TOWARDS THE PANOPTIC CITY

CORENTIN DEBAILLEUL & PAULINE DE KEERSMAECKER
SEPTEMBER 1, 2014
SUPERVISOR: MATHIEU VAN CRIEKINGEN
4CITIES UNICA EUROMASTER IN URBAN STUDIES
TOWARDS THE PANOPTIC CITY

THE PROLIFERATION OF VIDEO SURVEILLANCE IN BRUSSELS AND COPENHAGEN

This master thesis has been co-written by Corentin Debailleul and Pauline De Keersmaecker
4Cities UNICA Euromaster in Urban Studies 2012-2014
Université Libre de Bruxelles (ULB)
Supervisor: Mathieu Van Criekingen (Université Libre de Bruxelles)
Second reader: Henrik Reeh (Københavns Universitet)
Hence the major effect of the Panopticon: to induce in the inmate a state of conscious and permanent visibility that assures the automatic functioning of power. So to arrange things that the surveillance is permanent in its effects, even if it is discontinuous in its action; that the perfection of power should tend to render its actual exercise unnecessary; that this architectural apparatus should be a machine for creating and sustaining a power relation independent of the person who exercises it; in short, that the inmates should be caught up in a power situation of which they are themselves the bearers. To achieve this, it is at once too much and too little that the prisoner should be constantly observed by an inspector: too little, for what matters is that he knows himself to be observed; too much, because he has no need in fact of being so. In view of this, Bentham laid down the principle that power should be visible and unverifiable. Visible: the inmate will constantly have before his eyes the tall outline of the central tower from which he is spied upon. Unverifiable: the inmate must never know whether he is being looked at at any one moment; but he must be sure that he may always be so. In order to make the presence or absence of the inspector unverifiable, so that the prisoners, in their cells, cannot even see a shadow, Bentham envisaged not only venetian blinds on the windows of the central observation hall, but, on the inside, partitions that intersected the hall at right angles and, in order to pass from one quarter to the other, not doors but zig-zag openings; for the slightest noise, a gleam of light, a brightness in a half-opened door would betray the presence of the guardian. The Panopticon is a machine for dissociating the see/being seen dyad: in the peripheric ring, one is totally seen, without ever seeing; in the central tower, one sees everything without ever being seen.

It is an important mechanism, for it automatizes and disindividualizes power.

(Foucault 1975: 200-202)
Abstract

This master thesis aims at answering the following questions: what is the spatial distribution of open in Brussels and Copenhagen? How does this distribution relate with the socio-economic structure of these cities? What conclusions can we draw out of this relation in terms of political urban priorities? We used mapping and semi-structured interviews to help us conduct our comparative analysis. We found that if the two capital cities were subject to common trends i.e. the neoliberal governance of insecurity in the context of global city competition, the actual uptake of CCTV takes different forms and intensities in our two case studies and must be analysed in light of their local political economy.

Table of Contents

Abstract .................................................................................................................................................................................. 4
Introduction ......................................................................................................................................................................... 7
   Why a joint master thesis? ........................................................................................................................................ 7
   Our aims ............................................................................................................................................................................ 7
   Research Question ........................................................................................................................................................ 7
   Methodology .................................................................................................................................................................... 8
Contextualisation ............................................................................................................................................................ 11
   Introduction ................................................................................................................................................................ . 11
   On CCTV.......................................................................................................................................................................... 11
   Definition .................................................................................................................................................................. 11
   Brief history of CCTV in Europe .............................................................................................................................. 12
   Defensive urbanism................................................................................................................................................... 12
   Definition .................................................................................................................................................................. 12
   What does defensive urbanism practically consist in? .......................................................................... 13
   Drawing links between CCTV and situational prevention ........................................................................ 14
   CCTV as a way to implement defensive urbanism’s goals ................................................................................. 14
   CCTV as part of the defensive philosophy ................................................................................................. 15
   Common effects between CCTV and situational prevention .......................................................................... 15
   The wider picture: neoliberal globalisation .................................................................................................... 18
State of the Art .................................................................................................................................................................. 21
   Review ....................................................................................................................................................................... 21
   Academic sources .................................................................................................................................................. 21
   Non-Academic Sources ........................................................................................................................................ 23
   Presentation of the authors’ obtained results ................................................................................................. 24
Results for Brussels.............................................................................................................................................. 73
Copenhagen.................................................................................................................................................................. 75
Map.............................................................................................................................................................................. 75
Results analysis................................................................................................................................................................  78
Brussels........................................................................................................................................................................ 78
Copenhagen.................................................................................................................................................................. 81
What zones are under surveillance? ............................................................................................................. 81
What socio-economic profile for these areas? ..........................................................................................  83
Ghettoes in Copenhagen?................................................................................................................................... 84
Comparative analysis ............................................................................................................................................... 86
Differences............................................................................................................................................................... 86
What causes for these differences?................................................................................................................ 86
Policy transfer and inter-city competition.................................................................................................. 88
Similarities...............................................................................................................................................................  89
Why these similarities?....................................................................................................................................... 89
Conclusion.......................................................................................................................................................................... 91
Introduction

The spatial logics of CCTV implantation is the research object we have chosen to investigate in the following master thesis.

The decision to focus on this issue comes from a paper on defensive urbanism written earlier by one of us during this master program. We thought that the more specific topic of CCTV surveillance allowed us to concretely study the broader one of defensive urbanism, and to further the already initiated research. In this line of thought, we wanted to study how video surveillance is part (or not) and how, of defensive urbanism. What also motivated this decision is that we could get something concrete out of it, such as knowledge about our cities, or tracks for future actions. Indeed, Brussels and Copenhagen are the cities in which we live/have lived/will live. Also, the topic of CCTV is a contemporary central social debate, addressing issues that simply raised our interest such as security, privacy, the newly expanding security business, the ethics of technologies, social segregation, and defensive urbanism.

Why a joint master thesis?

Initially, we both had common topic interests, and it is out of a discussion aimed at trying to figure what our respective theses could be about without overlapping each other that we finally decided to work together. This was made possible by the fact that we seemed to have a common vision on the chosen topics. And also because we have complementary academic background (geography and political sciences), we both have different methods and perspectives to bring to the elaboration of this master thesis.

Our aims

As nowadays studies about defensive urbanism and the penitentiary city are very Los Angeles-centred, and the ones about CCTV very UK or London-centred, we want to contribute by bringing a European perspective on both these topics.

We also wish to pursue the already existing work of authors that are critical towards defensive urbanism and CCTV by trying to bring useful information, material, and perspectives that we hope can help support further research.

Research Question

We narrowed down our topic by trying to have a research question that would combine our two academic backgrounds. CCTV is indeed an object of research that can be concretely mapped, and that opens the door to the elaboration of a spatial analysis of defensive urbanism (geographical aspect). The topic also allows us to investigate the policies, discourses, and socio-economic dynamics lying behind that spatial distribution (political aspect).

How does the spatial distribution of public surveillance cameras reflect the socio-economic geographies of Brussels and Copenhagen? And how does this distribution shed light on urban policy strategies in these cities?
Methodology

Here’s the path our research will follow: we will first elaborate a contextualization whose purpose is to replace CCTV surveillance in a wider context, and to theoretically link it to other means of surveillance and social control, as well as with the urban environment in which it is embedded. This will be done by problematizing video surveillance as part of defensive urbanism, using the latter as a concept through which the presence in urban space of the former will be grasped and understood. Then, a state of the art will follow, developing on texts that focus specifically on the spatial dimension of CCTV surveillance. After that we will enter the more practical aspect of our research: we will investigate our two case studies, ultimately elaborating maps of publicly-owned CCTV surveillance devices at the city-level. We will then analyze the obtained results, with the help of previously conducted interviews along with other written material.

As said above, one of our goals is to elaborate maps showing the spatial distribution of public open-street CCTV networks for our two case studies. We will decided to focus on public open street cameras, as they are theoretically the only ones authorized to watch the public space, as studying public cameras allows us to examine public policies, and as it is difficult to be exhaustive concerning privately owned cameras (because of issues of privacy, multiplicity of owners, and existence of data). A precise methodological note of each produced will be developed further in the text, when presenting our finished material. These maps constitute the basis for our case studies analysis.

It also necessary to precise that when it comes to stakeholders, we focused on the discourses and practices held by institutional actors in charge of the placement and management of CCTV. More than on the population’s opinion and on actors opposed to it. Indeed, we did not want to ‘dissect’ people’s opinion we might feel close to. Also because as our goal was to obtain information regarding the location of cameras, as well as the discourses held by actors in charge of placing them, these institutional actors seemed better designated to give us accurate information.

We also decided to conduct interviews in both cities, in order to obtain first-hand information from the relevant authorities about our case studies CCTV networks. This gave us a more rapid access to relevant information or documents that we otherwise wouldn’t know where to look for or not even think of looking for. Interviews also helped us to have a vision of who are the important actors and how they relate to each other. The goal was to enrich our perspective on the topic by having a direct contact with actual stakeholders, as some significant facts or attitudes can only be grasped through the confrontation with them. The questionnaire we used to perform these semi-structured interviews can be found in Appendix 5 (while interview transcripts are in Appendixes 6 to 10).

It is important to specify that when it came to conduct interviews in the case of Copenhagen, we faced difficulties: very few people answered our demands (although they were sent twice, with a few weeks interval, firstly in English and then in Danish). And the few who did reply had a negative answer. The police, that was very cooperative when it came to give us written information, declined our interview request with an official stamped letter in Danish. Michael Agerbæk, a policeman who delivered press statements about the police decision to set up CCTV in the city centre, also refused. When we insisted, he stopped answering. And finally the S-train
operator DSB answered us to say that they were passing on the matter to the responsible person, who never contacted us back, despite our persistence. As a result, we weren't able to obtain any interview. All information about Copenhagen and its video surveillance system (besides the number of cameras and their placement) therefore comes from written sources, and might be less extensive than in the case of Brussels. Although this delayed us somehow and was of course disappointing, it didn't stop us in any major way as the CCTV situation of Copenhagen is clearer and easier to grasp than the one in Brussels.
**Contextualisation**

“It is vain, sterile and absurd to criticise the securitarian ideology without attacking the economic, political and social system it protects and propels” (Rigouste 2011: 148).

**Introduction**

For this contextualisation, we decided to focus on the existing links between the issue of surveillance and the city. We adopted the following problematised angle: CCTV as part of defensive urbanism, using the latter as a concept through which to grasp and understand the presence of the former. These two concepts and the way they relate to each other will therefore be investigated. The goal being to replace video surveillance in a wider socio-economic context, and to theoretically link it to other means of surveillance and social control, as well as with the urban environment in which it is embedded. Trying to answer these questions will help us understand in what context, with what purpose, and with what effects is CCTV surveillance developed. It will give substance to our object of study. In return, studying CCTV constitutes also a way for us to shed light on what defensive urbanism and the logics underlying it concretely consist in.

Our writing will not adopt the point of view of defensive urbanism, but instead use it as a tool through allowing us to frame the presence of CCTV in urban space, and at the same time to be critical towards this very presence. To follow Garnier’s argument, we could say that critical analysis does not mean trying to assess the efficiency of defensible spaces, which is generally the topic of discussions on the theme, but that it has more to do with questioning the necessity of making the urban space physically defensible (2012: 8-11).

**On CCTV**

**Definition**

By definition, CCTV (closed-circuit television) is

A TV system in which signals are not publicly distributed but are monitored, primarily for surveillance and security purposes [...]. The system is called ‘closed-circuit’ because the cameras, monitors and/or video recorders communicate across a proprietary coaxial cable run or wireless communication link. Access to data transmissions is limited by design (Pedersen 2011).

More specifically, video surveillance has a repressive function, as it is

A way to remotely control the activity of the user of public space, but also to label this activity’s conformity or not to social norms. This allows then, in case of non-compliance with the rule, to detain evidence in order to initiate a sanction process, if an instantaneous intervention by peers or by police has not been possible (Lefevre, quoted by Bourdoux 2009: 9, our translation).

It is important to remind ourselves that even though the object of these definitions is a technical, therefore seemingly objective one, there is always a political dimension inherent to it. In this
perspective, Robert Carr (2014: 2) proposes another definition, from a political economy perspective:

I have rationalised CCTV as: a component in the cultivation of patron-client ties between the Federal Government, its agents (MPs) and local councils/communities; a mechanism for government to facilitate the flow of public funds to private companies through arrangements that are virtually unchecked and non-evidence based; a mechanism for government to facilitate profitable opportunities for the security technologies industry, technical consultants and news media; and, a mechanism for reproducing political and social hegemony by working to normalise these relations at the level of discourse.

**Brief history of CCTV in Europe**

CCTV systems appeared in the 1970s in the European context, initially to assist traffic regulation in congested cities. Later on, it began to be used in private spaces menaced by the supposedly growing criminality, such as banks, shops, and malls. It is to achieve the same goal of improving security of persons and their property that the use of CCTV spread to public spaces, and began to be used by public authorities. The flourishing security market and the incentivising state policies in the UK at the beginning of the 1990s turned this type of use of CCTV into an unavoidable tool to ensure security in other European cities (Bourdoux 2009: 14-15; IAU 2008: 3).

Along the way, technology evolved, allowing for a more efficient and diverse use of video surveillance. The first devices were static low resolution black and white monitors with a fixed focal length and no interactive capabilities. A recording feature (which also evolved over time) was later added, as well as the ability to move the camera and to zoom. Today, modern high-resolution colour devices can be coupled with ‘intelligent’ features such as speakers, or automatic detection of (non-)movement and humans (through CO2 and heartbeat detection, for example), (Pedersen 2011; Norris 2009: 3).

**Defensive urbanism**

This section builds on the previous work by Pauline de Keersmaecker ‘Defensive Urbanism in Brussels’ written in 2012 for Mathieu Van Criekingen’s course ‘Urban Economic Geography’.

**Definition**

Defining the concept of defensive urbanism and exposing its views and main ideas allows us to conceptualise the issue of surveillance in an urban environment. It is by inscribing CCTV in this context (both theoretical, and historical: the greater importance defensive urbanism has gained over the last decades) that we will manage to link surveillance cameras with other urban social control and surveillance devices, technologies, and strategies. It is also through that angle that we will replace this technology in the urban environment.

As Kevin Lynch (1974: 511) puts it, “design is the imaginative creation of possible form intended to achieve some human purpose: social, economic, aesthetic, or technical. […] Urban design deals with the form of possible urban environments.” In this view, defensive urban design achieves the human purpose of defending specific social groups against defined threats. More specifically, defensive urbanism seeks to defend people against crime and delinquency that are supposedly rising in cities. This is achieved through the shaping of the city itself, as it is supposed to
influence people's behaviour (Newman 1972). Although, it is often argued that urban violence is not rising in cities. It is instead the feeling of insecurity, and the mainstream statements claiming that there is more urban violence, that are actually rising (Bétin, Martinais and Renard 2003: 4).

Generically, theories of defensive urbanism come from the *Community Design Analysis*, or *Crime Prevention Through Environmental Design* (CPTED) approach. It sees defensive urbanism as a necessity, and seeks to implement it in the urban landscape. This vision is mainly government-oriented, and its goal is to implement environmental design policies that make the city more secure both by deterring criminal behaviours and by enhancing the inhabitants' sense of ownership and responsibility towards their living environment. In this view, the city is perceived as violent, and full of crime and danger. Its founding publication is the book *Defensible Space. People and Design in the Violent City*, by architect and city planner Oscar Newman (1972). It launches the *defensible approach*, that is more specifically focused on urban design than the broader CPTED approach. These researches, conducted in the early 1970’s and updated until 1996, are mainly based on crime data analyses from New York City public housing (p. xiv), and are funded by a lot of different federal institutions, the main being the National Institute for Law Enforcement and Criminal Justice of the United States Department of Justice (pp. ix-xi). Newman claims that some residential patterns (mainly high-rise dwellings) encourage the proliferation of criminal behaviours amongst the low-income working-class (pp. 7-8). He therefore promotes some new patterns, described as *defensible*, in order to improve urban security of citizens against urban violence: “Defensible Space is a surrogate term for the range of mechanisms – real and symbolic barriers, strongly defined areas of influence, and improved opportunities for surveillance – that combine to bring an environment under the control of its residents” (p. 3). In the same perspective, the *broken window* theory claims that a visibly damaged environment will encourage delinquency and other more serious antisocial behaviours, and that fixing it is the key to reducing crime (Coles and Kelling 1996).

