially of the Cultural Heritage Management Office and the Agency for Planning and Building Services […] because when the advertising plan was decided on [in 2009] – when it gives clear enough guidance so that one can expect that certain projects will be approved, and when the Cultural Heritage Management Office then says that «no, we cannot do that anyway» because of internal rules – that is what I find to be complicated".

However, the administrative procedure for bike-share stations is continuously getting better, if one is to believe the APBS (see Gimmestad 2016).

6.2 **"External" implications**

When I decided to research the advertising funded model with regards to BSSs, my intention was to empirically assess the performance of the bike-share service itself, as well as the implications for the governance of the system. However, what emerged in the line of research was of a broader scope and my focus was increasingly shifted towards the implications of the model "outside of" the concrete BSS. But the BSS cannot easily be understood in isolation from other advertising funded services. In my interview with Frøy, for instance, s/he insisted on shifting the discussion from advertisements connected to the city bikes to a broader discussion about outdoor advertising.

This section pertains to this broader discussion and addresses the regulation of the outdoor environment. It includes an exposition on the municipality's ideas about aesthetics, public space and outdoor media. Under this framework I will delineate a historical summary of attempts to regulate outdoor media.

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[48] APBS-document. 14/09/2015. Item number 201511925-3. Accessible at http://innsyn.pbe.oslo.kommune.no/saksinnsyn/main.asp

It should be mentioned here that this thesis could have addressed issues such as the implications of the increased commercialization of urban space. Such research would be justifiable but it would also be very complex and time-consuming which is why it is not included.

6.2.1 Cityscape aesthetics and outdoor media regulation

The City of Oslo has over the last 30 years attempted to beautify the city in different ways. By the late 1980's, architect professor Thomas Thiis-Evensen – a pivotal and reoccurring figure in these matters – was commissioned by the APBS to create the first general *Aesthetic Plan* for Oslo (Byfolk Info 2002). The goal with the plan was to have an overarching aesthetics plan for the city center. The plan was adopted unanimously in 1991[49] and was revised in 1992 by the APBS (Thiis-Evensen 2005, 8). The topic of aesthetics of public space gained increasing attention in the early 1990's from politicians all over Norway, including Oslo. In particular the issue of outdoor advertising and signage (most of which were put up illegally and considered "out of control") gained traction. In the beginning of 1993, The Municipality of Oslo, in collaboration with private actors, initiated an 'advertising project' to establish strict and clear guidelines and regulations to address the advertising and signage concerns in the city. The project was also intended to result in a by-law that would enable the municipality to regulate the outdoor mediums (something that didn't come to fruition until 2009) (M. I. Kerr 2006a). The project had some success, but the municipality "forgot" the issue and started prioritizing other issues for a few years (Heiberg and Kerr 2003).

It wasn't until 2001, when the City Government again wanted an increased focus on the beautification of Oslo's city center that the aesthetic plan's intentions were thoroughly put to use (Thiis-Evensen 2005). They proposed that a general plan of action should be developed, arguing that "aesthetic qualities form the basis to foster pride and belonging to the city and can contribute to increased well-being and safety in public space"[50]. They later argued that a more visually attractive city would enhance the city's

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[49] City Council decision. 24/04/91. Item number 142/91. Instilling/Vedtak. Accessible at https://www.oslo.kommune.no/sru/default.asp

[50] Addressed by the City Government. 25/10/01. Handlingsprogram for estetikk og god byarkitektur. Item number 312/01. Accessible at https://www.oslo.kommune.no/dok/Byr/2001/BR1/2001010320-1.htm

competitiveness and attraction as a tourist destination. In 2004 they noted that the Planning and Building Act's § 74-2, the 'beauty paragraph', would be practiced in an "active and constructive way". They also noted that advertisements and signage contributed significantly to the visual representation of the city, with some of it being unsightly[51].

One of the concrete efforts to beautify the city center that was stressed by the City Government was called 'Hovedstadsaksjonen'. The project was initiated in 2002 by a group of private landowners called *Byfolk Oslo Sentrum AS*[52], and it quickly turned in to a collaborative effort between the City Government, state authorities and private actors. Architect Thiis-Evensen was again highly involved in the process, now serving as technical advisor for the effort. The former Labour-and administration minister (2001-2004) Victor Norman explained that "the state is concerned with Oslo being a representative capital. Everyone living in Oslo […] should have nice surroundings" (Byfolk Info 2002, 3). The initiative was "based on the conviction that the surroundings impact us: beautiful and safe surroundings increase [people's] love for the city and hence the feeling of fellowship" (Byfolk Info 2002, 4). For instance, former Secretary of State for Justice (2001-2005) Odd Einar Dørum pronounced that if Hovedstadsaksjonen were to be successful, the safety benefits would be measurable: "There's a relationship between littering and criminality. A cleaner and more appealing center will reduce criminality" (Byfolk Info 2002, 7).

Similarly to the former Aesthetic Plan for Oslo, 'Hovedstadsaksjonen' was intended to be a general plan for the central areas of Oslo – understood as one coherent entity and not through its individual parts; "Not one trash can or bench will be positioned without that positioning being done in harmony [with the larger concept] (Byfolk Info 2002). Standardization, functionality, beauty and high quality is held up as significant goals in the action. Several examples are provided, with everything from trash cans to road signs presented. The contract with JCDecaux for bus shelters is held up as a success story, under the headline of "even maintenance is free!" (Byfolk Info 2002, 10).

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[51] Addressed by the City Council. 31/08/05. Item number 296/05.Handlingsprogram for estetikk og god byarkitektur. Accessible at https://www.oslo.kommune.no/dok/Bys/2005/B/2004004773-104691.htm
[52] The organization had previously renovated the lower parts of the main street Karl Johan, starting in 1995.

Around the same time period, Thiis-Evensen is paraphrased as saying that the introduction of advertising funded descent towers will help concentrate advertisements in a manageable fashion while also enabling more proper maintenance (Heiberg & Kerr, 2003; Aadland, 2003). Grete Horntvedt acknowledged that there would be more advertisements as a result of the city furniture contracts, but that billboards were better than "glued-up-advertisements" and that they would help to "sort out the advertising impression" and be a "visual upgrade" for the city. She stressed the fact that the advertising companies undertake the responsibility to deliver maintenance of their installations (Lundgaard 2004; Aadland 2003). Similarly, Clear Channel directors are quoted as calling private bill posters as "wild-posters", and Trond Karlsen from the company is quoted as saying that "all and sundry cannot be let loose to put up posters" (Kristiansen 2005). Furthermore, in Hovedstadsaksjonen's guide for operation and maintenance, it is stated that advertising posters or any remains of them as well as tagging and graffiti should not be tolerated on any installations that were not explicitly created for that purpose (Samferdselsetaten 2005, 16).

To follow up on the work with Hovedstadsaksjonen, Thiis-Evensen was again asked to be technical advisor and author an aesthetic plan for Oslo – simply called 'Aesthetic Plan 2005'. The work was done in collaboration with the APBS (Thiis-Evensen 2005, 3). The new plan stressed the need for universal design and added recommended premises for city furniture, with "visual unity" as the main goal. City furniture, including bus shelters for protection against wind and rain, facilities for people to sit and public trash cans are held up as necessary to fulfill the needs of citizens. Two main demands are placed on such facilities; their design and maintenance. In addition there are three levels of aesthetic demands; one is for the furniture's design, which should invite people to use facilities for their intended use; the second is for city furniture as *symbols* for the responsible governance of public space, where lights that don't work or trash cans that are not emptied are signs of negligence of responsibility; the third is in regards to the visual unity to "tie urban space together and give the center a unified profile". A descent tower and lamp-post plastered with posters are among the examples that are held up that breaks with such demands (Thiis-Evensen 2005, 74–75). The advertising funded bus shelters are included in the plan, but the bike-share stations are not mentioned despite the fact that bicycle racks have their own section. The design-

guidelines for the bicycle racks that are mentioned are far removed in design and stature from the more imposing nature of the bike-share stations (Thiis-Evensen 2005, 84).

In the midst of these beautification efforts, in 2002, the city had entered into two advertising funded city furniture contracts; one for bus shelters and public toilets and one for a BSS (Lundgaard 2004b). The city saw the introduction of such contracts as positive since they would "reduce the municipalities purchasing expenses and maintenance" of such equipment. In addition, such contracts were expected to limit advertising in other places of the city[53] by having most outdoor advertisements connected to showcases, bus shelters and city-bikes.

Some of the traction with entering these types of agreements is that the municipality, besides the other things that the bicycles are thought to bring, receives a great medium for communicating with citizens. Several political parties, including some of the ones that are critical of outdoor advertising and wants to decrease its presence, have opted to use the advertising billboards for political campaigns. For instance, both Sosialistisk Venstreparti and Oslo Arbeiderparti purchased advertising space with JCDecaux in their bus shelters (Hagesæther 2005). According to magazine Kampanje, political parties bought advertisements for a total of 10 million NOK (from a total of 550 million NOK) in 2013 in Norway from JCDecaux and Clear Channel. This includes advertisements in connection with the BSS (Hauger 2013).

The organization Adbusters, a firm critic of advertisements and consumer culture, has been engaged in culture jamming[54] on Clear Channel's installations. For obvious reasons, Clear Channel considers this practice to be a simple case of vandalism. Politicians like Grete Horntvedt also agreed with the sentiment: "I see Adbusters destruction of advertising installations exclusively as vandalism. It is not creative, but rather a brutal exercise of violence against other's property. Respect for property rights must be maintained" (Baldersheim 2005). Along the same lines, the AUE says that they and any provider of advertising funded city bikes share a common interest in a proper

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[53] The Transport and Environmental Committee meeting. 07/10/98. Item 99. Item number 1998/754. Instilling/Vedtak. Accessible at https://www.oslo.kommune.no/sru/default.asp

[54] Culture jamming is a tactic used by social movements whereby they manipulate or hi-jack corporate or government messages. One example is how advertising messages are changed on billboards, e.g. having a Coca Cola-billboard changed from saying "Enjoy Coca Cola" to "Enjoy Capitalism" through the use of the same iconic colors, font and design that Coca Cola is known for.

maintenance regime for the advertisements. For example, in the demand specifications for the tendering process in 2014 the agency asks for the provider to remove any graffiti on any advertising installations within a 24 hour period (AUE 2015).

But as mentioned previously, there were almost immediate political reactions when the advertisements connected to the contracts started popping up in the city center. Grete Horntvedt said by late 2004 that the intentions behind the projects were good, but that "it has been too much at once. Now we need political governance". Several politicians started calling for a comprehensive plan for outdoor advertising again, with Horntvedt admitting that it should have been in place before initiating the projects (Vabø and Drangsland 2005).

The legal access to outdoor media

In 2004 the municipality, through its Traffic Agency, was given the authority to enforce certain paragraphs within the police by-law to fine actors guilty of littering public space. This included handing out fines for illegal advertising. The police alone had enforced this previously, but had used few resources to do so according to the municipality (Samferdselsetaten 2008). The enforcement became harsher on freestanding advertisement signs that in any way could constitute a "hindrance, danger or drawback for the free movement and accessibility of everyone in public space". Between 2004 and June 2008 there were a total of 6429 environmental fines, of which around 60% were filed under the category "advertising placards". The amount of environmental fines more or less tripled from 2004 to 2007 (Samferdselsetaten 2008, 9–18).

According to the police paragraphs[55], it was also forbidden to hang up posters, notices and announcements in the city except on publically designated bulletin boards (see Figure 5), a policy that was implemented already in 1996 (Archer & Pierstorff, 2015). Any violators risked getting fined 500 NOK for every poster they put up. With the stricter enforcement violators were increasingly slapped with fines (Waaler Lier 2004). Fines were sent to the organizations *behind* the posters. For instance, a support network for Afghan refugees was fined 17 times in 2006. However, the crackdown on such outdoor media was met with resistance from many organizations and networks who

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[55] Accessible at: https://lovdata.no/dokument/PV/forskrift/2007-06-06-577

complained about the strict enforcement to the Appeals Committee in Oslo, who, in collaboration with the traffic Agency, decided to change the interpretation of the police by-law so that violators now had to be caught in the act (Kielland Jensen 2008). Furthermore, after an evaluation of the arrangement in 2008, the Financial Committee of Oslo argued that the stricter policy was quite problematic:

> "As far as the committee knows, there has not been a single approved/established bulletin board by the municipality after the prohibition in the new police by-law was approved. In practice the new police by-law has therefore to a considerable degree limited the ability of voluntary organizations, resource-strapped concert organizers and interests groups to announce their events and their opinions"[56].

Figure 5. Examples of legal public bulletin boards in Oslo (Grünerløkka)

The committee called for more public bulletin boards to be introduced and that the Traffic Agency would generally not fine non-commercial and voluntary actors until that condition was satisfied. The City Council shared these concerns and voted in favor of the committee's suggestions. According to interviewee Luca, there have been discussions in the municipality over the prevalence of public bulletin boards, but the policy has generally been to limit their amount, and to the best of Luca's knowledge "nothing has been done" to increase the amount of billboards available for public use in the last 10–15 years. One of the main reasons for this s/he believes is the deteriorating

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[56] Financial Committee meeting. 14/01/09. Item 4. Accessible at
https://www.oslo.kommune.no/dok/Bys/2009/FKOM/2009000299-156087.htm

and visually poor effect they are seen to have. The posters are generally of low quality and are unprotected from wind and rain which further increases the dilapidated effect of them.

It should be mentioned here that there seems to be an almost insatiable need for citizens, organizations and others to express themselves in public space. Almost wherever one goes in Oslo one sees posters plastered on walls, lampposts, descent towers and elsewhere. In Figure 6 is a sample collected from district Grünerløkka of the illegal use of outdoor media (in the bottom-right picture we see illegally plastered posters side by side with a legal Clear Channel billboard).