In the French-speaking context, authors tend to use the term *prévention situationnelle* (situational prevention) (Bonnet 2012: 26; Garnier 2012: 9; Bocquet 2014). We will use that term interchangeably with the one of ‘defensive urbanism’.

**What does defensive urbanism practically consist in?**

Mike Davis (1998: 383-385) gives us a typology of Southern California’s *social control districts*, new social enclaves emerging together with a growing militarisation of the urban landscape. The specificity of these enclaves is that they mix sanctions of the penal and/or civil code with urbanism in order to impose a spatial discipline. He distinguishes them on basis of their specific judicial mode:

- *abatement districts*, where specific criminal activities are being reduced by extending the police’s power over the control of these activities;
- *enhancement districts*, where penal or civil sanctions against specific matters are enhanced (‘drug free’ or ‘gun free’ zone being the most common examples);
- *containment districts*, where specific social problems or groups (homeless people, for example) are contained and put in quarantine;
- *exclusion districts*, from where specific social problems or groups are juridically excluded.
Steven Flusty (1997: 48) also provides us with two typologies of defensive spaces. He firstly distinguishes 5 types of *interdictory spaces*, “spaces designed to intercept and repel or filter would-be users”:

- **stealthy spaces**, spaces that are hidden and cannot be found;
- **slippery spaces** that cannot be reached because of a lack of any clear path;
- **crusty spaces** that cannot be accessed because of walls or gates;
- **prickly spaces** that cannot be comfortably occupied;
- and **jittery spaces** that cannot be occupied unobserved.

He specifies that it is unlikely to find one place that would refer exclusively to one of these ideal-types, and that they rather “tend to be deployed simultaneously, so as to form distinctly unfriendly mutant building typologies” (Flusty 1997: 49).

In the European context, situational prevention has the same goal as defensive urbanism in the USA. Garnier (2012: 27-30) describes these defensive town planning solutions as taking up different forms regarding the context they are embedded in, but that they always aim at either being *dissuasive* (aimed at preventing the happening of criminal activities), either *repressive* (aimed at contributing to the neutralisation of criminals), or both. And that in the first case, public and semi-public spaces will be refurbished in order to increase their capacity of being watched, by cameras or by the neighbours themselves, with the new emblematic practices of *community policing* and *neighbourhood watch*. But the form situational prevention takes in Europe is generally considered to be softer than what Davis observed in the case of Los Angeles.

Concretely, defensive urbanism is implemented through several practices. Firstly, by reducing the number of hidden spaces in order to both enhance social and community control over public spaces, and to reduce criminal behaviours by influencing their opportunities to happen. This corresponds to Newman’s theory of defensible space and situational prevention. Secondly, the goals of defensive urbanism are achieved by reducing the number of visibly damaged spaces. According to the broken window theory, this is supposed to reduce or at least to not encourage delinquency and more serious deviant behaviours. Finally, by the more direct exclusion of undesirable population from spaces reserved for upper and middle classes, or supposed to attract profitable activities. This is visible in the setting up of gated or lifestyle communities, of physical and mental separation of the administrative district from the nearby old historical centre and other poor neighbourhoods, of overly guarded and secured spaces, of defensive urban furniture, etc.

**Drawing links between CCTV and situational prevention**

“Video surveillance simply modernises Newman’s defensible space principles”

*(Leclercq 2009: 144-145, our translation).*

**CCTV as a way to implement defensive urbanism’s goals**

The links between video surveillance and defensive urbanism can firstly be seen in the fact that the former is simply one of the means of surveillance used to implement the goals of the latter: reducing crime through the shaping of public spaces. Indeed, CCTV surveillance obviously contributes to the reduction of the number of hidden spaces (one of the three ways defensive
urbanism operates), to implement the obsessive need the power instances have to control everything and minimise risks everywhere.

**CCTV as part of the defensive philosophy**

Also, CCTV "has generally found its theoretical justification from situational crime prevention" (Norris 2009: 4). Indeed, CCTV contributes to the making of a public space that appears safer and would therefore deter delinquent and criminal behaviours. The visibility of cameras in public spaces is indeed supposed to have a preventive effect on these kind of deviant behaviours.

In this sense, the CPTED, defensible space, and broken window theories establish a causal link between crime and poorly designed environment. It is the situational prevention’s main premiss. As a matter of fact, Newman (1972: 2) claims that “poorly designed buildings and projects have crime rates as much as three times higher than those of adjacent projects housing socially identical residents at similar densities.” But this causal link appears to be simplistic, because in this perspective the solution to crime problems is reduced to a spatial and design reorganisation. While social matters, which are a lot more complex to manipulate, are simply avoided (Norris 2009: 4). Also, when changes in the spatial environment end up having any effect on crime and violence in the city, it is only a deterring one. The only solution that situational prevention brings to these issues are their displacement, as it works on the opportunities for criminal and deviant behaviours to happen, not on the solving of their actual socio-economic causes. This is a criticism that is also often addressed specifically to CCTV (Bourdoux 2009: 16).

**Common effects between CCTV and situational prevention**

In this section, we will examine how both CCTV and defensive urbanism contribute to rise of a penitentiary urban landscape, operate based on a division between legitimate users of the space and undesirable ones, and finally lead to the creation of an *ecology of fear* by reinforcing the already existing feeling of insecurity.

**The rise of a penitentiary urban landscape**

Critical authors and theories on defensive urbanism focus mainly on its negative social effects such as socio-spatial exclusion and segregation, and describe it as leading to a securitarian obsession feeding off the *ecology of fear*. Authors such as Davis (1990, 1998 and 2003), Ellin (1999) or Flusty (1997) insist on how defensive landscapes result in the creation of a *penitentiary urban landscape* enclosing the poor in specific spaces and allowing the rich to lock themselves in fortresses from which undesirable population are excluded. Although ultimately, all population strata become under surveillance.

In his identification of the processes of urban transformation in the postmodern city¹, Edward Soja (2000) develops on *The Carceral Archipelago* discourse, exploring the emerging changes specific to the *postmetropolitan mode of social and spatial regulation*. Building on Davis’ work, Soja describes the postmetropolitan urban spaces as closely controlled, both socially and

---

¹ The 6 processes, or ‘discourses’ being: 1) the Postfordist Industrial Metropolis, 2) the Cosmopolis or the rise of the world city, 3) the Exopolis or regional city formation, 4) the Fractal City or the creation of the dual city of polarized communities, 5) the Carceral Archipelago of closely controlled urban spaces, and 6) the Simcity or simulacrum city of hyper-reality production and consumption (Soja 2000; Short 2006).
spatially, filled with “protected and fortified spaces, islands of enclosure and anticipated protection against the real and imagined dangers of daily life” (p. 299) such as prisons and gated communities. Socio-spatial control are enforced through surveillance, policing and carceral technologies, privatisation and urban design (Soja 2000; Short 2006; Hassler-Forest 2012).

This form of social control by way of panoptic surveillance technologies does recall concept of disciplinary society developed by Foucault in his emblematic publication *Discipline and Punish: The Birth of the Prison* (1975), in which all the central institutions of modern society have been based on the model of the prison.

Borrowing from Foucault, the post-metropolis is represented as a collection of carceral cities, an archipelago of ‘normalized enclosures’ and fortified spaces that both voluntarily and involuntarily barricade individuals and communities in visible and not-so-visible urban islands, overseen by restructured forms of public and private power and authority (Soja 2000: 299).

The panopticon becomes a metaphor used for designating the ubiquitous and invisible forms of control exerted on the individuals, that have been reduced to the status of prisoners. Foucault goes further when he explains that the advent of carceral societies in modern Europe goes hand in hand with the development of capitalism, as it was both the driving force behind these societal changes, as well as a product of it (Hassler-Forest 2012: 157, 159, 178). Indeed, the main utility for this generalised carceral system is to adapt peoples’ lives to the capitalist principles of productivity and profitability, coercing them into becoming a mere workforce, and their time into adapting to the rhythm of production cycles (Gros 2010: 9). The parallel with the deterrent effects of CCTV can be draw in that the automatic functioning of power is assured by the turning of the control of individuals, conscious that they are in a permanent state of visibility, into a reflexive process that renders the exercise of visible power superfluous, people becoming the agents of their own domination (Williams and Johnstone 2000: 191; Knox and Pinch 1982: 48).

**A naturalising social division**

In this section, the question of what or who is perceived as a threat (and consequently by and for which social groups are video surveillance and defensive urbanism implemented) will be raised. Indeed, as both CCTV and situational prevention operate on the basis of a natural division between legitimate users of the space and the undesirable ones, defining who is considered legitimate, who is seen as undesirable, and what mechanisms create these categories is therefore essential.

We can indeed assess that when it comes to justifying the installation of an urban CCTV system, there is a phenomenon of designation of some fringes of the population as being inherently harmful. Economic interests play an important role in the setting of CCTV systems, and they are often at stake in the definition of who is a legitimate citizen and who is a deviant one (Bétin, Martinais and Renard 2003). CCTV is used as a powerful tool to ‘purify’ city centres from ‘undesirables’, following a logic of space privatisation of city centres. Because the goal is indeed to reduce crime, but also to exclude attitudes and people that might ‘put customers off’ (Lomell 2004: 346-347). Cohen (quoted by Lomell 2004: 346) summarises the aim of exclusion as being “to create purified domains inhabited by just the right groups.” Garnier (2012: 7,25) adds that these undesirables are designated as the bad poor who trouble the public space sometimes only by being there, stressing again the economic dimension of the categorisation CCTV supposes.
These bad poor are all the *laissés-pour-compte* (social outcasts) of capitalist globalisation: the jobless, homeless, illegals, futureless youth, beggars, prostitutes, etc.

We can conclude that pro-defensive urbanism theories and practices tend to separate the population between ‘good’ and ‘bad’ citizens, the former developing a sense of ownership and responsibility towards their living environment and the latter being seen as criminals and offenders. What is more serious is that this naturalising separation is operated on basis of social, racial and spatial stereotypes. In this sense, Newman, again, says that low-income populations, even if they are the main victims of criminal behaviours, also are their main perpetrators. He acknowledges that the poor are not the only ones to commit criminal acts, but that low-income crime is "the most directly oppressive [sic] form of crime, as it is the most immediately threatening to person and property [...] because they are crimes of personal confrontation, and hence, the most destructive of the feelings of well-being, security, and stability” (Newman, 1972: 198-199). This is obviously ideologically oriented, and takes stand for the middle- and upper-classes interests. In this sense, Davis (1998: 386) states that "social control district strategy penalizes individuals, even in the absence of a criminal act, merely for group membership. ‘Status criminalisation’, moreover, feeds off middle-class fantasies about the nature of the dangerous classes.” This separation, as well as its outcomes, is objectionable as it leads indeed to social exclusion and segregation of some fringes of the population on the very basis of socio-spatial stereotypes.

**An ecology of fear**

The feeling of insecurity defensive urbanism seeks to fight is said to be a paranoid one as it is detached from reality (Flusty 1997; Bétin, Martinais and Renard 2003). And as Bourdoux puts it, “CCTV does not fight against insecurity itself, but against the feeling of insecurity” (2009: 16, our translation).

Although, while seeking to fight off crime, secured environments paradoxically reinforce that already existing feeling of insecurity instead of toning it down, as “the social perception becomes a function of the security mobilization itself, not crime rates” (Davis 1990: 224; 1998). A secured space implies that an area is dangerous, and this contributes to the creation of a suspicious atmosphere, and to the accentuation of a general feeling of insecurity and distrust (Garnier 2012: 43; Leclercq 2009: 151). This operates through the proliferation of more and more privatized spaces – ‘post-public spaces’ (Flusty 1997: 51-52), or ‘pseudo-public spaces’ (Davis, 1990: 226) –, and the militarisation of the urban landscape with the multiplication of securitarian practices and devices such as walls and fences, patrols, cameras, etc. Society’s securitarian obsession grows bigger, and would lead to what Davis calls an *ecology of fear*.

The sociologist Mathieu Rigouste has shown how discourses on insecurity are actually manufactured to feed the (in)security market – a hundred billions of euros worldwide (2013: 124). His book *Les marchands de peur* (the Fear Merchants) focuses on the French case, where this *ecology of fear* is implemented by ‘experts’ on insecurity, counter-insurrection or antiterrorism, coming from the ranks of the far-right and benefitting from a large audience in the media, academia, and high governmental spheres.
The wider picture: neoliberal globalisation

We will here develop on the wider context both defensive urbanism and CCTV are embedded in, trying to make more sense to these concepts and ground them in a common logic.

Defining the concept of neoliberalism is not an easy task. As Simon Springer (2013) puts it, it is an offshoot of globalisation (p. 150), as well as “the most unforgiving and revanchist version of capitalism” (p. 152). He further argues that a monolithic definition of neoliberalism is not a desirable conceptualisation, as neoliberalism is not an abstraction whose globalised political economic rationale can wholly transform the local economies it is unleashed on (p. 150; Brenner and Theodore 2002). Instead, it is important to acknowledge the different forms neoliberalism takes depending on the geographical and political context, and the way these mutations articulate. Talking of “a series of partial, shifting and thoroughly hybridized ‘neoliberalizations’, rather than a rigid, universal and fully realized ‘neoliberalism’” means that the institutional local context is given its importance back (p. 151). At the same time, it is necessary to take into account a certain continuity and contagiousness to neoliberalism, to not fall into the trap of relativism (p. 152). In this sense, the concept of actually existing neoliberalism developed by Brenner and Theodore (2002) seems to take this complexity into account:

In contrast to neoliberal ideology, in which market forces are assumed to operate according to immutable laws no matter where they are “unleashed,” we emphasize the contextual embeddedness of neoliberal restructuring projects insofar as they have been produced within national, regional, and local contexts defined by the legacies of inherited institutional frameworks, policy regimes, regulatory practices, and political struggles. An understanding of actually existing neoliberalism must therefore explore the path-dependent, contextually specific interactions between inherited regulatory landscapes and emergent neoliberal, market-oriented restructuring projects at a broad range of geographical scales (p. 351).

As they have shown, neoliberalism is not only about deregulation of the economy but impacts larger parts of society and is also characterised by forms of re-regulation. A restructuring ‘roll-out’ phase follows the destructuring ‘roll-in’ phase of and the “creation of ‘new authoritarian’ state apparatuses” is one of the components of this particular ‘moment of creation’ within neoliberalism (p. 365). CCTV, as put by Kevin Walby (2005: 190) has been implemented “within the paradigm of neoliberal surveillance.” To illustrate the idea, we would like to quote Loïc Wacquant’s metaphor of the neoliberal state:

This centaur state, guided by a liberal head mounted upon an authoritarian body, applies the doctrine of ‘laissez-faire et laissez passer’ upstream, when it comes to social inequalities and the mechanisms that generate them (the free play of capital, dereliction of labor law and deregulation of employment, retraction or removal of collective protections), but it turns out to be brutally paternalistic and punitive downstream, when it comes to coping with their consequences on a daily level (Wacquant 2009: 43).

The centaur state is further described as “liberal at the top and paternalistic at the bottom, which presents radically different faces at the two ends of the social hierarchy: a comely and caring visage toward the middle and upper classes, and a fearsome and frowning mug toward the lower class” (2009: 312). Designed to reassure the middle- and upper-class and simultaneously to threaten the poor, CCTV can then be understood as a perfect centaur tool. If some commentators
discuss the place attributed to the middle classes in this framework, they nevertheless agree on the advantage it offers to the higher classes and on its harshness towards the lower ones (Lea and Hallsworth 2013). However, it should be stressed that the action of the state is ambivalent in a second way: its repressive and exclusive functions should not distract us from its initial inclusive nature. The safest solution to keep the system running is to integrate people as much as possible, to convince them to adopt its values and logics rather than rejecting whole layers of society hence taking the risk of setting off declared enemies. As neoliberalism has been a methodical assault upon the workers’ movement and its structures of solidarity (Lea and Hallsworth 2013: 25), it would be a terrible failure if it happened to generate a new strong opposition to capitalist ruling.