Figure 6. Examples of illegal usage of outdoor media (Grünerløkka)

I have attempted, without success, to find a general overview of all the municipally approved bulletin boards in Oslo. Luca doesn't think there exists one, and the AUE also said that one doesn't exist, referring me to the individual districts of the city for more information. This left the impression that the issue of legal bulletin boards is not a priority for the municipality. According to Jan Hauger, the head of Rusken, the bulletins are generally limited and in the city center there are none (Archer and Pierstorff 2015). This is problematic, since resource-strapped bill posters are similar to the professional advertising companies in one crucial respect; they want to profile themselves where a lot of people are, but have limited legal means of doing so in the outdoor media landscape. Even former Clear Channel director Jan-Tore Endresen agreed in 2005 that

"private citizens have fewer possibilities to put up posters. But this has always been forbidden in Oslo, it's just that people notice it now because we in Clear Channel have a better maintenance regime than the municipality. We remove the posters when they appear" (Baldersheim 2005).

The legal access to outdoor media: outdoor advertisements

In 2002, two members of the City Council proposed a 'zero-tolerance campaign' for illegal advertisements in Oslo as a part of the effort to beautify the city. They argued that the city had neglected its responsibility by allowing offenders to get away for many years without repercussions (Johansen and Lindsjørn 2002). The campaign was adopted in early 2003, and the City Council also asked for an advertising plan that would limit and fix the "advertising mess" (Brandvold and Bergwitz 2006) and provide "concrete rules for how advertisements can be placed and designed to be allowed". By spring 2005 the municipality started to remove illegal advertisements in specific streets of Oslo (APBS 2010). In the same time period the city started seeing the impact of the advertisements connected to the municipality's own contracts. Many private actors felt that the municipality disproportionally approved advertising installations for its own city furniture contracts, while enforcing a strict regime against any private actors that wanted to install equivalent advertisements on private property. When the municipality was confronted on the grounds that it practiced unequal treatment under the law, the response was often that the advertising funded city furniture served a good cause[57].

The legal access to outdoor media: tagging and graffiti

The Municipality of Oslo has tried to limit the scope of tagging (graffiti) since the mid 1980's when it started emerging. The efforts to combat tagging were not very effective however, and in 2000 the Division for Transport and the Environment asked for the City Government to implement a 10-point strategy to come to grips with the issue. This included a zero-tolerance policy against tagging[58]. The new strategy was implemented in 2001 and was a lot stricter than before (Journalen 2014). It showed some promise

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[57] From Norsk Form's yearly conference. 22/11/06. Accessible at: http://docplayer.me/7921519-Norsk-forms-arskonferanse-kritisk-sokelys-pa-forskjellsbehandling-i-skilt-og-reklamesaker-av-morten-i-kerr-22-11-06.html

[58] The City Government's strategy to combat tagging. 03/08/00. Item number 1752/00. Accessible at https://www.oslo.kommune.no/sru/default.asp

initially, with reductions of around 40 % in the central areas. The municipality loosened its stance somewhat in 2006 when it decided to allow individual district administrations to provide legal graffiti walls. But this caused an increase in tagging incidents as the tags "spilled over" from the legal walls to illegal places, and the City Council voted in 2010 to take away the district's right to establish such walls again[59]. The policy was changed again in 2014, when the City Council all of a sudden wanted to make Oslo into one of the main cities in the Nordic countries for graffiti and street art (Røsåsen 2014).

The signage and advertising plan (2006-2009)

The first draft of a signage and advertising plan was released in early 2006 for input from municipal and state authorities, organizations, private individuals and 12 districts. Most were positive to the introduction of a general plan, but many also claimed that the initial draft represented a liberalization compared to prior practice, and some argued that the plan was business oriented. The use of standalone billboards were being discouraged by most. Furthermore, Outstanding Media AS even warned that the municipality risked breaching principles of equal treatment if it were to exclude its own advertising contracts from the regulations[60].

A revised plan was later approved in 2009 which specified the municipality's policy in relation to the Planning and Building Act's § 107. This was almost 15 years after political calls for such a plan began (M. Kerr 2010) and five years after the Department of Urban Development had asked the APBS to develop the plan. One of the stated reasons for why the process was initiated was to address the new city furniture contracts (bicycles, bus shelters and toilets) and descent towers. The overall intention of the plan was to suggest area specific strategies for dealing with signage and advertising in a way that catered to the city's different interest group's needs. It was also a goal to "limit signage and advertising's dominance in public space" while ensuring more proper aesthetic expressions of the mediums (APBS 2010, 3–5 & 47).

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[59]Tiltak mot tagging. Accessible at:
http://www.pangstart.oslo.kommune.no/getfile.php/131729917/bydel%20gamle%20oslo%20%28BGO%29/Intranett%20%28BGO%29/byr%C3%A5dssak.pdf
[60] Information From a document from the Agency for Planning and Building Services. Item number 200506403-84. Vedlegg 2. Accessible at
www.ivarjohansen.no/dokumenter/sammendrag%20bemerkninger25072006.doc

The plan divided the city into four advertising areas (XS, S, M and L) with individual guidelines to be followed for each. In "vulnerable areas" the regulations are very strict. The regulations are then gradually weakened with business dominated areas the least regulated ones (see text box and appendix 6). The plan was intended to consider the needs of businesses for signage and advertisements and the public's needs for a pleasant and accessible city. The plan also considers aesthetic and architectural values as needs (APBS 2010).

After much criticism against standalone billboards, the plan decided that they should generally not be allowed. Neither were advertisements to be allowed on city furniture. There are only two exceptions; if the units are integrated into the physical infrastructure of bus shelters or bike-share stations. They are exempt because of their "direct utility for the use of the streets and urban space" (APBS 2010, 39). Advertisements in connection with bus shelters and bike-share stations are allowed in areas S, M and L. In addition, "the XS-areas should not have advertisements. Exceptions can be made for bus shelters and bike-share racks if no other options are available" (APBS 2010, 42). Indeed, the entire agreements seem to be exempted from the plan: "Oslo has entered into agreements for advertising funded city furniture. The signage and advertising plan does not pertain to these private agreements"(APBS 2010, 36).

Some of the advertisements that were already deployed on the streets of Oslo in connection with the advertising funded agreements were now all of a sudden in violation of the regulations. But by 2012, three years later, at least 120 advertising

Advertising areas

XS (Vulnerable areas): Areas with low business activity that "should not have advertisements". These areas include parks, the river- and seaside and graveyards as well as buildings like kindergartens, elementary schools and churches.

S (Residentially dominated areas): Areas with low to middle density of business activity, where advertisements are to be limited, generally speaking.

M (Areas with mixed uses): Areas with middle to high density of business activity, with limited amounts of housing. M-areas are assumed to have a "robust capacity for different signage- and advertising types".

L (Business dominated areas): Areas with a high density of business activity, where business operations should be able to be clearly exhibited.

billboards from the municipality's own agreements were still on the streets despite of being in violation of the plan (Venli 2012c). The municipality claimed that the plan could not have retroactive effect which stopped them from removing the advertisements (Venli 2012a).

Changes to the signage and advertising plan (2013)

In 2013, before the launch of the new tenders for advertising funded bus shelters, public toilets and city-bikes, the APBS suggested that the signage and advertising plan would have to be revised slightly in order to accommodate geographic expansions[61]. Specifically, APBS assumed that it would be very difficult to get any offers for the contracts if backlit advertisements were not allowed in all areas (backlit advertisements are the preferred format of both JCDecaux and Clear Channel). After the approval of the signage and advertising plan in 2009, backlit advertisements were regulated in advertising areas XS, S and M. Without approval for backlit posters, every application to establish bus shelters or bike-share stations in these areas would need dispensation, something the agency would not be willing to give on a regular basis. The agency feared that the projects could be stranded or delayed if a political solution was not found[62].The City Council decided in September 2013 to allow for backlit advertisement signs in all advertising areas, but only when they were integrated into bus shelters and bike-share racks[63], with the caveat that any such advertisements could not be unsightly or cause a nuisance for the surrounding areas (as is regulated by the Planning and Building Act).

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[61] Letter from the Agency for Planning and Building Services. 18/09/13. City Government item 193/13. Accessible at https://www.oslo.kommune.no/dok/Byr/0/VEDLEGG/2013031479-1195795.pdf
[62] Meeting notes. 25/10/11. Item number 201104550. Accessible at http://innsyn.pbe.oslo.kommune.no/saksinnsyn/main.asp
[63] City Council vote. 20/11/13. Item number 381/13. Accessible at https://www.oslo.kommune.no/sru/default.asp

7   Discussion & Conclusions

This research set out to critically investigate some of the inherent traits and implications of an advertising funded BSS. But to conclude anything on the topic is not entirely straightforward. The process of implementing and governing a BSS is very complex. It spans over many years and involves many different actors who have diverging interests, ideas, mandates and opinions. Furthermore, city bicycles and outdoor advertisements are two topics that really interest and engage people. This makes them fertile ground for contestation, critique, politicization and as a result—changes in policy. To draw any definitive inferences in such a setting is difficult and some conclusions will necessarily be dependent on contextual factors (such as the specific people involved in the process). That is why this chapter will be focusing on the main traits and the broad implications of the model that are less likely to be overly dependent on contextual factors.

7.1 From conflict to convergence

In general it can be said that the experience of Oslo in relation to outdoor advertisements share many similarities to the U.S. precedent a century before it. As in the U.S. context, the relationship between public officials/authorities and the outdoor advertising industry has largely gone from one being characterized by conflict to one being characterized by convergence. And as in the U.S., the authorities in Oslo defined the value of public space "in terms of its expressive power, not in terms of its contributions to democratic political life" (Baker 2007, 1200).

In Oslo, the introduction of PPPs with advertising companies for city furniture is the clearest manifestation of convergence. The two dominant advertising companies have created an ingenious model that caters directly to the municipality's interests. They have become increasingly professionalized and are well placed to deliver solutions that are pleasing to the political representatives; cost free public services as well as a functioning maintenance regime which keeps the city cleaner than the authorities had bothered/been able to do before. The promise that implicitly follows the advertising funded agreements from the municipality's point of view is that they will be enabled to control the outdoor advertising environment more easily. Indeed, this was the promise

made by Jean-Claude Decaux in the 1960s when he sought to help governments "fight against surplus and unsightly advertising".

I would argue that one of the keys to understanding the municipality's point of view (the center-right parties primarily) is to think of it as aligning with the ceremonial model of public space[64]. The ceremonial model favors civic order over private market interests. In these PPPs, there is a promise for the municipality to have it both ways; civic order *with the help of* private actors. The authorities may be tempted to think that they can control the outdoor media landscape by interacting with a few, professional actors like Clear Channel and JCDecaux that can put advertisements "in their proper place", rather than bothering with a chaotic and almost ungovernable outdoor media landscape where businesses, graffiti artists and private bill posters fight for attention.

The main convergence in these arrangements is therefore the interest the involved actors have in controlling the outdoor media landscape. The large outdoor media companies have an interest in controlling and monopolizing the outdoor environment for two main reasons; first, too much outdoor media in the city scape risk causing a back-lash from the public, and second; with too many competing outdoor mediums their product's value will go down as their 'Opportunity To See', 'Visibility Adjusted Contact' and 'share of voice' measurements are reduced. For the municipality, a beautiful and well-maintained city is assumed to be a sign of proper governance which communicates to the public that their representatives are responsible governors of public space. Viewed from this perspective, it is not a paradox that the municipality enters into advertising contracts while simultaneously trying to regulate the outdoor media landscape.

One could argue that the ceremonial model of public space has to a large degree been institutionalized in the Municipality of Oslo's bureaucracy. Aesthetic concerns have increasingly been institutionalized under the APBS, not least through the introduction of general aesthetic plans and the signage and advertising plan. Through such plans the municipality attempts to control the outdoor environment in a bid to make the city beautiful. Today the ceremonial model is often expressed in terms of place marketing, in which outdoor advertisements are understood to detract from architectural or

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[64] That this view is dominant does not mean that everyone adheres to it. To the contrary, ideas about public space have always been contested and there are dissenting voices in Oslo as well.

hereditary values. Such concerns are institutionalized under the CHMO. Through these public authorities, the municipality tries to maintain control over the expressive power of public space. The advertisements connected to the bike-sharing stations (and sometimes the bicycle stations themselves) do not fit into such aesthetic aspirations. What the city bikes *do* provide is a transportation mode that can both "say and do" things. They offer the municipality a way to show their commitment to environmental issues without hurting anyone in any straightforward way and without the municipality having to pay anything for it.

But the attempts by the municipality to maintain the integrity of the outdoor environment even after it has entered into contracts for advertising funded public services have caused some issues for Oslo Bysykkel, as we could see in section 6.1.3. Clear Channel wants to maximize the advertisement's value by having the billboards attract as many 'eye-balls' as possible. The installations have to capture people's attention. This forms part of their inherent monetization strategies. But other actors have interests and mandates that clash with those of Clear Channel. Several of them want to direct people's attention elsewhere. The CHMO wants to direct our attention towards buildings and environments with high cultural values. The APBS, on the other hand, wants to preserve the aesthetic expression of the city. Furthermore, the traffic agencies want our attention (or eye-balls) to be on the road. For them the key issue is traffic safety and they want to limit any distracting elements. In the authorities mind it is the advertisements that pose the biggest challenge for such mandates. What is clear is that the presence of advertisements, because of these conflicting interests and mandates, has caused challenges in the physical development process of both BSSs (which in turn complicates the authorities ability to live up to its contractual commitments). The physical development process is continuously impeded and slowed down, and the involved actors are also unable to optimize the locations of the stations. This is further exacerbated when the individual authorities do not have a uniform interpretation of the advertising regulations.

Clear Channel, according to Chris, would not mind decoupling the advertisements from the bicycles again. S/he acknowledges that it would make physical development easier because good placements for bike-share stations would not be as likely to be rejected. But to have standalone billboards as part of the scheme has been tested before and that

model has subsequently been abandoned. In a way, the municipality is stuck between a rock and a hard place in dealing with the advertisements for the BSS. By decoupling the city bikes from advertisements, they will find it difficult to find tolerable placements for the standalone billboards (which in turn actually slow down the physical development process as it did in the first system). Outdoor advertisements are contentious in and of themselves, but even more so as standalone billboards. From the point of view of citizens (who might not even know that the BSS is funded by advertisements) these installations are ostensibly deployed in the streets "for no good reason". On the other hand, if the municipality couple stations and advertisements together they at least invoke the sense among the citizenry that they are "getting something back". But at the same time it guarantees sub-optimal placements for the stations as individual agencies will reject placements when advertisements are present. It also slows down the physical development process of the system. A slower physical development process of the BSS is thus inevitable for any authority that—like the Municipality of Oslo—wants to fund city bicycles with advertisements while simultaneously presenting themselves as responsible governors of public space by controlling the outdoor environment[65].