To conclude this contextualisation, we would like to highlight that these depictions of video surveillance and defensive urbanism as parts of neoliberal government should not mislead the reader. Neoliberalism is but the last phase of capitalism. Sooner or later, the system will evolve to another form. Already today, with the massive recapitalisation of banks after the 2008 crisis or the Keynesian warfare-like state investments in the security market, the neoliberal paradigm could be questioned. Hence we can only agree with Garnier (2012) when he speaks against authors and actors who criticise the neoliberal context and neglect the broader frame of capitalism.

In that vein, reading Mumford’s *The City in History* is salutary. Published in 1961 –way before the neoliberal theories of Milton Friedman seized the globe – the book already warned that the “class segregation, unfeelingness and irresponsiveness, secrecy, authoritarian control, and ultimate violence” (p. 48) of the ancient citadel had come back “in a highly magnified form, in the final stages of metropolitan culture. In the end every aspect of life must be brought under control: controlled weather, controlled movement, controlled association, controlled production, controlled prices, controlled fantasy, controlled ideas” (p. 542). Similarly, the carceral city is everything but a recent invention. Mumford already identified the inhabitants of early cities as “a permanently captive farm population” (p. 47, see also p. 83). The same critique went for Plato’s ideal polis: “a walled prison without room for the true activities of the city within its prison-yard” (p. 176). In Plato’s setting, the “variety, disorder, conflict, tension, weakness, and even temporary failure” are undervalued while they “produce a far more desirable community than any mode of conformity be imposed by philistine executives of a modern government agency or business corporation aided by electronic computers, or by the greatest thinker and writer that Athens had helped to produce” (pp. 177-178).
State of the Art

We will start by a chronological review of the literature focusing on the spatial dimension of CCTV, to then summary the main conclusions we can draw from it in terms of CCTV locations, rationales, efficiency and implementation processes.

Review

Academic sources

In 2001, the European Union has commissioned a multidisciplinary team of researchers from many universities in Europe to produce a transnational comparative analysis named UrbanEye. The project has led in 2004 to the publication of 14 studies and a final report summarising the findings.

Among the UrbanEye reports, the study on Copenhagen and Oslo by Wiecek and Sætnan (2002) has particularly caught our attention, considering the city it deals with and its use of the map tool. The purpose of the first research phase was indeed to map CCTV locations in selected areas of the selected cities (that is, at a lower scale than our research does). The authors then decided to try to find the connections between a zone in Oslo that has six cameras, and the number of incidents of violence per street block (pp. 45-46). However, the authors clearly state that finding a link between the CCTV’s spatial repartition and socio-spatial urban structure is definitely not their priority. Instead, their analysis together with additional data focus on developing a typology of CCTV locations and systems (p. 46).

The final report by Hempel & Töpfer (2004) suggests that CCTV cannot be understood trough generalisations and requires to be examined locally, “at the interplay between technological, organisational and cultural factors” (p. 1). In our view, the most important conclusions drawn by the UrbanEye cross analysis are: that the use of video surveillance in public space differs widely from one country to another, but that a constant is that CCTV is pretty much impossible to avoid in any city, as it is generally present in places of daily use such as public transport, grocery shops, and money institutions (p. 5). That most CCTV systems are actually mainly deployed as tools of social control (especially to prevent and detect theft), (p. 6). That symbolic deterrence often prevails over active surveillance. That many systems do not conform with the existing legislation leading to an all too common discriminatory targeting (p. 7). That it is impossible to hire one employee per camera, as this leads to informational overkill (p. 33), and finally that large CCTV networks get connected to one another, shaping surveillance webs that remain invisible for the citizens (p. 63).

Besides the UrbanEye project, numerous studies exist in the UK due to the early development and extreme proliferation of CCTV in this country (see for example the many studies by Norris and McCahill in the 1990s or Coleman and Sim 2000). This omnipresence has lead Stephen Graham to qualify CCTV as a ‘fifth utility’ standing next to “electricity, gas, water, and telephone networks as ubiquitous infrastructures that we expect to cover all places and therefore largely take for granted” (Graham 1999: 312). Among those British studies, Williams and Johnstone’s paper (2000) analyses the proliferation of CCTV in two rural towns in the UK in order to address three questions: “how the cameras are used for direct law enforcement; how this use is governed; and how the public react to the use of CCTV” (p. 183). They conclude that CCTV policy does not fit with local communities’ preferences.
Dessouroux, Van Criekingen and Decroly (2009) have published an interesting description of Brussels as a city where the urban renewal is undertaken ‘under surveillance’. In this study, they show that the proliferation of CCTV accompanies the gentrification front. Their results and analysis will be further discussed in section XX on Brussels. Also, in 2010, a Belgian research team produced a report on video surveillance in Belgium for the Ministry of the Interior (Lobet-Maris, Dumortier and Van Espen 2010). The research was titled Urban Eyes: Research for a reasoned and appropriate policy regarding urban surveillance, obviously quite far from our perspective on the topic. This study tries to examine which kinds of cities tend to install CCTV, under which modalities, and with which goals. It demonstrated that cameras were generally used to assist police intervention, collect evidence, regulate behaviours, monitor particular types of individuals, as well as for general surveillance (pp. 19-21). This first study was followed in 2012 by a second paper on behalf of the Ministry of the Interior: Is video surveillance in public space really efficient? (Mortelé and Deprins 2012, our translation), published as the final chapter of a ‘guide’ dedicated to help and support local authorities in the implementation of video surveillance on their territory. The research tries to delineate the impact of CCTV in public space on security, policies and particular forms criminality such as nuisances, violence, theft and fraud (p. 5). In order to outline the efficiency of CCTV schemes and potential crime displacement effects, the researchers selected a study area, a buffer area, and a control area in each of the seven selected cities or municipalities located in all three Belgian regions. The main result of the study is that no serious decrease in crime can be attributed to CCTV. Although it interestingly also declares goals for CCTV introduction, as well as other measures that accompanied it (p. 20-30). Thanks to a public survey, the researchers noticed that the higher the efficiency of a CCTV system, the less it is perceived as a threat to privacy (p. 32).

L’Institut d’Aménagement et d’Urbanisme d’Île de France (IAU), the Paris region institute for urban planning, produced a similar kind of study (2008). The report assesses the efficiency of video surveillance in public space in the French context. It was preceded by two others, that focused on the same issue in public transports and in high schools. The report provides a map of the Parisian region municipalities that owned a CCTV scheme in 2006 (p. 13). The costs, budgets and decision processes are presented, as well as a state of the art of similar reports in several other countries.

In their article about the construction of deviance in Lyon (France), Bétin, Martinais and Renard (2003) wish to replace CCTV surveillance within the context of power and societal relationships it is embedded in, adopting therefore a dynamic and political perspective. Their goal is to prove that technique is not neutral but bears representations, and is inserted within a certain institutional context with its own economic, political, cultural and symbolic logics. Technique is said here to contribute to redefine social norms and the subsequent designation of ‘deviant’ behaviours and practices. The authors decided to demonstrate and illustrate this assertion through the example of Lyon’s inner city securitarian development (2001-2003).

Douillet, Dumoulin and Germain (2011) have written a study comparing the apparition of CCTV in three different cities in France (Lyon, Grenoble and Saint-Etienne). They explain that the implementation of CCTV schemes is usually preceded by a period during which it is promoted by some local actors. The swing occurs when a particular event or occasion allows it (p. 108). The authors have also noted an evolution in the argumentation aimed at legitimating video surveillance: as the efficiency of the cameras is hard to prove while its costs are easy to calculate, its promoters tend to develop new arguments such as the post identification of wrongdoers
thanks to the recordings or the calibration of police action thanks to hints of the situation the images offer (p. 112).

Gemma Galdon Clavell (2011a), in her study about CCTV in Catalonia (Spain) tries to use different levels of analysis to go beyond the strictly national one. Her goal is to gain into complexity for the understanding of the process of CCTV proliferation at the global level by zooming in on local processes (p. 319). The author states she will take the political aspect of CCTV analysis into consideration, as it is often overlooked and under-researched when it comes to this topic (p. 320). She also decides to map the CCTV cameras at the scale of the Catalonia region (that is, at a bigger scale than ours), to then cross-reference them with socio-economic indicators such as population, income per capita, number of police officers and percentage of migrant population (p. 325).

Finally, Robert Carr (2014) has written a study over the recent introduction of public CCTV in the Australian city of Kiama, a small city characterised by low crime rates. The starting point of his analysis is that as CCTV promoters have not yet managed to produce any convincing evidence that this technology is efficient to lower crime, there must some other reason(s) why municipalities keep on implementing it. He then tries to inscribe CCTV analysis in the field of political economy.

**Non-Academic Sources**

The short book *Sous l’œil des cameras, contre la vidéosurveillance à Grenoble* (Under the eye of the cameras, against CCTV in Grenoble), (Various authors, 2010) contains articles and pamphlets that criticise the installation of cameras in the French city. The criticism focuses on the lack of transparency from the local authorities, the high costs, and the positioning of cameras along the city’s main demonstration paths. The authors dispraise a world of suspicion where people are under permanent monitoring, as opposed to the vision of a society that would be based on trust and freedom. They also highlighted the importance of artificially ‘manufacturing the consent’ of inhabitants, for example with the decision of the Ministry of the Interior to erase the word *vidéosurveillance* from every French official publication, to replace it by the term *vidéoprotection*. Similarly, the setting of ‘ethics committees’, that gather members of the civil society and aim at guaranteeing the respect of privacy and other values, is denounced as a mere illusion as they actually only legitimate the creation or expansion of CCTV schemes. A radical conclusion, that seems to be shared by the French *Ligue des Droits de l’Homme* (Human Rights League), calls for the refusal of any participation in such committees (p. 91).

The Institute for Applied Autonomy (IAA), (2010) produced a map of CCTV in Manhattan, based on data collected by two grassroot associations. They published it under the form of a web application named *iSee*, that allowed its user to generate ‘routes of least surveillance’ and print the map for later use. The first version was produced in October 2001, that is one month after the 9/11 attacks, which could be considered the most difficult period ever to conduct a critique of surveillance devices. However, the initiators of the project managed to reach a broader audience than expected as their action was covered by *Wired* magazine and their app was integrated in the *Yahoo Online Travel Guide*. The map also had consequences for community organising when a plan was initiated to implement CCTV in Chinatown: most of the residents were in favour of the project until they saw the map and realised most cameras were intended to be mostly installed in the business and commercial districts rather than in the residential areas. With this experiment, the IAA has shown the role of the cartographer as urban actors.
**Presentation of the authors’ obtained results**

**Efficiency**

Before elaborating on the (lack of) efficiency of CCTV, a preliminary clarification is necessary: CCTV is often criticised for its lack of efficiency in regard with its important costs. This critique, if undeniably right, is nonetheless insufficient. Except in a few noteworthy cases like Copenhagen, the price-quality ratio critique has shown to be unable to block CCTV proliferation. Worse, this type of critique actually constitutes a *critical support* as it takes for granted the philosophy of surveillance and only finds fault in the way it is applied. To overcome this weak criticism, it is necessary to challenge the philosophical foundations of video surveillance and to address the question suitably asked by Robert Carr (2014): if CCTV is costly and inefficient, then why is it spreading? What and who does it serve?

Practically, evaluating CCTV efficiency is not a simple task. In order to prove efficient, should CCTV reduce crime rates thanks to its dissuasive effect? Or should criminality statistics rise due to the improved action of the police? Furthermore, as the study of the CCTV scheme of a mall in London (McCahill and Norris 2003) showed, a same CCTV system can be used differently and produce variable outcomes according to the employee who sits in front of the screens. Also, CCTV is only efficient when people are aware that they are being monitored. "It is therefore essential to recognise that CCTV is not merely a technical system – it is a socio-technical system." (Norris 2009: 3-4). But serious transparency concerning CCTV efficiency is not desired by everyone. Douillet, Dumoulin and Germain (2011) report that in Lyon, France, an analysis of CCTV effects on street delinquency conducted by the municipality never went public due to its “not much encouraging” results. In the case of Australia the national funding program specifically prohibits to use the money for an efficiency evaluation program; while it however requires that an evaluation of the ‘anticipated benefits’ is produced (Carr 2014: 23-24).

Here are the main the results of the studies undertaken, relevant when it comes to assess CCTV efficiency:

- The main result of Mortelé and Deprins’ study (2002) for the Belgian Ministry of the Interior is that *no serious decrease in crime can be attributed to CCTV*, and that effects of crime shifting for most types of offences also spread to the buffer areas. Only the nuisances tend to be reduced by CCTV implementation and engender a slightly positive ‘radiating’ effect in the buffer zone (pp. 15-19). Williams and Johnstone (2000: 190-191) similarly pointed out that “the evidence [...] suggests that it is most effective in the control of [...] very low level criminality and activities which are actually legal, even though some would prefer that they were not.”;

- The IAU report (2008: 40), in its synthesis of institutional reports on CCTV worldwide, concludes that the dissuasive effect of CCTV is not so evident and depends on the kind of space and the kind of deed; that the impact on the feeling of insecurity

---

2 It should be mentioned that the results are not offered that explicitly: this study tend to emphasise the pro-CCTV results and to minimise the results that show crime shifting or zero effects. This tendency reaches its climax when the authors present the graphs of crime evolution after CCTV implementation but ‘forget’ the offence category which did not show any decrease. Actually, a hint of this favourable point of view was dropped by the cover illustration which represents a CCTV camera viewed from behind, and offers a vista on a parking, as if the reader was monitoring it, *with* the camera.
is limited to inexistent; that the displacement of offences is the Achilles' heel of CCTV but is not systematic; that delinquents become sometimes more discreet and adopt adaptation strategies; and that the efficiency is limited in time as delinquency prevention initiatives follow cycles of life and death.

- Lobet-Maris, Dumortier and Van Espen (2010: 18) also argue that cameras can lead to a heightening of the 'feeling of insecurity' once they have proven inefficient 'watching without intervening' an assault.

- Among the 888 cases of persons targeted by police CCTV monitoring indexed by Clive and Norris in their 1999 study in three different cities (quoted by Heilmann 2009: 131), only 49 led to a police intervention and 12 to an arrest (1.4%). Significantly, Scotland Yard surveillance chief described the UK CCTV system as an "utter fiasco" regarding its failure to cut crime (Bates 2008).

- The UrbanEye final report concludes that symbolic deterrence often prevails over active surveillance (Hempel & Töpfer 2004: 7). The same conclusion was drawn by sociologist Vincent Francis in his study on the security system of the Belgian rail company (SNCB/NMBS): instant crime detection thanks to CCTV is very seldom due to the incredibly huge number of images to be watched over (the rail company possesses 3,300 CCTV cameras), (La Dernière Heure 2011).

- It is complicated for the operators to handle the vague if not contradictory indications given by their managers concerning the tasks they are supposed to fulfil with CCTV (Heilmann 2009).

As the efficiency of the cameras is hard to prove while its costs are easy to calculate, Douillet, Dumoulin and Germain (2011: 112) noted an evolution in the argumentation aimed at legitimating video surveillance. Its promoters tend to develop new arguments such as the post identification of wrongdoers thanks to the recordings, or the calibration of police action thanks to hints of the situation the images offer.

**Costs**

The costs for CCTV are high. According to the Belgian study UrbanEyes: one camera is worth between € 8,000 and € 27,000, and an average open-street CCTV scheme € 1,830,000. But other costs – often hidden – have to be mentioned: consultancy (60% of the municipalities make use of it), installation, operating (€ 102,025/year on average) and maintenance (€ 30,111/year). The budget even skyrockets at € 6,000,000 for a 'smart' CCTV project (Lobet-Maris, Dumortier and Van Espen 2010: 24-25).

The cross analysis conducted in France (IAU 2008: 16) suggests even higher prices. The preliminary steps cost a total of € 80,000 with € 30,000 for preliminary feasibility study and € 50,000 for specifications. The installation (equipment included) cost € 20,000 per camera or € 2,500,000 for a city scheme. The operating costs were of € 650,000 a year for maintenance and salary of the employees watching the cameras.

**Process: who takes the decisions?**

In the case of France, the IAU (2008: 17) has produced a summary for the official decision process in France. Firstly, for the ‘formulation phase’, a municipality that plans to have a CCTV
network on its territory consults the local population for its opinion, commissions a specialised office to develop a feasibility study, consults the police as well as the prefecture which has to grant the authorisation. Secondly, the ‘realisation phase’ consists in the elaboration of an ‘Ethics Charter’, followed by the setting up of a ‘Centre for Urban Supervision’ that oversees the training of the operators, the creation of a collaboration network with the local and national police forces, and the storage management. The finality of it being the installation of the cameras.