7.2 **Advertising funding – a slippery slope?**

When engaged with these contracts, the authorities become invested in the outdoor advertisements profitability as a means towards realizing "free" public goods such as city-bikes and bus shelters. So when for example the advertisements are subjected to culture jamming or other alterations, political leaders are quick to defend the private property rights of the advertising firms. Authorities and political parties, furthermore, are invested in these arrangements not just as regulators, but also as advertisers themselves. The advertising contracts include possibilities for the public authorities to use billboards. Political parties and individual authorities see the value in using the billboards for their own purposes, whether that is for political campaigns, awareness campaigns or simply to provide public information. The promise and power of the medium to influence the citizenry is one of the ways that have enabled a convergence between the advertising companies and public authorities.

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[65] Similar physical development issues can also be seen in the contract for bus shelters, where JCDecaux even considered taking legal action against the municipality for its failure to provide the company with enough locations for advertisements (Lundgaard 2004b).

But as much convergence that can be found as a basis for such agreements, I would argue that there is an inherent risk to municipalities who enter into them. Concretely, the advertising funded model is based on some key premises. It is predicated on the idea that public space is exchangeable. Public space becomes commodified. And if the municipality can act as a commercial actor by commodifying public space and legally exchange it for advertising contracts, how does it credibly stop private actors from doing the same thing? How can a municipality regulate the outdoor media landscape while simultaneously being one of the main participants in it? When the municipality wants to limit the total advertising impression of the city while entering into its own advertising contracts, one can only deduce that something else has got to give. Some other outdoor mediums will have to be restricted.

The problem is; how can the municipality legally enforce strict regulations on some outdoor signage and advertisements in the name of "order" and "aesthetics" without endangering its own contracts? The first way is to be more lenient towards the municipality's own installations. The APBS started by lowering the aesthetic and accessibility standards that would otherwise apply, as the agency felt pressured to do so to realize the bike-sharing scheme. And when it became clear that the physical development process was so slow that it could endanger the entire project, the Agency for Outdoor Activities loosened its stance on advertisements close to parks..

When Oslo finally managed to decide on a signage and advertising plan in 2009, the municipality's private agreements for advertising funded city bikes and bus shelters were simply exempted from the rules on a general basis. But the new plan did still cause some trouble for the agreements. The fact that backlit signs were not allowed in some of the plan's advertising areas meant that an expansion of the city furniture contracts towards Ring 3 were in jeopardy. Both JCDecaux and Clear Channel had standardized the use of backlit billboards as they boost the industry's quantitative measurements. The municipality did not expect any other competitors for the second tendering process, which pushed them to change the regulations in 2013 and allow backlit posters in all of the advertising areas, albeit under one condition; such billboards would have to be an integrated part of either bus shelters or bike-share stations.

In practice this meant that the municipality played into the hands of the two large actors that stood to gain the most from such a change while also favoring its own contractual

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agreements. The municipality ended up favoring some private interests over others. This must be considered a huge success from the point of view of JCDecaux and Clear Channel. What seems quite clear is that the type of advertisements that the companies can now enjoy placing around the city would not be allowed without having city bikes or bus shelters connected to them. By 2013 they had a near duopoly in the city to use certain billboards, and the municipality has in practice institutionalized unequal treatment into its governance of signage and advertisements[66]. The bus shelters and city bikes in this way has "carried" backlit billboards into areas where they would otherwise not be allowed, and indeed were not allowed until the municipality changed the regulations in 2013. To paraphrase Arild Alsvik, the city bikes have functioned as a kind of "Trojan horse" that secures access to areas that were otherwise off limits. In this way, the professionalized mediums of JCDecaux and Clear Channel—where one has to pay to gain access—have remained legal and are flourishing.

Other stakeholders in the outdoor media landscape such as private businesses, graffiti artists and private bill posters have seen their mediums being either criminalized or restricted in the name of aesthetics and order. They have faced tougher regulations. The municipality has consistently fought against graffiti ever since it emerged on the scene in the 1980's, but in 2001 it ramped up its efforts and implemented a zero-tolerance policy. This coincided with the first negotiations over advertising funded city furniture. Since then there have been a lot of inconsistencies in the graffiti-policy and it is difficult to draw any general conclusions from the period. But the picture is a bit clearer when it comes to other outdoor mediums. The enforcement against illegal advertisements and private bill posting was bolstered considerably shortly after the introduction of the advertising funded agreements, not least after the municipality started enforcing the police by-laws. Since then, no effort seems to have been made to increase the access of resource-strapped citizens, voluntary organizations and interest groups to legal and free outdoor advertising spaces. In addition, private businesses complained about the strict interpretations of the regulations when it came to their installations, when the municipality approved similar installations for their own city furniture contracts.

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[66] In theory, other private actors could still attempt to set up their independent BSS and attach advertisements to the stations on private property. We can only speculate what the municipality would do if that were to happen.

The overall picture that emerges is one of divergence; the large advertising companies have gained legal access to new areas for their advertisements at the same time that other outdoor mediums have faced tougher regulations and enforcement regimes. After the introduction of the advertising funded city furniture agreements, the legal access to outdoor media has been increasingly monopolized and monetized by the large players. The democratic accessibility of the outdoor media landscape has in this way been restricted, resulting in a more limited regime of publicity. It may be difficult to *prove* that the entry of advertising funded city furniture has caused this development in Oslo, but according to Kurt Iveson (2012) there are precedents for it in other places. The model is dependent on the monetization of the outdoor advertisements that will fund the public services. This tends to push the authorities to reduce the amount of free advertising space in the outdoor media landscape. That the municipality accepts such a development may well be because their concern is not primarily with the democratic integrity of public space, but rather with the symbolic integrity of the urban landscape.

7.3 Contract dilemmas and development issues

In the advertising funded model the Municipality of Oslo is bound by contract to make sure that a sufficient amount of advertisements are deployed in public space to fund the system. As we could see in the first system, this may be easier said than done. It will be difficult for any authority that wishes to maintain control over the aesthetic expression of the city. One of the difficulties for the municipality is how to strike a balance between the length of the contract and the advertising exposure in the city. The municipality does not easily go for shorter contracts as that would imply very high advertising exposure in a short period of time that would risk politicizing the issue. Spokespeople for Clear Channel warned about such a scenario publically before entering into the second BSS in Oslo (Eggesvik 2014a) and interviewee Chris said that "there is a certain tolerance-level among the population". Longer contracts, on the other hand, allow the municipality to distribute the advertisements over time. But it also commits the municipality to agreements that span over several administrations, thereby limiting their flexibility. It may "trap" new administrations in contracts that they may not particularly like, but which one does not simply get out of. As was stated in leftist

newspaper Klassekampen: "The red-green City Government in Oslo is bound to a bourgeois advertising contract that runs until 2028" (Smedsrud 2015b).