Bétin, Martinais and Renard (2003) described the process of decision-making for the city of Lyon. It appears that the CCTV implementation was part of a ‘security local contract’ for which a ‘security diagnosis’ was necessary. However, the authors show that this evaluation of local delinquency was built to stick to the preconceived stereotypes of the retail owners, the main proponents for CCTV in Lyon. This stereotype has a spatial dimension and can be summed up as the division between ‘legitimate’ users of the space and the others, as the term ‘imported delinquency’ (délinquance d’importation, from one neighbourhood to another) is coined by those self-labelled ‘good’ users of the space. The representation of the typical delinquent is thus nothing more than an expression of some citizens’ will to reinforce their dominant position in a space invested by all. The appropriation of this stereotype by the local authorities reinforces the credibility of this discourse, becoming therefore the mainstream justification for the decision of installing cameras in Lyon’s inner city, a rapid and visible answer to the expectations of a share of the population.

Douillet, Dumoulin and Germain (2011) explain that the implementation of CCTV schemes is usually preceded by a period during which it is promoted by some local actors. The swing occurs when a particular event or occasion allows it (p. 108). In Lyon, this happened in 1998, when the municipality was looking for a solution after multiple cases of armed robberies of luxury shops in the city centre; in Saint-Etienne, it was in 2001, when the municipality used ‘security’ as election campaign main theme; in Grenoble, it had to wait until 2006 when a municipal stadium was built. Once the process is set in motion, it sustains itself through multiple ways: the professionals involved in the installation, operation or maintenance of the CCTV system quickly identify it as their livelihood and become its best promoters; if local police has to take on the monitoring, they get to appreciate this new gratifying responsibility, closer to criminal investigation than their routine; finally, the police often does not have to bear any costs for a system that serves their action while the municipality holds the responsibility for its success or failure: a situation the police can do nothing but savour (p. 109).

In Belgium, the Urban Eyes study (Lobet-Maris, Dumortier and Van Espen 2010) presents the following case: in a (non-specified) Belgian city, the process began in 2001, when eleven cameras were placed in touristic areas. Then, two others were added in 2004 for the purpose of fighting drug traffic. Finally, fifty more were placed on ‘hot spots’, described as places of ‘small acts’ and ‘incivilities’ (p. 26). No camera was ever withdrawn, even when the evaluation showed no conclusive effect (p. 10).

Also, when it comes to national subventions for local CCTV installations, the situation highly differs from one country to another. Governments in the United Kingdom, in France and in Australia actively support CCTV implementation, both ideologically and financially (Williams and Johnstone 2000: 188; Various Authors 2010: 95; Carr 2014: 7). If it is not impossible to find federal grants that can be used for this objective in Belgium, the government is nevertheless much more timid in its support (Interview with Murengerantwari 2014) while in a country like
Denmark, the law has been for long highly restrictive against open-street CCTV (Hempel & Töpfer 2004: 23).

*When the vultures prowl...*

Robert Carr (2014) denounces the way politicians exploited the violent murder of Jill Meagher in Brunswick, in 2012 as an argument for open-street CCTV in Australia. His case study of Kiama also used one of its own local events, a ‘serious assault’ perpetrated in 2014, to justify the implementation of a CCTV scheme in a city characterised by low crime rates.

As we will see later, the same kind of shameless exploitation of sensational events took place in Brussels and Copenhagen, our case studies. Hier, Walby and Greenberg (2006: 238) described a similar mechanism at work in London, Ontario, when the murder of 20-year-old Michael Goldie-Ryder led to the creation of citizen organisation named ‘Friends Against Senseless Ending’ that successfully campaigned for video surveillance. The argument was even stronger and more repulsive in Liverpool, as the CCTV proponents used the murder of James Bulgar, a two-year old kid (Coleman and Sim 2000: 627).

*Where are the cameras located?*

The following table summarises which important urban features are under video monitoring in the *UrbanEye* cities:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Berlin</th>
<th>Budapest</th>
<th>Copenhagen</th>
<th>London</th>
<th>Madrid</th>
<th>Oslo</th>
<th>Vienna</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open street CCTV</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>A few systems within the larger urban agglomeration</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Public transport</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>N.A.</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Major Motorways</td>
<td>Yes</td>
<td>Yes</td>
<td>N.A.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Train stations</td>
<td>Yes</td>
<td>N.A.</td>
<td>Yes</td>
<td>Yes</td>
<td>N.A.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Airports</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>N.A.</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>National Government buildings</td>
<td>Yes</td>
<td>N.A.</td>
<td>N.A.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*Fig. 1 - CCTV in major urban infrastructure (Hempel & Töpfer, 2004: 27)*

The situation has become even more uniform since the report’s publication in 2004, as the Madrid scheme is now much larger than ‘a few systems’. And as we will develop in our case study analysis, Copenhagen has also started an open-street program. The most monitored areas are the city centres, the night life neighbourhoods, the retail and touristic districts, the train
stations or public transports and the ‘problem quarters’ (Mortelé and Deprins 2012: 20-30). Galdon Clavell’s study (2011a) also shows very high connections between camera placement and immigration.

**Who is monitored?**

If we believe the *UrbanEye* report, discriminatory targeting is all too common (Hempel & Töpfer 2004: 7). Eric Heilmann (2009: 130-131) reviewed a 1999 study by Clive and Norris (*The Maximum Surveillance Society: The Rise of CCTV*) detailing the practices of CCTV operators in three different cities for 600 hours. It shows that prime targets of the operators are the teenagers, representing 47% of the targeted persons but only 15% of the local population. Men are more often targeted than women (89% vs. 11%), and in a prosperous provincial town where black people compose 6% of the population, although 15% of CCTV targeting is aimed at them. Similarly, in a case study marked by its economic decline and ‘ethnically’ diverse population, 84% of the targets were black while they compose only 18% of the local population. Among all the people specifically monitored by the operators, 30% were suspected (rightly or wrongly) to be involved in some kind of crime or offence, and 22% suspected to disrupt public order. For all the others, “no obvious reason” could justify their monitoring. Voyeurism represented 1% of the cases generally and 10% when it came to monitoring women. Clive and Norris’ conclusion was that the work of the operators was based on rough prejudices (see also Williams and Johnstone 2000: 193).

In Bétin, Martinais and Renard’s study (2003), the two populations that are designated by the inhabitants (shop-owners in particular) of the inner city of Lyon as being the cause of the “daily”, “terrifying”, and “unbearable” criminality are the ‘council estate youth’ (*jeunes de banlieue*) and the ‘dropouts’ (*marginaux*). Bad users’ of the space, who are not, as they should be, in the streets to walk around, buy something, or be on their way home. The feeling of insecurity, argue the authors, is not built only on actual experiences or criminality facts, proving that the stake of the conflicts mainly is about space appropriation, with an obvious economic interest. Indeed, the youth and dropouts are considered undesirables because they create problems on a territory that locals and shop-owners consider theirs, having practices and behaviours that shake up established norms and order (although not always illegal ones, such as walking a pit-bull), and because their presence is said to make the number of shop visitors drop, and to negatively influence the profit rate. “In this system of representations, that tends to distinguish between legitimate modes of space occupation and those that are not, some individuals and some social groups are considered *de facto* a source of potential danger” (p.7). Here, it is those *jeunes de banlieue* (young, coming from poor neighbourhoods, preferably with a North-African origin) that are seen as the natural enemy. This representation of the typical delinquent is thus nothing more than a classist and racist expression of some citizen’s will to reinforce their dominant position in a space invested by all.

The situation is admirably summarised by Williams and Johnstone (2000: 193):

> In the context of zero-tolerance policing, which specifically targets low level disorder and public drinking, the fact that the gaze of the cameras is socially discriminated is likely to lead to more concentrated levels of official stigmatisation, and ultimately police intervention, for those groups which are already socially and economically marginalised and which do not possess ‘consumer citizenship’. These include teenagers (especially ethnic minorities), drunks, beggars, street traders and the homeless.
Why?

The Belgian Ministry of the Interior study (Lobet-Maris, Dumortier and Van Espen 2010:19) showed that the cameras were officially used to assist police intervention, collect evidence, regulate behaviours (p. 20), monitor particular types of individuals, and for general surveillance (p. 21). Interestingly, the authors have also investigated the reasons behind some municipalities’ decision to not install cameras: the decisions makers in this case claimed that their municipality was still human-sized and/or had no real insecurity problem. Technical difficulties and high costs were also mentioned (p. 17). The second study for the Ministry indicated that the most cited targeted effect of CCTV is to reduce ‘nuisances’, to prevent offences and especially theft, and to improve mobility, safety and law enforcement (Mortelé and Deprins 2012: 20-30). Notably, three out of seven studied cities had not established any specific goal.

The classist aspect of video surveillance is highlighted by the UrbanEye project conclusion that most CCTV systems are actually mainly deployed as tools of social control and especially to prevent and detect theft (Hempel & Töpfer 2004: 6). The goal of CCTV is not so much to protect people’s integrity but private property. This reminds us Newman’s stand for middle- and upper-classes, when he asserts that the most violent types of crime are the ones committed by lower classes (1972).

According to Carr (2014), CCTV mainly allows local politicians to ‘do something’ about insecurity, even when its actual effect is conveniently not evaluated. The measure can be labelled as electoralist as the demand itself is also partly manufactured by the politicians themselves (p. 5-8). Furthermore, video surveillance of public space, even if costly, does not provide huge direct payouts for the business sector: it rather provides indirect benefits by helping the ‘wannabe global city’ (Galdon Clavell 2011b) to turn its urban spaces in spaces of investment and profits: in the competition between cities to attract investors, they have to produce an image of being ‘dynamic’, ‘vibrant’, … but also ‘safe’ (p. 11).

From his literature review and own research, Carr (2014) concludes that CCTV can then be rationalised as: “a component in the cultivation and strengthening of patron-client ties between the Federal Government, its agents (MPs) and local councils/communities; a mechanism for government to facilitate the flow of public funds to private companies through arrangements that are virtually unchecked and non-evidence based; a mechanism for government to facilitate profitable opportunities for the security technologies industry, technical consultants and news media; and, a mechanism for reproducing political and social hegemony by normalising these relations at the discursive level” (p. 32). This analysis is not unlike the one of Eric Heilmann who identifies CCTV’s objectives as “eminently political”, they are those of the local authorities which “support CCTV implementation in order to restore their image, stimulate the economy and bring concrete solutions to the expectations of the voters” (2009: 134, our translation).

Conclusion

After our examination of the literature on CCTV in the urban context, it appears that no study had ever adopted the same approach as ours to grasp the reality of video surveillance. However, many activist groups have designed maps of CCTV schemes in their cities. If most of these activists are Human Rights and Privacy defenders, as well as anti-authoritarians opposed to the ‘Big-Brother’ society, we also discovered one quite different website based in the US named
CommunityCam™ which has also produced maps for cities like Chicago, Boston or San Francisco. But in this case, to offer their users "the power to locate security cameras so they can plan safer, monitored routes" (CommunityCam 2014). Not surprisingly, a rapid glance at the website indicates its owner: Videosurveillance.com, a CCTV provider. At the meeting of activist and academic approaches, the Institute for Applied Autonomy (IAA 2010) has produced a map of the CCTV locations in Manhattan, joined at an analysis published in An atlas of Radical Cartography and the French publishing house le monde à l’envers (the world upside down) has published an article collection analysing the roll out of open-street video surveillance in the city of Grenoble (Various Authors 2010). In the academic world, a few studies have analysed the spatial distribution of cameras in the city, but at a different scale than ours, on other case studies, and with different approaches, goals and objectives in mind. Exhaustively mapping the publicly-owned open-street CCTV devices (in Brussels and Copenhagen) in order to conduct a comparative study aimed at unwrapping the social and political logics behind this spatial distribution seems to be a new ground of research.
Introducing our case studies

We have chosen to focus on Copenhagen and Brussels as case studies. We wanted to study cities for the connections we have with them, as it is a good way to get to better know our own environment. What also motivated this decision is the possibility get something concrete out of it, such as knowledge about our cities, or tracks for future actions. And as the feasibility is a central factor in the selection of case studies, choosing the one where we live/have lived/will live obviously facilitates the research process. Finally, the two cities are comparable in their status of capital city, but also present a number of qualitative differences in their political regimes that might lead to a rich and interesting comparison.

Brussels

Brussels is the capital city of Belgium. The Brussels Capital Region, with Flanders and Wallonia, is one of the three Regions of Belgium. With its 1,155,166 inhabitants, Brussels gathers 10.4% of the Belgian population. The city is actually larger, but political conflicts block any potential broadening of the Region. Up to 450,000 people commute every day to the city (AVCB 2012: 9). According to the Brussels-Centre police zone, their territory only counts 250,974 inhabitants, but the diurnal population comes close to 1,200,000 (Central PZ 2014: 8).

Economically, Brussels is highly service-oriented: 92.7% of jobs in Brussels are in the service sector within which 89.6% of the added value is ‘created’ (Michiels 2013: 3). The presence of European, Belgian, Flemish and Brussels Regions institutions, along with the ones of the N.A.T.O. and all the associated services, can explain such a prevalence of the tertiary sector. A Eurostat study (2012) showed that Brussels was the third richest region of Europe (among 271 regions, while Hovedstaden, Copenhagen’s region, is 18th). However, half of the workers are commuters, which means that a lot of income from employment leaves Brussels for its richer suburbs.

Administratively, the Brussels Capital Region is divided into 19 municipalities. It is at this level that the authorisations have to be granted concerning the installation of surveillance cameras in the public space. These decisions also have to be notified to the local police authorities. Brussels is subdivided into 6 different police zones, as follows:
History of the built environment in Brussels

The 19th century in Brussels was marked by an intensive industrialisation. The city saw the formation of a working class population and working class neighbourhoods in the lowest parts of the city, in the centre and around the canal, while the higher classes started to build more well-off houses uphill, in the South-East. This history has strong reminiscences in the social geography of Brussels today, as can be seen on map the following map. Unsurprisingly, the poorer neighbourhoods also show the highest numbers of unemployment (up to 44% in the West Station neighbourhood) and the highest share of non-EU residents.

---

3 This description of Brussels and its urban policies builds on the one offered by Van Criekingen (2013).
Deindustrialisation came during the 20th century in parallel with a large expansion of the service sector. During the 1950s, the European Union started to take shape and Brussels was chosen to host its institutions. At this period, urban renewal programs were implemented to destroy lots of ‘hovels’ and build inner city highways and offices. Social movements, urban struggles and the 1970 crisis limited the damage. Transversally, municipalities tend to favour policies that foster the installation of businesses and upper classes in order to heighten their tax income.

The Brussels Capital Region was created in 1989. The region has been lead for most of its existence and is still lead by a social-democrat Minister-President. Active policies of ‘urban revitalisation’ were launched with the creation of the Region. During the 1990s, the contrats de quartier (neighbourhood contracts), programs aimed at refurbishing the most deprived neighbourhoods, saw the day.

**The rise of Defensive Urbanism in Brussels**

As said earlier, defensive urbanism is implemented through several practices: by reducing the number of hidden spaces, by reducing the number of visibly damaged spaces, and by the more direct exclusion of undesirable population from spaces reserved for upper and middle classes, or supposed to attract profitable activities.
In Brussels, the number of hidden areas is reduced through several means: the shaping of space in a panoptical way (every of its parts remaining visible to the inhabitants or pedestrians), the setting up of surveillance technologies, or the establishment of patrols (both private and public). CCTV is of course an active part of that dynamic. In Brussels, the new plaza in front of the Central station, or less recently the Flagey square, are examples of public spaces renovated in a very open and visible way. As shown by Dessouroux, Van Criekingen and Decroly (2009) the proliferation of CCTV in the city is part of this embellishment policy. Those means of control and repression are supposed to solve social problems, nowadays more and more translated into security problems (Liga Voor Mensenrechten n.d.). Finally, the multiplication of patrols, both private and public, in the streets of Brussels is an important phenomenon. Neighborhood agents (agents de quartier), STIB security agents, or vigils in front of bars and clubs, are more and more visible but also more and more armed, these private militias therefore infringing upon the police’s attributions (Matagne, Meynaert and Scohier 2010: 4-5). The practice of neighborhood watch or community policing, consisting in a "self-management of social control by the inhabitants in coordination with policemen", also begins to be established in Brussels (Scohier 2011).