In the end, both bike-share contracts in Oslo have ended up being quite long. The first contract finally lasted between 2002–2015. The second one is due to be finalized by 2028. Such long contracts can be quite problematic when it comes to attempts to develop the BSS within the time frame of the contractual agreements. The first system in Oslo stagnated at a certain level of usage (at around 1 million trips) for the last years of the contract (at least partially because of poor economic incentives for the operator) and was insufficiently scaled to meet demand in the city. However, the efforts to expand the system were very complicated as we could see in section 6.1.2. The municipality also recognized the issue of stagnating systems and rigid contracts during the first system, which is the reason why they introduced "future-proofing" in the new contract. However, it is too early to say whether or not this type of contractual innovation will actually work in practice. At the end of the day, any innovation or expansion is likely to be dependent on further funding which is ultimately controlled by Clear Channel (if the municipality does not decide to subsidize the system in some way).

When contracts are about to run its course and a new tendering process is about to begin, further complications emerge. When the private actor owns the physical infrastructure of the system by the end of the contract period they will do with it as they see fit. From a sustainability perspective, the physical infrastructure could potentially be used again. This would also save the time and money it takes to build bike-share stations. But the municipality has to adhere to certain principles in the tendering process which makes it very difficult to reuse the same infrastructure in a new system. This means that even if the municipality wanted to use the same physical infrastructure again (which is a big "if" considering that technological development is likely to have made the system obsolete after 12–14 years) they probably could not. A way to get around this is to do as the municipality has done in Oslo, in that they decided they wanted to write down the value of the system to 0 by the end of the contractual agreement. This will enable them to decide what will finally happen to the infrastructure. But in order to make such an arrangement possible, we come back to the issue of contract length and advertising exposure. How many billboards can the municipality accept in order to have the prerogative to decide the fate of the infrastructure by the end of the contract, and

how long will the contract have to be for an advertising company to agree to such a deal?

Finally, the question of developing and expanding BSSs will likely be even more important in the future. The BSS market is still quite young and is continually developing. Organizations, authorities and researchers are starting to produce knowledge about what works and what does not work. In addition, bicycling is increasingly being promoted by local authorities as a way to achieve sustainable mobility which will likely encourage more people to use BSSs. In such a context, authorities will have to plan for how to deal with the "problem" of very successful systems that experience considerable demand from users. How will such systems be further developed within contractual agreements and can that easily be done within the framework of an advertising funded system? Will development always demand more advertisements? Will it demand public subsidies?

7.4 **Final words**

It is easy to see why municipalities all over the world are tempted to implement advertising funded BSSs. They receive a free, 'green' transportation service where a private actor even takes care of the maintenance needs. Many of the systems also turn out to be highly successful and popular among the citizenry. But the model comes with some likely implications that may not be evident at first—especially for authorities that are mainly focused on the advantages of the arrangement.

The inherent need in the model to commodify public space risks opening a Pandora's box: if the municipality can rent out urban space, why should not private actors be able to do the same? It puts the municipality in a position where it cannot easily control outdoor advertisements—at least not without breaching principles of equal treatment. But the advertising funded model also creates some complications for the BSS itself – in terms of contractual arrangements, station location and physical development of the system. These issues will not have any simple solutions for cities that consider implementing their own advertising funded BSS.

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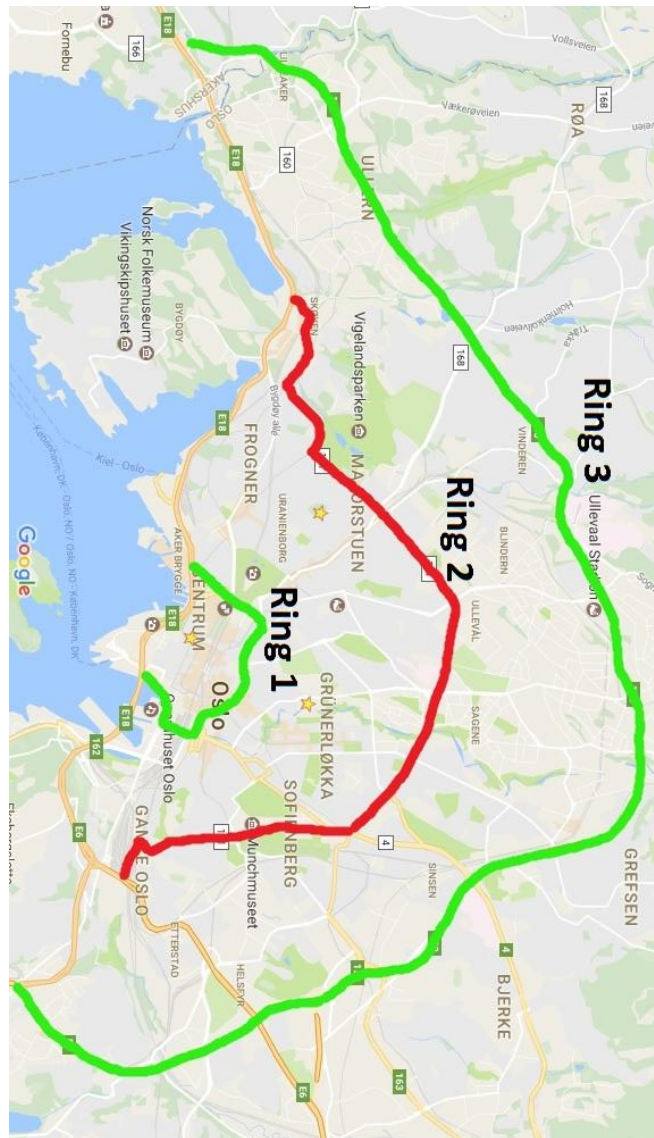
Appendix

Appendix 1. The "Ring-roads" in Oslo. Map data ©2017 Google. Adapted by the author

Organizational chart City of Oslo
Updated 01.01.2017
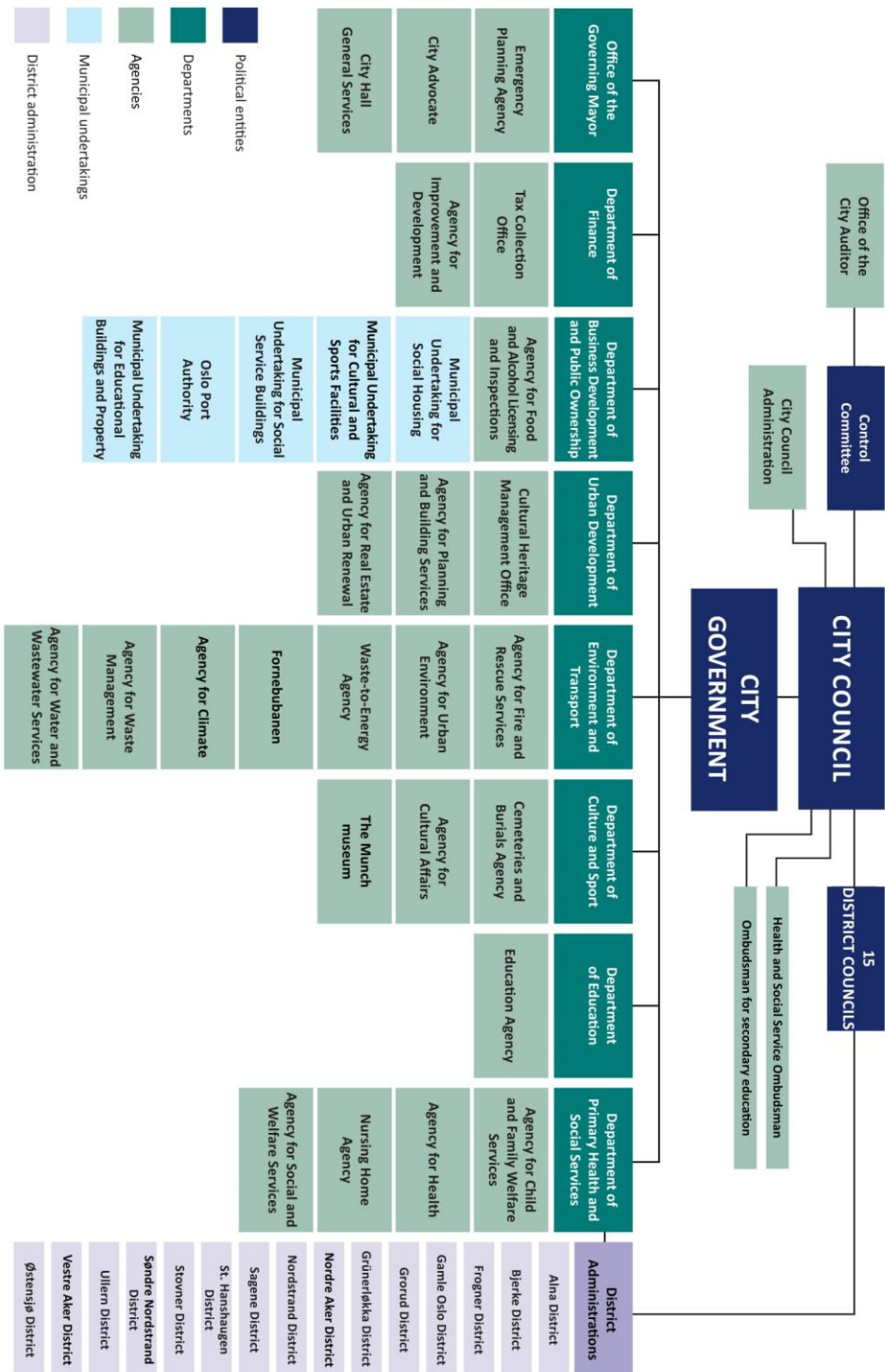
Appendix 2. Organizational chart structure of the Municipality of Oslo.

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|	Position	Pseudonym[67]
1	Public Official in the Municipality of Oslo	Kim
2	Representative from the University of Oslo	Marian
3	Chauffeur for the city bikes	Inge
4	Mechanic of the city bikes	Iben
5	Representative from Share Bike	Alex
6	Representative from Urban Infrastructure Partner	Mika
7	Public Official in the Municipality of Oslo	Nore
8	Public Official in the Municipality of Oslo	Francis
9	Representative from Clear Channel	Chris
10	City council secretary	Andrea
11	Bike-share user	Gabriele
12	Bike-share user	Kristen
13	Member of the City Council	Sandy
14	Person involved with bike-share initiative in Bergen	Audun
15	Member of the City Council	Eli
16	Member of the City Council	Frøy
17	Marketing Academic	Orsa
18	Public Official in the Municipality of Oslo	Theodore
19	Representative from Rusken[68]	Luca