Improving the aspect of public spaces and buildings, or reducing the number of damaged spaces, is mainly done through revitalization policies. Neighbourhood contracts are a good example of this, as they are specific to Brussels and act in old neighbourhood. Neighbourhood contract’s way of proceeding is to first make a diagnosis of the area, to then implement an urban renovation plan seeking to regenerate and reinforce the targeted neighbourhood. Also, gentrification as it is partly encouraged by government policies and partly by private real-estate market, is a residential phenomenon that contributes to make unattractive neighbourhoods desirable for middle classes. And other policies such as the anti-graffiti ones are also conducted in the same spirit: making the damaged neighbourhoods visibly less altered in order to deter criminal behaviours (Lemmens 2010).

More directly, some spaces are clearly designed in order to exclude some undesirable fringes of the population, such as youngsters, drug-addicts, prostitutes, immigrants, homeless people, poor, etc. Example of this in Brussels are numerous, Matagne, Meynaert and Scohier (2010) provide us with a lot of them. Firstly, exclusion can operate through defensive design of urban furniture and devices. In this sense, people are not formally forbidden to go and stay somewhere, but devices are set in order to deter them to do so. For example, new public toilets in Brussels are equipped with special lights disabling people from seeing their veins so as to repel drug-addicts. Benches that were suppressed from the inner city are now reappearing in an aesthetical way that renders them uncomfortable for sitting and completely impossible for lying down, in order to force homeless people to go elsewhere. Pikes in front of shops or houses are installed to prevent youngsters and other wanderers from sitting there. Randomly turned on sprinklers also deter drug-dealers, prostitutes, homeless people or other undesirables from staying in parks, especially at night (when parks do no simply close their doors at nightfall).

Sometimes, exclusion operates through the design of a whole area becoming thus inhospitable for undesirable population, as the spirit of the place insidiously and tacitly says who and what is welcome and who and what is not. A good example of this is the one of the European neighbourhood, where no street, plaza, or other space is ever flat. Kuyken and Schmitt (2014) established a list of situational prevention devices and techniques in this district: "forced distancing, evasion strategy, diverted route, specialised ways, crooked spaces, windowless
ground floors, barbed wired barricades, cameras, patrols, private security companies in public space and interior streets designed as moats to protect the velvet salons." Indeed, every space in this area is always a bit angled, giving the general feeling that stopping in this neighbourhood is not desired. The only people informally allowed to do so are the people living or working there, the others being only expected to pass-by. In the same view, the Berlaymont building (the European Commission one) now has a newly designed entrance, concealed against a little garden and a glassed wall. This kind of design renders the place implicitly unwelcoming for people not using it. And a lot of other measures are taken enhance this feeling, such as the 2005 ministerial circular that allows the European Parliament to have its own militia to control public highways around the building (a control that is improved during big events and gatherings), (Matagne, Meynaert and Scohier 2010: 4-5). Other spaces functioning on the basis of the same spread of an insidious spirit of the place are consumption spaces such as malls or supermarkets. Indeed, when they do not simply exclude them, everything in these spaces reminds insolvent people that they have nothing to do there (Bonnet 2012).

Finally, the exclusion of undesirable people can be done by simply forbidding them access to specific places. Gated and closed communities are one of the most obvious examples of such privatization of space. These enclaves for rich people are often located in Brussels inside poor neighbourhood. Two good examples are the Up-Site tower in the canal-area, and the cluster of lofts located in Molenbeek, on Ribaucourt street. But other can be found in richer areas, such as the Square du Bois (also symptomatically called Millionaire Square) near the Louise avenue, or the Hyde Park residence at the end of Chaussée de Waterloo (Kelly 2008). But other spaces than residential ones are rendered exclusives, such as the underground public transport network that is formally forbidden to beggars and buskers as an announcement periodically reminds travellers. The MOBIB system and gates now also prevents people not able or wanting to pay for their journey from coming in.

As said earlier, all of these undesirable population are spotted as so on basis of social stereotypes and fear of the other. The effect of all this is the reinforcement of an already existing dual socio-spatial pattern through privatization, militarization but also revitalization urban policies. This creates in the end a penitentiary urban landscape that exclude poor from the spaces used by the urban elites, separating themselves from the lower fringes of the population seen as dangerous by locking themselves into more and more secured urban fortresses. However, saying that the implementation of these defensive practices produces the same socio-spatial results as in LA would be simplistic. Because if Brussels is structured similarly to American cities, with a poor geographical and historical centre, a gentrification process going through some of its central parts, a new administrative centre that is not located in the old historical one, and middle- and upper-class suburbs tending to more and more have their own autonomous nodes; the city is not as exclusive and segregated as American cities. There are in Brussels a lot of socially mixed areas because the middle class is spread through the whole city. There is for example no equivalence to the American ghetto in Brussels, to any of their locked poor neighbourhood, or to private master-planned communities, such as the city of Celebration in Florida developed by the Disney company. Nonetheless a centre-periphery hierarchy remains (Noël 2011). So if the outcome of defensive design in Brussels may remain the same, these practices are not as exacerbated as it already is in American cities such as New York or Los Angeles. This can be due to the fact that the establishment of such urban practices and
landscapes is more recent in Europe as they are inspired of the American way of making the city, already set up since the 1970s.

**Policing history**

A police reform in 1998 resulted in the disappearance of the *gendarmerie*, the national military police force, that was replaced by a federal police, better connected to the local one (this reform followed the Dutroux paedophilia case that deeply shocked the Belgian public opinion, and highlighted the lack of communication and collaboration between the local and national police).

The recent history of policing in Brussels shows the same evolution toward neoliberalism that marks urban policies. Since 1990, Belgium has started to implement new urban policies at the intersection of security and the social, leading to what Andrea Rea (2007) calls the ‘social-securitarian’ state. The Belgian case has been influenced by the French and Dutch experiences. Rea emphasises the way the younger populations are targeted by those new policies and how the structural dimensions of social problems such as unemployment are neglected (p. 22).

These evolutions are visible in the recent establishment of the following emblematic institutions, measures, and events. The creation (after the riots in Forest, Brussels, in 1991) of the ‘security contracts’, at the same period as the ‘neighbourhood contracts’ (Rea 2007: 23) is one of the first example of this. Indeed, the package was financed by the Ministry of the Interior in order to fight the ‘feeling of insecurity’, to ensure citizens’ safety, and to bring them closer to their administration.

Then came the development of the *Sanctions Administratives Communales* (SAC), or fines issued by municipal agents that usually target ‘incivilities’, ‘nuisances’ or ‘breaches of public order’, a practice that challenges the traditional separation of powers in liberal democracies. The creation of SACs went hand in hand with the hiring among the local unemployed population of *gardiens de la paix* (‘peacekeepers’ or *stewards*) to walk the streets, apply these administrative sanctions, and assist the police in their peacekeeping mission. On January 1st 2014, the minimum age under which sanctions cannot be applied was lowered to 14 years old. A few examples of the behaviours targeted by the SAC (spitting, making noise, “squatting” entry halls, walking on public benches or starting a snowball fight) shows that the restrictions municipalities can impose on youngsters’ freedom knows few limitations (Hovine 2014).

Within the same dynamic of merging social work, prevention and repression, many school classes were attributed a police godfather or godmother in the Brussels-Centre police zone: around 1800 children were concerned by this measure aimed at developing the right civic spirit among the youth and at bettering the police image and reputation (*Central PZ* 2012: 52). In the same line, camps for underprivileged children, involving activities with the police, have been organised by municipalities (Rea 2007: 26).

The police force tasks also now want to hire volunteers for low responsibility temporary jobs, such as helping with traffic cops in case of a special event (*Le Soir* 2014b). Also, it is significant that the STIB/MIVB itself is progressively becoming a private police force, with 200 security agents, 160 prevention agents, and the largest CCTV system in Belgium with 1800 cameras in their buildings and stations, and 6800 on their vehicles (STIB 2013). The assignment of 200 police officers on public transports after the murder of a bus driver, Iliaz Tahiraj, in April 2012 (Matgen 2014), is also emblematic.
In Brussels, the existence of a French-like BAC (Brigade Anti-Criminalité – Anti Crime Squad) used to be limited to the central neighbourhoods of the city: a ‘BAC’ in Brussels-South (Southern PZ 2008: 20) and a ‘BAA’ (Brigade Anti Agression – Anti Aggression Squad) in Brussels-Centre (Central PZ 2009b: 65). Even though the situation in Brussels is still far from the Parisian one, in terms of socio-racist segregation as in terms of systematic police brutality, an amplification of police violence that has lead the new mayor of Brussels-City to enter into conflict with his local police (see for example brusselnieuws.be 2014) can be pointed out, as well as an emphasis placed upon police units that have to ‘push the numbers’. In this way, a unit specialised in urban ‘gangs’ was created in 2009 in Brussels-Centre police zone (Central PZ 2010: 23), a ‘FLAG’ unit (short for flagrant délit, caught in the act) was launched in 2011 in Brussels-South-East (South-Eastern PZ 2013: 11) and “proactive patrols” were initiated in Brussels-East in 2012 (Eastern PZ 2013: 22). As these two last zones are calmer and more well-off, this denotes the extension to the middle-classes of techniques that used to be kept for the “endocolonial domination” (Rigouste 2012).

In addition to all this, a ‘Prisons Masterplan’ to build a dozen new prisons in Belgium and to refurbish and extend the already existing ones, as well as Brussels mental institutions, has recently been designed. It comprises the project to build a ‘maxi-prison’ in Haren that would host more than a thousand of inmates, male, female and underage. It would be the biggest prison ever built in Belgium (La Régie des Bâtiments n.d.).

And finally, the latest evolutions in technology such as the recent acquisition of a drone by the Brussels-North police zone, the automatic plate recognition systems, and of course the proliferation of open-street CCTV, is part of the same dynamic.

This multiplication of ‘prevention’ and repressive measures leads some activists who oppose the construction of the new prison of Haren to consider the city of Brussels as one big open air prison (La Cavale 2014).

**Copenhagen**

Copenhagen (København in Danish) is the capital city of Denmark. It is around 1160, when King Valdemar entrusted Roskilde's bishop Absalon as authority figure for the Greater Copenhagen, that this little trading town began to grow and became pivotal to the country's history (KK 2010: 2). Despite the fact that Copenhagen has become a big city, it is still a small town: its surface is of 94.9 km² (Statistics Denmark n.d.b: ARE207) and it has 672,274 inhabitants (meaning that the population density is of 7,084 inhabitants/km²), (Statistics Denmark n.d.b: FOLK1)⁴. The current Lord Mayor is the social-democrat Frank Jensen since 2010, whose predecessor is Ritt Bjerregaard (also social democrat).

Copenhagen is one of the most bicycle friendly in the world, with 390 kilometres of cycle paths (Denmark.dk). The city also has an extended network of public transports, with a metro, buses, and regional S-trains. The Copenhagen airport in Kastrup is one of the largest in Scandinavia.

The current subdivision of the city in 10 districts was introduced in 2007 (KK n.d.a). The wealthy residential neighbourhood of Frederiksberg, although being de facto one of

---

⁴The statistics presented here cover the areas of Copenhagen and Frederiksberg (an enclave municipality of its own right).
Copenhagen's district, is formally not part of the city. It is an independent enclave municipality of its own since 1858 (FK n.d.; Stanners 2013). This is why Frederiksberg is not comprised as being part of the city's neighbourhoods on the following map. The districts that we will focus on during our case studies analysis are the neighbourhoods of Indre by/Christianshavn (the city centre), the northern Nørrebro, and some other northern zones in Bispebjerg and Brønshøj-Husum.

Fig.4 - Copenhagen’s districts (KK n.d.d)

Socio-economic profile

In general, Copenhagen's socio-spatial structure, that emerged in the industrialisation period, has remained quite stable over the last century. The industrial residential segregation pattern has maintained despite major changes in the industrial structure, and an important spatial expansion.

Copenhagen’s social geography is the result of the historical development of the city, that we will briefly detail. In terms of population growth, it was mainly concentrated in the central districts until the 1940s. Then the population began to grow around the city, initiating Copenhagen’s suburbanisation (led by the ‘Fingerplan’ since 1947). It is since the 1970s that the population in

---

5 On the commune website, this map is said to show the geographical territories of the city's neighbourhood committees (lokaldudvalg), but the 2007 neighbourhood subdivision is the same, so we decided to choose this map as it was aesthetically clearer and more appalling.

6 This description of Copenhagen’s socio-spatial structure builds on the one offered by Andersen, 2012.
the Copenhagen Metropolitan Region stopped growing, and even declined in the central districts and inner suburbs. In terms of socio-spatial distribution, the initial pre-industrial situation shows a pattern where upper classes were located in the north around the king's palace and other central institutions, middle-class and skilled workers inhabited the north-west, while lower classes, unskilled workers and immigrants settled in the south-west. This pattern reflected the quality of the housing. It is during the second half of the 19th century that the outer inner districts (around the historical core) developed, again following a clear socio-spatial division pattern. Then in the first half of the 20th century, the overall housing quality improved together with wealth. Functionalist development, introducing the first separation of residential and industrial functions, resulted in low-density residential areas with access to green spaces and recreational areas. After the second world war, suburbanisation booms and stretches the already existing social geography to the new suburbs. The period from the late 1960s to the early 1990s was harsh for the city, as it was filled with changes resulting in major social problems such as unemployment, dereliction of the housing stock, and a lack of development. Since the 1990s and the decision to initiate the Ørestad development and to create better connections between the existing City and this new city annex, as well as with the airport and the Swedish city of Malmø, a change from stagnation to development was operated.

The current segregation pattern therefore reflects the class structure of the industrial city. It can be studied by looking at the spatial distribution of socio-economic factors such as employment, income, education, age groups, and ethnic minorities. The spatial distribution of income (a major relevant factor in population segregation), seems to strongly reflect the spatial distribution of employment, education, housing tenure, and reception of social benefits. In this class structure pattern inherited from the industrial period, the upper classes inhabit the most attractive districts (best located, with beautiful surroundings, and few disturbing functions). The middle classes occupy the less expensive second class districts, while trying to imitate the upper classes. And the working classes live next to transport nodes and job-providing industries. Today, this means that there is a clear socio-spatial separation in terms of occupation, income, education and housing tenure in Copenhagen. Indeed, high income and highly educated people inhabit the north-eastern residential suburbs, the west of the inner city, as well as the centre, while areas concentrating rented housing estates, and low income, poorly educated population with difficult access to the labor market, highly depending on social benefit, are located in the north, north-west and south-west of the inner city. These clear socio-economic differences from area to area can partly be explained by the fact that municipalities in the Copenhagen Metropolitan Region depend on local tax-base. Copenhagen’s social geography actually follows the Chicago school model: there is a clear segregation pattern depending on socio-economic factors as well as on life-cycle shaped concentric circles around the centre, with families with children living in the suburbs and singles and youngsters in the inner city.

If we take a closer look at the socio-economic maps provided by the Copenhagen Commune, we can indeed confirm Andersen's observations:

---

7 All maps and methodological details from this section come from the Copenhagen Commune socio-economic interactive map (KK n.d.f).
Figure 5 shows that in 2011, the areas where there were more than 48% of low-income population (people aged more than 18 years old that did not earn more than 162,000 kroner in 2011, which is 25% less than the gross median income) were Nørrebro (north), the south-west of the Centre, and some parts of Vesterbro, Valby (south-west) and Amager (south-east). Areas with 41-48% of low income populations were located north of Nørrebro (Tingbjerg is one of those) and again in Vesterbro, Valby, and Amager. Figure 6 shows that the distribution of the population outside of the labor market in 2012 (defined as retired and unemployed people aged 16-66) quite matches the previously described low-income population distribution scheme. In general, areas with the highest share of low-income population are also those with the highest shares of out of work population. The same observation can be made when we look at Figure 7, showing the 2012 distribution of non-educated people (aged 16-64, and who have no education at all, or no education higher than an elementary school degree, or immigrants with an educational background that cannot translate in the Danish context). The only areas with less than 25% of non-educated residents are also those with the lowest shares of low-income, and outside of the labor market population.

However, this pattern might now be shifting and therefore has to be nuanced. Indeed, the number of non-Danish citizen is now growing, causing the appearance of clearly distinct ethnic neighbourhoods such as Nørrebro or Tingbjerg, that are now part of the government’s ‘ghettoliste’. These ‘ghettos’ complicate the already existing social geography by adding to the traditional class segregation model. If we take a look at the map showing the distribution of population from ‘non-western origin’ (Figure 8) we can observe that again, the districts concentrating more than 18% of people from a ‘non-western’ origin are the same as those with the highest shares of low-education, out of work, and non-educated population.
Fig. 8 (KK n.d.f)
Another shift in the pattern can be observed in that central districts began to grow in population, which induces a change in their social composition. This is due to a break in the life cycle traditional trajectory in Copenhagen, as young families now tend to stay in the inner city after finishing education instead of migrating to the suburbs. Another cause for this change is the public-led refurbishment of some parts of the inner city.

To give a few important figures (that will be developed further, when comparing our two case studies), Copenhagen is a city where the share of foreigners amongst the population is quite large compared to the overall Danish situation. Indeed, 14.23% of the population of Copenhagen is non-Danish (meaning that they do not have the Danish citizenship) which is twice as high as in Denmark as a whole, with 7.21% of non-Danish population (our own calculations based on Statistics Denmark n.d.b: FOLK1®). The unemployment in 2013 in Copenhagen, Frederiksberg excluded, was of 5.9 (in percent of the workforce). This is a little bit more than in Denmark, where unemployment was at 4.4% in 2013 (KK n.d.c). The average income is of 265,000 kr/an/taxpayer in 2011 (KK n.d.e). Finally the crime per 1,000 inhabitants was of 170 in 2013 (Statistics Denmark n.d.b: STRAF 11).

**Its history in terms of police and surveillance**

In this section, the main information about police, defensive urbanism, and CCTV in Copenhagen will be given.

**Police**

The local Copenhagen police has 3 major police stations in the city: Amager station in the south, Bellahøj station in the north, and the City station located in the centre. For each of these three stations depends a number of smaller and more local stations in the city. The number of people employed by the Copenhagen police is in average of 2,600 people, 800 working at the Copenhagen Police Headquarters (Københavns Politigård). This number is fluctuating depending on how many police officers from the National police are stationed in Copenhagen. The territory covered by Copenhagen police comprises the municipalities of Copenhagen, Frederiksberg, Tårnby and Dragør, meaning that 171 km² and 630,000 inhabitants are under their authority (KP 2014).

**Defensive urbanism in Copenhagen**

The concrete situation about the history and design of defensive urbanism in Copenhagen is developed by Sandra Laville in her article *Designing out crime in Scandinavia: ‘Cities cannot be completely safe and completely exciting at the same time’* (2014).

Designing out crime philosophy in Copenhagen began in the 1980s, with a manifest written by a group of architects who tried to put the philosophy of a softer designing out crime philosophy

---

8 All statistics concerning immigrants and their descendants in Denmark include a share of people from a foreign background even though they obtained the Danish nationality (1/3 of immigrants and 2/3 of descendants are Danish citizen) (Statistics Denmark n.d.a). We were not satisfied with this definition, and chose instead to present number regarding the share of inhabitants that do not have the Danish citizenship.
than in the UK at the heart of city planning. They drew up recommendations, based on the
following principles:

- Creating a social space allowing for natural surveillance between people living in it;
- Increasing people's attachment to an area;
- Encouraging people to use common areas with spaces that invite social contact;
- Providing facilities for adults and young people in particular;
- Limiting the number of access points from surrounding streets;
- Frequent inspection and repair of vandalism;
- Avoiding alleyways, hiding places and blind spots, and only using locks cameras and
  physical barriers as a last resort.

"The basis was that Denmark should continue to be an open society with a minimum of physical
barring and formal surveillance" (quoted by Laville 2014), says Bo Grönlund about the manifest,
that he contributed to in the 1980s. The first housing area in Denmark where those principles
were implicit in the design is the Sibelius estate, located 5 miles out of Copenhagen, conceived by
the architect John Allpass. A more recent example is the one of Sluseholmen, a former working-
class dock located in the southern harbour that has been recently regenerated according to the
plans of Grönlund himself.

This philosophy is based on the idea that urban design and architecture can be used for
preventing crime, which is the core idea behind defensive urbanism and the broken window
theory. But the Scandinavian way to concretely apply those principles to urbanism in
Copenhagen is a particular one. Despite higher crime rates than in the UK (homicides and
assaults), according to OECD figures, the adopted approach is a softer one than the hostile and
defensive one of the UK. Installing thousands of CCTV cameras, metal spikes in the street, and
building gated communities isn't seen here as desirable. Indeed, the leader of the Danish Crime
Prevention Council Karsten Nielsen "believes there is a vital philosophy behind his country's
desire to make its people feel safe without locking them in. [...] We want a society we live in to be
a free, open society, and we don't want to lock any gates or make barriers unless it is absolutely
necessary" (quoted by Laville 2014).

However, these principles do not stay unchallenged in Copenhagen. There have been indeed
some failed attempts at copying the Sibelius model elsewhere in the city, resulting in designs
that do not have a human scale anymore, feeling therefore too large, lifeless, and deserted. Also,
the principles meet the dismay of Nørrebro's inhabitants. Indeed, there is a current wish to
adapt the already existing built environment of this vibrant and multicultural neighbourhood to
the principles of the broken window theory and the designing out crime philosophy. This does
not please the residents, who despite their awareness of gang and drug related issues, do not
feel unsafe at all. What they fear more is for their neighbourhood to lose its soul. As Grönlund
puts it, "you cannot have a completely safe city and a completely exciting city at the same time,
they are completely contradictory" (quoted by Laville 2014).

**Comparison of Belgium and Denmark’s carceral situation**

In this section, we will focus on incarceration and crime rate data.
Fig. 9 and 10 - Incarceration rates (ICPS 2014) and homicide rates (UNODC 2014) are per 100,000 inhabitants. Crime rates (Polfed 2014; Statistics Denmark n.d.b: STRAF20) are per 1,000 inhabitants.

As can be seen on Figure 9, the incarceration rate has been constantly growing since 1992 in Belgium at an annual rate of 5.34%, while it remained pretty constant during the same period in Denmark (ICPS 2014, our calculation). This increase, both global as well as relative in the inmate population of Belgium cannot be explained by an increase of crime in the country, as can be seen on Figure 10. Between 2000 and 2012, the homicide rate in Belgium has decreased of approximately 4% a year, while it has only diminished of 2% a year in Denmark (UNODC 2014, our calculation). The general crime rates of both countries have also been decreasing during the last fifteen to twenty years, at similar paces. Those graphs contradict the claims of a growing insecurity. They also illustrate the difference between the two countries in terms of imprisonment policy: the Belgian state is clearly imprisoning more and more each year, lessening the gap with the US ‘prisonfare’. However it would require statistics over a longer period in order to attribute this tendency to an hypothetical neoliberal turn in the Belgian policy.
The main observations we can draw from Figure 11 is that Brussels is much larger than Copenhagen, in terms in terms of surface and population. Although the capital city of Belgium has a higher GDP, it also presents generally lower conditions of living (higher unemployment rate and lower incomes). It also has a higher share of foreigners. As said earlier, the national incarceration and murder rates are much lower in Denmark than in Belgium, sign of a more peaceful and less repressive society. The crime rate, however, is higher in Copenhagen than in Brussels, but we suspect this difference can be attributed to a better reporting of crime offenses in the Northern city, as hinted by the number, precision and diversity of available crime data. Politically, Brussels is a more centrist and liberal city than the traditionally social-democrat Danish capital, even though the Belgian proportionality rules have lead the Brussels Capital Region to be governed by a social-democrat Minister-President for most of its existence.

As we have both been living in these two cities, we will end up this comparison by giving a personal impression, trying to give a little more spirit to these cold numbers. Wilder Brussels,
more peaceful Copenhagen. But higher police presence in the streets of Brussels, less controlled Copenhagen and more free atmosphere. But more integrated social control (people seem to tend to naturally respect the rules more). Both cities are very contrasted depending on which neighbourhood you are in. But Brussels apparent diversity stays unrivalled.
Introduction to our results

Legal contexts

In Belgium, it is the 2007 Camera Act, and the 1992 Privacy Act, together with its several implementing decrees that are relevant when it comes to drawing the legal context for CCTV. While in Denmark, anybody who installs a camera must comply with two Danish laws: the 2007 Video Surveillance Act (tv-overvågningsloven), and the 2000 Personal Data Act (persondataloven), that applies to all processing of personal data in connection with CCTV surveillance. These laws place strict limitations on how and where cameras may be placed, who has the right to monitor, and for how long the footage may be stored before being deleted. The relevant authorities ensuring the respect of these laws are the national Data Protection Agencies. In Belgium, it is the Commission for the Protection of Privacy (CPP), also known as the Privacy Commission, and in Denmark it is the Datatilsynet (CPP 2014; DT 2008).

The role of the Data Protection Agencies

The DPAs are in both countries independent authorities responsible for giving advice on all sorts of processing of personal data such as registration or transfers, and for supervising authorities, companies, and other data holders, and see if they comply with the personal data law.

In Belgium, the Commission for the Protection of Privacy was established in 1992, with the adoption of the Privacy Act (CPP 2014). In Denmark, before the first of July 2007, both public and private had to notify their monitoring activity to the Datatilsynet. But this clause was abolished with the new surveillance law of 2007 that introduced a regulatory obligation, which means that the agency chooses random samples to check for compliance with legal obligations (Sikkerhedsbranchen n.d.).

Law's history

In Belgium, the Privacy Act adopted on the 8th of December 1992 oversees the protection of privacy in relation to the processing of personal data. The Belgian Data Protection Agency was established together with this act. The goal of both the law and the agency was to ensure a fair and protected use of individual’s personal data. Since then the law has undergone two substantial modifications, and the Belgian legislator modified the act in order to allow the Privacy Commission to be able to face up to the rapid evolution of our computerised society. It is the 21st of March 2007 Camera Act that regulates the installation and utilisation of surveillance cameras (Moniteur Belge 2007). However, the law was modified in November of the same year: the obligation to produce a ‘security and efficiency study’ before any CCTV implementation in public space was simply deleted (Dumortier 2009: 19).

If we take a look at the evolution of the video surveillance law in Denmark, we can observe that the country has progressively adopted a general attitude of greater permissiveness towards CCTV. Indeed, until the first of July 2007, the current Video Surveillance Act was then called Act on Prohibition of Video Surveillance. The advent of the new law, accompanied by this emblematic change in terminology, can be seen as the starting point of a change in spirit and attitude towards CCTV in Denmark, as it greatly expanded the possibilities and conditions for video surveillance and monitoring. Later on, the act was amended twice: taking effect on the first of
July 2010, the first amendment gave housing associations and sports facilities extended possibilities for monitoring. A year later, a second amendment gave municipalities the right to monitor sites linked to specific neighborhoods designated as ‘problematic’ (Sikkerhedsbranchen n.d.).

**Concretely?**

In Belgium, the Camera Act distinguishes between open spaces, closed spaces accessible to the public, and closed spaces non-accessible to the public. It defines a surveillance camera as being a fixed or mobile observation device that aims at preventing, noticing and/or detecting crimes and nuisances, or at maintaining public order. These devices can collect, process and save images only in order to achieve these goals (Moniteur Belge 2007). All cameras have to comply with the 1992 Privacy Act, except when the 2007 Camera Act expressly states otherwise (Moniteur Belge 2007: Art. 2). A camera can only be placed in an open space with the agreement of the municipality council, which first has to take advice of the local police chief (Art. 5). There are restrictions about the aims that cameras on publicly accessible closed spaces can fulfil but they otherwise don't reclaim any particular authorisation (Art. 6). Cameras in closed spaces can be freely installed (Art. 7). All CCTV cameras, whatever the kind of space, require a declaration to the local police chief and to the Privacy Commission9 (Art. 5, 6 and 7).

It is forbidden for private persons to *specifically* film areas which they are not responsible for, except with the agreement of the one(s) in charge (Art. 5, §3). This would theoretically deny people the right to monitor public space, but the vagueness of the term 'specifically' (Atas and Deroover 2009: 90) as well as the experience in the field show that the opposite is true. This situation implies that an *exhaustive* study of video surveillance of public space should not restrict itself to the analysis of public cameras.

In terms of signage, cameras both in open spaces and publicly accessible closed spaces have to be indicated by a pictogram ‘as determined by the King’. A number of information have to be mentioned on the sign:

- “Surveillance by Camera – March 21th 2007 Act”;
- The name of the physical or moral person responsible for the images processing;
- Their post address or mail address (Moniteur Belge 2008: Art. 4).

Any 'hidden use' of CCTV is forbidden by the law (Moniteur Belge 2007: Art. 8), however, this interdiction can be lifted by an examining magistrate for a police inquiry according to the Particular Research Methods Act of 2003 (Moniteur Belge 2008: Art. 47sexies). However, in case a camera is placed illegally, police forces can only fine its owner a ridiculously low amount. It is impossible to seize the material, and there is no obligation to pull it out. Moreover, an illegal camera can potentially produce images that will be used as evidences of which jurisprudence has shown they were acceptable. Hence dissuasion against illegal CCTV use is negligible (Atas and Deroover 2009: 88).

9 The register of those declarations is public and can be consulted on [www.privacycommission.be](http://www.privacycommission.be)
The basic principle in Denmark is that it is forbidden for private users to monitor public spaces. This includes any public or private street, square, road, bridge, tunnel, passage, path, stairs, or the like. With a few exceptions:

- Areas where an economic activity takes place, such as gas stations, shopping centers, or factories, can be monitored by the person disposing of the area.
- Areas and persons in the immediate vicinity of ATMs and CIT vehicles can be monitored by the person having disposal of the machine/vehicle.
- Entrances, facades, fences, and the like, can be monitored by their owner if the images aren’t recorded (except for banks, casinos, hotels, shops, shopping centers, etc. who can store their images, as well as record the immediate vicinity of these areas, if this is done in the purpose of fighting criminality).

The amendments of 2010 and 2011 extended CCTV surveillance possibilities in two new ways:

- Residential (and directly adjacent) areas that are owned by a housing association or where households are represented by a union can also be monitored since the first of July 2010. CCTV surveillance can be carried out only if it is essential in the fight against criminality, and a permit must be obtained from the chief of police. Although it is interesting to notice that the notion of ‘fight against criminality’ remains broad and blurry, which allows for loose and arbitrary interpretations.
- In order to foster a sense of security, communes can carry out CCTV surveillance of public streets and roads used for general traffic if the site is located near particularly burdened residential areas, where there CCTV surveillance is already carried out under the conditions of the 2010 amendment.

Public authorities can also place CCTV surveillance devices in schools, hospitals, and town halls. When the monitoring takes place in closed spaces accessible to the public or in the workplace, a signage obligation applies. In these situations, it is compulsory for the authorities to make the public aware that they are being watched. Although this signage obligation does not apply to television surveillance carried out by the police or probation services, or where the monitoring is done to protect a military installation.

Images can be stored for a maximum of 30 days. The personal data law also states that you must have a written policy for safe images and data storage, with a designated responsible person ensuring that the policy is respected, and that images are not disclosed for vexatious purposes. Disclosure to the police is considered a legitimate purpose, and is therefore allowed (Sikkerhedsbranchen n.d.; JM and DT 2008).

**A few criticisms**

The aim of the Belgian 2007 Camera Act was to simplify the use of CCTV and as such, it is a success. The problem is that camera owners should also respect European Law and Privacy Commission recommendations, which are often overlooked. The principles of proportionality, appropriateness and minimum intervention that are supposed to preside in the choice of installing a CCTV are simply neglected. CCTV owners only have to declare that they comply with the principles of the 1992 Privacy Act, which resembles the way one “agrees to the Terms and Conditions” when installing iTunes.
Concerning the neglecting of the Camera Act, one of its most overlooked aspects is probably the signage obligation. We did not collect specific data on the matter, but we noticed that a large majority of cameras in Brussels simply had no sign, and that most of those that had did not fulfil the required characteristics. McCahill and Norris (2002: 22) made the experiment in London, and they discovered that only in 53% of the cases was there a sign indicating the presence of surveillance cameras, and that only 22% of those signs were in accordance with the law. In Copenhagen, there is simply no signage obligation when the surveillance is carried out by the police in public space.