Appendix 3. List of interviews

[67] All pseudonyms are gender-neutral to ensure anonymity
[68] Rusken is the Municipality of Oslo's effort to keep the city "nice and clean"
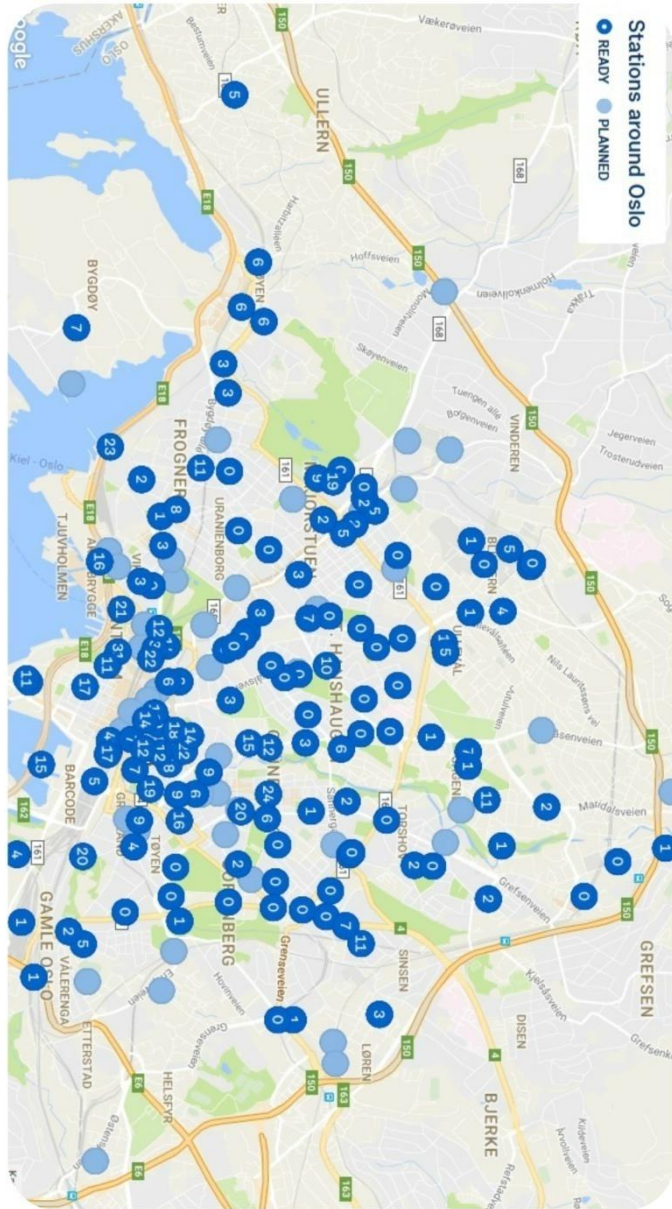
Appendix 4. Map of bike-share stations (as of 2017-04-16). Map data ©2017 Google
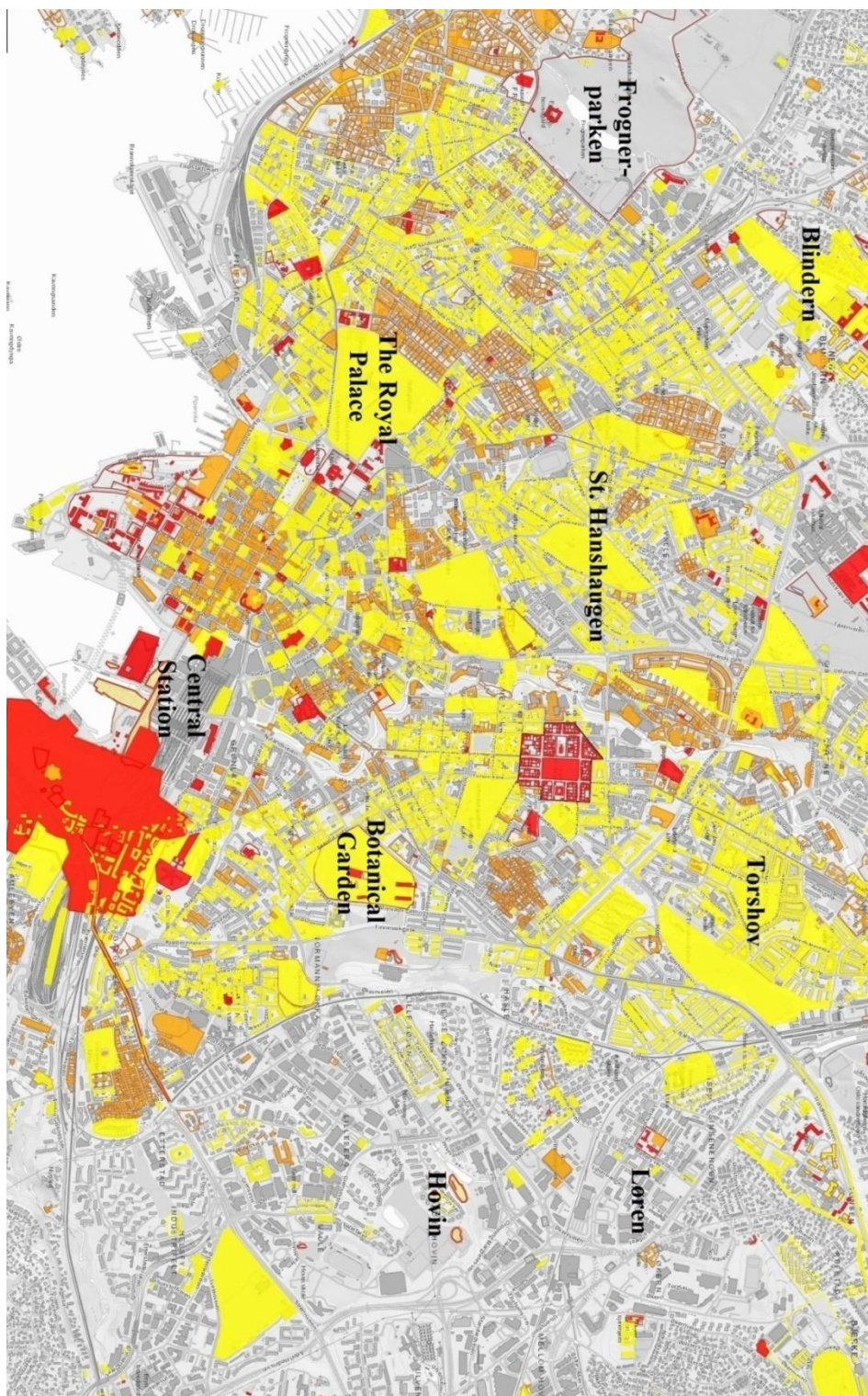
Appendix 5 – The Cultural Management Heritage Office's Yellow list (Gul liste).
Kartverket, Geovekst og kommuner - Geodata AS. The map has been adapted by the
author.
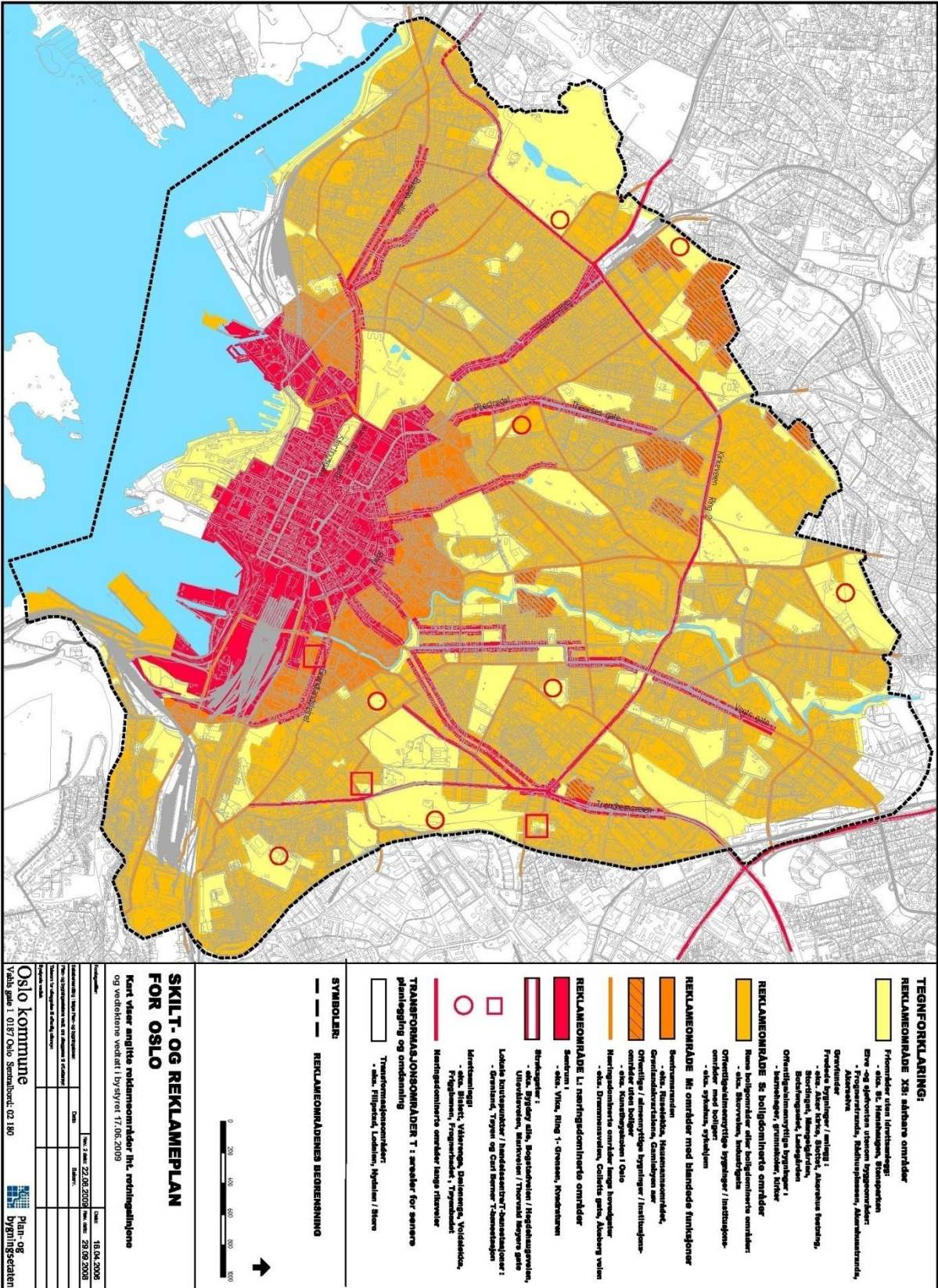
Appendix 6. The signage and advertising plan for Oslo. Advertising areas.