Another major issue is the unclear character of the justifications needed when installing a camera. In Belgium, it is necessary to declare the camera and what it will be used for, and to only use it for the declared purpose. But saying that the camera will be used ‘for security matters’ is enough. Similarly, in Denmark, some cameras can be installed if they are ‘in the purpose of fighting crime’, as said earlier. These types of justification are so broad and vague that the use allowed for these cameras is actually almost unlimited.

In fact, the general process of decision-making when it comes to elaborating the law is to adapt it to the way police and public authorities wish to use cameras in a way that pleases them, not the other way around. For example, the only authority that does not have to comply with the signage law in Denmark is the police. Also, the new on-board camera and bodycam systems that are now used in Brussels are simply unable to comply with the signage law. Instead of respecting the law and deciding to not use those systems, as their current legality is questionable, the authorities do it anyway and decide later to adapt the law to render these new uses legal. Another range of mechanisms that proves our point is the way the law is presented to the public. For example, in Denmark, this legitimating role is hold by the way the law itself is designed, as well as by the police and public authorities’ discourses. Indeed, the 2007 law states that the police is the only responsible authority for public open-street surveillance. And with their 2012 decision of stopping the CCTV plan for Copenhagen, one could assume that no more open-street cameras would be installed in Copenhagen. And it is what the municipal authorities and the police told us indeed. But really, the 2010 and the 2011 amendments actually allow municipalities to conduct open-street monitoring under certain conditions, but this is kept quiet. In the end, it is as if the law was there to serve the interests of the local authorities and the police, as well as those of shop owners (and housing associations in the case of Denmark), when one could assume it to be in the interest of the citizen.

**Stakeholders and their relationships**

**Brussels**

The Brussels Capital Region is subdivided into 19 municipalities and 6 police zones. It is at the municipality level that decisions are taken concerning the installation of open-street surveillance cameras, after consultation of the local police chief. Practically, open-street cameras are monitored by police agents, except in Koekelberg where the municipality wants to keep control of its network, and where the screens are only watched by municipal stewards. Other intermediary situations exist, like in Etterbeek, where a control room was initially installed in the Town Hall. Today, most cameras are connected to the Brussels-East police network but some remain watched by municipal employees.
**Subventions and Budgeting**

Approximately a third of Belgian municipalities own a video surveillance system. Among them, only the big cities massively use this technology (Lobet-Maris, Dumortier and Van Espen 2010: 15-16).

In Brussels, the European Union subsidises the municipalities that host the European Institutions. The Federal State and the Regions can also contribute and bear a share of the costs for CCTV installations (Lobet-Maris, Dumortier and Van Espen 2010: 25). The Eurotop Fund reaches €20 million a year, to be divided between the different municipalities and police zones (AVCB 2012: 7) – not exclusively for CCTV implementation.

Finding the way Regional grants are rolled out turned out to be an impossible task. The only information available are that the Region intervened to finance different phases of CCTV implementation in the city centre (FM Brussel 2005; 2007), and that in 2009 the Region offered €49,000 when the municipality of Berchem-Sainte-Agathe installed seven cameras (Degreef 2009).

At the federal level, the Ministry of the Interior subsidises Belgian municipalities to improve ‘security and prevention’. To benefit from this aid, municipalities must have a population over 30,000 inhabitants, conduct a ‘security diagnosis’, and have a prosperity index below the national average (Moniteur Belge 2013: Art. 2). In total, Brussels municipalities receive 20% of the national budget (€6.8 million). Up to 10% of those grants can be spent on ‘investments’, potentially for CCTV schemes (Interview with Murengerantwari 2014).

This means that the funding has to come directly from the municipalities and police zones. The budget of all municipalities of Brussels is of €1.8 billion, of which 15% is used to finance the police zones (AVCB 2012: 4). Those zones also receive funding from other sources and totalise an annual budget of €427 million (AVCB 2012: 3). 86% (€367 million) of the local police budget is used to pay the salaries of the 5690 local policemen in Brussels – the federal police offers additional forces in case of necessity, e.g. for demonstrations and summits. Except for other fixed running costs, the rest of the money can be spent for expenditures that fit with the zone’s mission plan, as established by the police chief, in collaboration with the Ministry of the Interior.

**Copenhagen**

In the city of Copenhagen, only the police is in charge of the CCTV cameras placement (de Silva 2014). This induces that these two institutions have a different relationship than in Brussels, where they could previously both be in charge of CCTV equipment. However, even if this has now changed, the police being the only authority allowed to have a video surveillance network, this does not make the Brussels’ situation similar to the one of Copenhagen. Indeed, the process through which communal administrations had to hand over their camera networks to the police caused a struggle that has never taken place in the Copenhagen context.

Nonetheless, this does not mean that the situation in Copenhagen is conflict-free. The power imbalance situation caused by the monopoly of the police over the public CCTV network does not always please public authorities. The best illustration we can give of this is the conflict that
arose from the police decision to abandon the video surveillance plan for Copenhagen in 2012, forcing local authorities to give up on their projects to develop the CCTV network (Hvilsom 2008). Important political figures expressed their discontentment in the newspapers, such as Lars Aslan Rasmussen, social-democrat member of the City Council at the time (Isherwood 2012; Stanners 2012).

Particularly important and illustrative is the case of the municipality's plan to adopt CCTV in Nørrebro and Tingbjerg in order to take these areas out of the government's ghettoliste10. Before the 2012 decision to stop the setting of open-street CCTV, the City Council had approved a municipal plan for CCTV in these two areas. The project was ongoing, and even if it was still necessary to obtain the police approbation on specific plans, and if the police would be the responsible authority for the network management, the local authorities were confident it would eventually be implemented (Lindqvist and Gudme 2011). This turned out to be false, as the project for setting a CCTV network in Copenhagen was stopped in August 2012, forcing the authorities to abandon their plan. This did not please the politicians, who are still pressuring the police into revising their decision. But as we will see later, the practice shows that there are ways to go round this situation.

**CCTV network development**

**Copenhagen**

The launching of Copenhagen's public CCTV network in open spaces was triggered by a specific event: a knife attack that caused the death of 19-year-old Anton Nije Hansen on Strøget in January 2008. The perpetrators were found and arrested because a video surveillance camera in a store had captured their identity. This sensational event was later followed by a meeting between the social-democrat Lord Mayor Ritt Bjerregaard and police authorities Hanne Bech Hansen and Chief Inspector Per Larsen. Out of this meeting came the decision to increase surveillance in Copenhagen, and to launch the installation of a public CCTV network in the city. Although, the knife killing acted only as catalyst, inciting a process already in progress. The Copenhagen police had indeed already considered for some time whether they should put up cameras on Strøget, Nørreport Station, and other areas (Maltesen 2008).

The plan was to firstly install cameras in a few areas selected on the basis of crime statistics, and to expand the network to other areas in Copenhagen after a trial period (Politiken 2008). The area eventually selected for testing the new network was Strøget, a central “multi-use high street”, a “zig-zag pedestrian mall of about 1.5 km”, running from Kongens Nytorv to Rådhuspladsen, the two main squares of the city centre. It is frequented by local citizens as well as by tourists, and is close to a number of important urban institutions such as the City Hall, churches, and the national theatre (Wiecek and Sætnan 2002: 8-10). In terms of crime statistics though, its crime rate is no higher than in other parts of the city, which contradicts the initial choice to put up cameras in areas with specifically high crime rates. Michael Agerbæk, from Copenhagen police, justifies the choice of this area by saying that “it’s natural to start the project there because it’s always full of life [...]. If something’s going on, then the officer on duty will be able to look at his screen and see exactly what the situation is and how best to prepare for it”

---

10 An official statistical category determined following unemployment, crime and ethnicity data (Borello and Balfelt 2012).
Strøget is also the place where the event that triggered the decision to install CCTV in Copenhagen took place. The next areas to be covered by this plan were supposed to be Nørrebro, Tingbjerg, Axeltorv Square, Town Hall Square, Gammel Torv Square, Vestergade and Nørregade (Finnsson 2008; Lindqvist and Gudme 2011).

But in August 2012, the head of Copenhagen Police’s investigative unit Svend Foldager released a statement, saying that the Copenhagen video surveillance plan was to be abandoned. “It’s extremely costly both collecting and storing the data so we have had to objectively and cynically assess the outcome. It has had no preventative effect […] We can use it to solve the occasional case and of course that is good but video surveillance really makes little difference” (quoted by Stanners 2012). Although, in 2011 and 2012, a few cameras requested by the municipality were installed in the residential ghetto zones of Tingberg and Nørrebro.

On a side note, it is interesting to keep in mind that the Danske Stabaner (DSB, the Danish State Railways) also possesses an extensive network of cameras. DSB is an independent public state-owned corporation under the Danish Ministry of Transport and Energy, and is a profit-oriented organisation (DSB n.d.). It is the national railway company, and therefore has a network throughout all Denmark. It also has a S-tog (commuter train) network running around Copenhagen. From 2004 to 2006, DSB installed CCTV in all its commuter trains (Maltesen 2008): there are now 4 cameras in each train car (32 cameras per train), accompanied with pictograms. The goal is to ‘make more profit’, along as to increase security by fighting criminality and vandalism, says DSB S-tog production manager Gert Frost (DSB 2004b). DSB already had an active surveillance program in the stations – where ‘active’ means that the images are watched by stewards (in Esbjerg), and ‘passive’ means that the image are simply stored and consulted when needed (DSB 2004a). Then, in 2008, cameras were installed in long distance trains after the assault of a train driver (North 2008).

Brussels

Police zones

Brussels-Centre (Polbru)

According to the information website Brussel Nieuws, there were originally only 19 cameras in the zone, located mainly on Rue Neuve (the main retail street in the centre), the central lanes of the city, and around the European institutions (FM Brussel 2005). Those cameras were installed at the occasion of the international football competition Euro 2000 (Central PZ 2014: 21). In 2005, 7 new cameras were installed, and 10 old one were replaced. These new surveillance cameras were to be located between Rue Neuve and Rue des Commerçants, with a cost of € 550,000 and a support from the Brussels Region (FM Brussel 2005). In the Ixelles commune, 5 cameras were placed between 2005 and 2006 in the retail district of Porte de Namur. The signage was only installed in 2010 (Ixelles 2010: 152; 2011: 184). In 2007, 11 cameras were replaced on the North-South axis “frequently taken by large demonstrations” (Central PZ 2008: 30). But new cameras have also been put up since then: 6 in Brussels-City and 5 in Ixelles, in the neighbourhoods that were already watched.

In the meantime, a large CCTV plan started to be elaborated in 2006. An agreement protocol was signed in September 2007 between the legal and administrative authorities, the police and the coordinating director (Central PZ 2009a: 40). The police thought the project could start in 2008,
as soon as the public contract would be launched, with a first burst of 50 cameras (Central PZ 2008: 31). This was announced in the local press in September 2009 (Vlan 2009), but for unknown reasons the public contract was only adopted in 2010. It concerned the providing, placing and maintaining (for 36 months) of CCTV cameras and required many meetings between the police and the municipality to specify the technical requirements and to evaluate the offers from CCTV providers (Ville de Bruxelles 2014: 162). The plan consisted of four phases totalising 235 cameras to be installed between 2010 and 2013. The costs were initially of €8 million (brusselnieuws.be 2009) but eventually reached €9 million. It was also accompanied by a €1.6 million program of replacement of older cameras (Lhoest 2014). The new digital cameras could zoom in 20 times, and were to be added to the already existing analog CCTV system of a hundred of cameras (brusselnieuws.be 2009). Both the Region and the federal state intervened to fund this project (FM Brussel 2007). It is still ongoing, and should reach an end in 2015 (Central PZ 2014: 21). An important share of those cameras are already placed, but not yet activated (La Capitale 2014). To our knowledge, there is no plan (yet) to further expand the network in Brussels-Centre police zone.

See the following table (Figure 12) for an insight of the evolution of the camera number:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Camera Count</td>
<td>19</td>
<td>97</td>
<td>120</td>
<td>105</td>
<td>105</td>
<td>221</td>
<td>270</td>
<td>330</td>
</tr>
</tbody>
</table>

Fig. 12 – Evolution of the Brussels-Centre police zone CCTV scheme (FM Brussel 2005; FM Brussel 2007; 7sur7 2008; Central PZ 2012: 53; Central PZ 2013: 65; La Capitale 2014)

In 2011, as a result of a cooperation agreement that the then mayor Freddy Thielemans (socialist) signed with the shopkeepers, the Brussels police also gained permanent access to the private security cameras of the shops in Rue Neuve. The police can now look inside the stores “so we can intervene more quickly” (Thielemans, quoted by Vanheerentals 2011).

Eventually, all sixteen police stations in the zone will have their own control room. In 2013, new screens were already placed in the main control room (dispatching zone) but also in the temporary control rooms of the Roi Baudoin Stadium and of the special headquarters for European summits and large scale events (Central PZ 2014: 21).

Brussels-South (Midi)
Anderlecht was among the first communes to implement a CCTV scheme in Brussels with a first generation of 50 cameras installed during the 1990s (brusselnieuws 2012b). For months, the Southern police zone remained with a lot of out-of-order cameras, as the cable company Coditel considered that the agreement they had with the municipality expired after the liberalisation of the cable market (initially the company was supposed to have a monopoly on the municipality’s cable market). Coditel refused to repair any broken camera until a new agreement was reached. 19 out of 50 old cameras were not working at all or so few (TV Brussel 2008b). All of those 50 cameras are out of order today, they can be recognised by their white colour and old standard look (Interview with Neys and Weemaels 2014). To our knowledge, the public authorities in Brussels never placed dummy camera on purpose but the out of order cameras are not pulled out.

According to TV Brussel (2008c), the municipality of Saint-Gilles took the decision to implement a CCTV scheme of 15 cameras in 2004. The system was bought in 2005 and installed in 2006 but
in 2008, it still was not in function due to similar problems as in Anderlecht. The municipality only realised it when they planned the installation of 4 new cameras and asked the police for an evaluation of the older ones. The municipality of Forest encountered similar problems. The municipality of Saint-Gilles also declared a new CCTV scheme to the Privacy Commission in November 2008. The cameras were supposed to fight waste dumping. However, those cameras were never installed and the project seems to have been abandoned (CPVP; Interview with Neys and Weemaels 2014).

In 2008, investments in surveillance cameras were scheduled to double the amount of cameras in the Southern police zone and to place 21 cameras in the South Station (TV Brussel 2008a). In a 2014 article (La Capitale 2014), the number of cameras on the zone in operation was said to be of 74 – not including the cameras at the Constant Vanden Stock stadium in Anderlecht and Joseph Marien Stadium in Saint-Gilles, hosting two important football teams. The cameras are distributed as follows: 39 in Saint-Gilles, 16 in Anderlecht and 19 in Forest. The police zone also owns a camera embarked on a van (Interview with Neys and Weemaels 2014), and a new generation of ‘smart’ CCTV is also scheduled for 2014-2015. A share of those new cameras will come and replace the old out-of-order ones. The costs for the next phase are planned as being of €1.6 million for the installation of 108 intelligent cameras (73 domes 360° and 35 fixed ones) and of €1.25 million for maintenance costs (brusselnieuws 2012b). The camera locations are decided in collaboration between the crime analysis centre of the police and the consultancy company Optimit. The new ‘smart’ cameras were initially scheduled much earlier but the project ran late due to a case of corruption. In 2012, three officials from the Southern police zone got charged for forgery, counterfeiting, and breach of the law on public contracts (Dupont 2002).

Brussels-West (Bruxelles-Ouest)

Municipalities

Precursor in terms of security policies, the municipality of Koekelberg established a CCTV network in the 1990s (Tange 2009: 113). Already in 2002, there were plans for expanding this system (KKB 2010: 119). And indeed, that year, a network integrating the old and new cameras was created. The new cameras were placed on the main squares (Van Hoegarde, Simonis and Noville) and on the local school (Athénée Royal de Koekelberg). A control room was also arranged in the Town Hall (KKB 2003: 43). The expansion of the network continued in 2003 by including the municipal social housing (Foyer Koekelbergeois), the Town Hall square and two other streets (KKB 2004: 45). The expansion slowly went on during the following years. 16 CCTV cameras were installed at the Victoria Sport Centre (KKB 2011: 95; KKB 2012: 118). The pictograms were also added in 2009 and the network was connected to the police one: the municipality keeps control on its cameras, but now the images can also be watched at the police dispatching (Western PZ 2010: 28). In 2011, an inventory of the CCTV cameras in the municipality was established by Fabricom, the company in charge of its maintenance (KKB 2012: 21). In 2012, aerials were replaced on the Godiva factory and Koek’s Theatre (KKB 2013: 21). The municipality council voted a budget of €118,000 in 2013 for the acquisition of 6 new cameras and the maintaining of the old ones (Saoul 2013).

See the following table (Figure 13) for an insight of the evolution of Koekelberg’s CCTV scheme (the count represents open-street cameras and the ones inside the Town Hall).
<table>
<thead>
<tr>
<th>Year</th>
<th>2003</th>
<th>2006</th>
<th>2008</th>
<th>2009</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camera Count</td>
<td>38</td>
<td>42</td>
<td>43</td>
<td>50</td>
<td>52</td>
<td>58</td>
</tr>
</tbody>
</table>

Fig. 13 – Evolution of Koekelberg CCTV scheme (KKB 2004; 2007; 2009; 2010; 2011; 2012; 2014; Saoul 2013)

In 2006, the municipality of Berchem-Sainte-Agathe spent €61,000 on four cameras, with a subsidy from the region (Binst 2006). In 2009, a second phase of seven cameras cost €105,000 to the municipality and required an investment of €600,000 by the police zone. The Brussels Capital Region subsidised this operation by offering €49,000 (Degreer 2009).

The municipality of Jette also reacted to the 2003 proposition of the Region to offer subsidies. The decision was approved by the municipality council in 2004 but the scheme of 9 cameras was implemented much later in 2007. The Region offered the same amount as for Berchem-Sainte-Agathe. According to the municipality website, the cameras have a 100m range and fulfil mobility and road safety functions. However, a local newspaper article put other reasons forward: deter delinquents and identify authors in case of crime. If most cameras are installed at large crossroads, some of them are also placed at the municipality’s social housing where the safe mobility argument is unconvincing. 7 more cameras were scheduled for 2010, but are still not installed, for lack of funds (Hubo 2004; Jette 2014; and personal communication with Patrice Heuss, responsible for CCTV in Jette).

In Molenbeek, the first 25 cameras were installed in 1997. The socialist mayor negotiated a contract with Coditel, the television broadcaster, when the company asked to renew their monopoly on the municipality. In 2009, the municipality counted 56 open-street cameras plus 6 cameras at the local football stadium. In 2010 and 2011, new CCTV schemes were installed in Molenbeek’s social housing (Tange 2009: 111-112; Molenbeek 2013: 176; 2014: 146).

**Police Network**

The progressive integration of the five communal networks has been complicated due to the diversity of actors and technical specifications involved (Western PZ 2013: 59-60).

Between 2004 and 2009, all police stations of the Western zone were equipped with their own surveillance cameras to monitor the prison cells and the entrances of the buildings (Western PZ 2011: 27). In 2004, the open-street CCTV scheme knew a €143,000 expansion (Western PZ 2005: 33). The police report indicates that the scheme is subsidised but does not indicate by whom. In 2006, the network had doubled: there were 56 cameras in Molenbeek and 36 in Koekelberg. The Molenbeek cameras were watched on 18 screens, 24/7, in the police dispatching. The ones in Koekelberg were watched by the habilitated municipal stewards (Western PZ 2007: 51). A project for new municipal cameras was ongoing and led in 2007 to the launching of the public contract (Western PZ 2007: 51). In 2006, the zone paid €70,000 to TYCO for the providing, installation, and putting into service of a CCTV scheme compatible with the police zone dispatching (Western PZ 2007: 108). A ‘crisis centre’ was also installed in the main police station in Molenbeek. The open-street camera was financed by Molenbeek municipality (Western PZ 2008: 87). And TYCO was paid €1.6 million for delivery, installation and maintenance (5 years) of this CCTV system (Western PZ 2008: 106). In 2009, the zone paid €81,000 to the company TYCO for a 18 screens ‘video wall’ in the police zone dispatching (Western PZ 2010: 80).
In 2008, the zone provided technical support for the creation of a unified network, in collaboration with the public authorities and the CCTV company. The amount of cameras increased from 88 to 133. 1 camera was added in Molenbeek (Molenbeek 2009: 185), several others in Ghansoren, and the first 7 cameras of Berchem-Sainte-Agathe were installed (Western PZ 2009: 30; TV Brussel 2008a). The network went fully operational in 2009. The police was proud to announce that “nothing was forgotten, not even the pictograms indicating the presence of CCTV” (Western PZ 2010: 28, our translation). From 2010 onwards, they also had access the images from the Federal Police helicopter (Western PZ 2010: 80, 2011: 27).

In 2010, according to the police, there were 117 CCTV cameras on the zone. The old screens in the dispatching were replaced by a ‘video wall’ where all cameras can be monitored controlled, except for the Koekelberg ones (Western PZ 2011: 27). The number of cameras increased again in 2011, as the annual police report states that there is a total of 195 cameras in the Western police zone (Western PZ 2012: 35). This probably includes both open-street and police station cameras, as our own count is of 126 (Interview with Scarlata 2014), and as La Capitale counted 133 (2014).

The plan is to bring the total number of cameras in the zone to 215 in 2015. There would then be 120 cameras in Molenbeek, 56 in Koekelberg, 15 in Jette, 14 in Berchem-Sainte-Agathe and 10 in Ganshoren (La Capitale 2014). The study for the plan to extend the Molenbeek part of the network was presented to the Municipality Council in 2013, and is inscribed in the 2014 budget. It should be installed at the end of 2014 or beginning of 2015. For ‘flexibility reasons’, 5 of those new cameras will be mobile (Piquard and Schepmans 2014). The new cameras will be able to rotate 360°, to zoom-in ‘with precision’, and will have a situation recognition program, said to be able to detect aggressions and illegal waste dumps. The total cost for Molenbeek is estimated at € 1.65 million (Gypers 2013). In Koekelberg, there is also a plan to enlarge the system, an audit was started in 2012 in that perspective and the public authorities foresee a budget of € 250,000 for its realisation (KKB 2014: 28; Saoul 2013). The Western Police engagement letter for the period 2012-2017 also specifies that a budget of € 190,000 has to be scheduled for a ‘crisis centre’ with a ‘video wall’ in Ganshoren in 2017 (Western PZ 2013: Appendices).

<table>
<thead>
<tr>
<th>Area\Year</th>
<th>2006</th>
<th>2010</th>
<th>2014</th>
<th>Final Aim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molenbeek</td>
<td>56</td>
<td>63</td>
<td>69</td>
<td>120</td>
</tr>
<tr>
<td>Koekelberg</td>
<td>36</td>
<td>33</td>
<td>43</td>
<td>56</td>
</tr>
<tr>
<td>Jette</td>
<td>0</td>
<td>9</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Berchem-Sainte-Agathe</td>
<td>0</td>
<td>7</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Ganshoren</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total Camera Count</strong></td>
<td><strong>92</strong></td>
<td><strong>117</strong></td>
<td><strong>133</strong></td>
<td><strong>215</strong></td>
</tr>
</tbody>
</table>

The cameras harshly suffer from vandalism. Particularly in case of reprisal after a particular police action or in difficult areas where people do not want the police to have an eye on their activity. There are usually between 10 and 50 % of out of order cameras in the zone. Due to sabotage but also due to the vulnerability of the optical fibre network: the cables get often cut
when the streets are opened in case of piping renovation or other works within the sidewalks (Interview with Scarlata 2014).

**Brussels-South-East (Marlow)**

In the South-Eastern police zone, there are only cameras in the municipality of Uccle. The municipalities of Auderghem and Watermael-Boitsfort are the only ones in the whole Brussels Region to have not implemented open-street CCTV (Tange 2009: 112; South-Eastern PZ 2011; personal communication with the municipalities). In Uccle, the first cameras were scheduled in 2002. The plan was to install 6 cameras with a € 114,000 budget. The driving force for this project was a right-wing liberal member of the Municipality Council. According to another of its members (green), a debate emerged where it appeared that the decisions process had not been respected and that it was far from transparent (Laveleye 2010). The cameras were installed in 2005, along the Avenue Brugmann. A second phase was achieved in 2008 and 8 cameras were added in the centre of Uccle. A third phase started in 2009, notably in the local commercial hubs Vanderkindere, Churchill and Bascule (South-Eastern PZ 2011: 151). We know that the system then counted 31 open-street cameras as well as 12 cameras on police buildings in 2010 (South-Eastern PZ 2011: 82; 127). There was an expansion of the network in 2010 to Fort Jaco, a well off neighbourhood with high standing shops, and Rue de Stalle. The cameras are working and the images are recorded 24/7, the data are kept 10 days. The monitoring is done at the police zone dispatching (South-Eastern PZ 2011: 151). The 2012 police report states that the camera count that year was of 50 cameras (South-Eastern PZ 2013: 58). However, the report also includes a map of the police zone and its cameras that counts only 42 units. This number is also closer to 43, the number given in a recent newspaper (La Capitale 2014).

**Brussels-East (Montgomery)**

In September 2005, the first cameras became operational in Etterbeek. The images were watched and temporarily stored a control room in the Town Hall, that is in direct contact with the police. When the previous government announced subsidies for municipalities to install video cameras on their squares, shopping streets and other crucial points, Etterbeek was right in line. The municipality was expecting a € 270,000 grant for cameras in seven different locations. The locations were selected by the Strategy and Quality Cell, a unit created for the occasion. The Cell made a risk evaluation and attributed ‘points’ to risky zones, determined as the most in need for CCTV (statistics of thefts have played an important role here), (Eastern PZ 2013: 71). Fieldwork has also been done by the authorities: police officials went on elevators to evaluate the ideal elevation for cameras to keep a balance between width of vision and possibilities for face and plate recognition (Eastern PZ 2013: 71; interview with De Wolf and Mahieu 2014).

Eventually, Etterbeek received a € 148,000 grant, and the number of locations was reduced to four (the town hall not included): the crossroads Avenue de la Chasse, the Jourdan Square, the Rue des Tongres and the Forte dei Marmi Square. In total there are now 11 cameras, which can be used to zoom on a face or a license plate. We are not talking here of a hi-tech system of automatic recognition as in some British cities (for the moment) but still, the cameras have a quite high precision zoom. This zooming operation has to be done by a steward watching the images live. In total, there are 6 stewards employed for this task. They work for periods of 4,5 hour and have received a particular training of the police (Merchiers 2005). 24 open-street cameras were also installed in Woluwé-Saint-Pierre and Saint-Lambert during the year 2012. The images from some of the cameras of the municipality of Etterbeek were also redirected to the police station (Eastern PZ 2013: 71; Interview with De Wolf and Mahieu 2014).
Concerning the Northern police zone, our sources are mixed. Many camera locations were found on the privacy commission website. However, the registry was incomplete, in particular for the Schaerbeek municipality. The rest of our data come from two maps in a presentation given by the local police superintendent and available on the website of the police (Dauchy 2014).

The last development phase cost €6 million (Van Garsse 2011b), 127 intelligent cameras will be installed between June 2012 and 2014 (Van Garsse 2012). 70 cameras in Schaerbeek, 40 in Saint-Josse and 20 in Evere, they join the 16 already existing cameras in this police zone (brusselnieuws.be 2010). The program was initially supposed to be finished at the end of 2013 but ran late, and at the beginning of 2014 there were only 25 cameras in the zone (La Capitale 2014). The reason of this delay is unknown, but it could be related to legal matters (Schaerbeek 2011: 102). Our own count, which gathers information from police sources and newspaper, reaches the number of 150. Those cameras that are currently being installed will be all equipped with Video Content Analysis (VCA), a system that makes the automatic recognition of specific situations possible. In case the VCA detects anything suspect, the images will automatically appear on the dispatching screens and all the cameras in the neighborhood will be directed towards the appropriate location. For this, the police zone selected the Schaerbeek-based company Tein Telecom, which is said to have considerable experience in this field (Van Garsse 2011b).

The VCA system is said to be able to:

- Detect suspicious behaviours around vehicles, abandoned and inanimate objects, the formation of small groups of people, graffiti, car plates thanks to the Automatic Plate Number Recognition system (ANPR), and the like;
- Conduct noise and sound analyses, and therefore detect broken windows, (strong) scream, gunshots, etc.;
- Report anyone who stays still for more than 20 seconds on parking lots in order to track car thieves;
- Research predetermined criteria on the recorded images.

There is also a project to integrate the télépolice system with the rest of the network: in case of a télépolice alarm, the pre-programmed cameras will turn in the direction of the possible flight ways (Dauchy 2012; La Capitale 2012).

There are only 8 screens to process all these images (La Capitale 2012). According to the main superintendent David Yansenne, the big advantage of the VCA “is that our police agents don’t have to stare at the ten screens 24/7. The camera helps to analyze suspicious situations, which makes the job much easier. [...] Camera images, which are stored between 20 days and one month, may also be useful for investigations afterwards.” (Van Garsse 2011a, our translation).

---

11 The ‘Télépolice Vision‘ company offers shopkeepers to install private CCTV cameras in direct relation with the police station. A push on the “panic button” transfers the images and/or the sound immediately to the police dispatching. Four police zones in Brussels make use of this system (not in Brussels-Centre nor Brussels-West).
A future integrated network?

As we can obviously see, the management of public video surveillance in Brussels is very scattered, to the discontent of the authorities, who would prefer a centralized control of the camera stock. Therefore, steps have been over the past years towards the integration of the different existing camera networks of the capital city.

Indeed, in February 2011, Mr. Van Wymersch, police chief of the Brussels/Ixelles zone, claimed his desire to be able to connect directly to the STIB/MIVB and SNCF/NMBS camera networks rather than to have to request images to these public transports companies (Degreef 2011). In July 2012, the regional ministers council approved a bill giving open access to public transports and nuclear sites surveillance systems to the local and federal police. The measure had already been announced a few months ago when a STIB-inspector was killed (brusselnieuws 2012a).

Furthermore, in 2013, the Brussels Regional Informatics Centre (BRIC, the public interest agency of the Brussels-Capital Region) was appointed to study the implementation of a “comprehensive, integrated solution for video surveillance to equip Brussels with a regional network” that would connect together the networks of the different police zones with those of the Port of Brussels, the STIB/MIVB, the SNCF/NMBS and Brussels Mobility (Carlot 2013). According to the BRIC director, Hervé Feuillien, the 10,000 cameras of the future automated metro of the STIB/MIVB could also be integrated in this unified network (Doucet 2013). The national media mentions that during the parliamentary debate, the protection of privacy has not occupied a central place, as if it were nothing but a rearguard struggle. And nobody mentioned the vulnerability of some cameras, that could easily be hacked (Carlot 2013).

The integrated network, expected for the end of 2015, will be inspired by the one of Paris which gathers more than a thousand cameras. A commission composed of regional and local policymakers and police chiefs went to Paris to have a look at the system (Doucet 2013). The advantage of such a dispositive, according to Vincent De Wolf, the right-wing opposition leader at the Brussels Parliament and mayor of Etterbeek, is that in Paris it is not necessary to pass through a judge to request access to the local police and commercial centers images, as it is the case in Brussels. The Parisian authorities claim 4,000 arrests since the installation was completed (Belga 2013).

In March 2014, the regional government eventually voted the adoption of the project: the platform will gather more than 3000 surveillance cameras, will cost € 6 million spread over 3 years, and should be ready in 2016. The daily exploitation of the installation will be carried out by the public private partnership IRISnet. According to Brigitte Grouwels, Minister of Public Works, the project will allow a € 7.5 million reduction of costs over the next seven years. The firemen will also have to render their cameras available for the platform. However, the network of the STIB/MIVB will remain separated with a distinct connection to the platform (Belga 2014; Le Soir 2014a).

During our interviews, it appeared quite clearly that the police authorities in charge of CCTV from the Southern and Eastern zones, as well as the people in charge at the public transport company, were not especially enthusiastic about this plan which obviously has a political origin. The chiefs feared to lose control of their cameras, claiming that they wished to ‘keep a hand on the joystick’.
Besides the municipalities and police CCTV networks presented above, the future integrated network will also include the networks of MOBIRIS, of the STIB/MIVB of the port, and of the fire brigades:

**Brussels Mobility (MOBIRIS)**
According to their website, Mobiris is "the administration of the Brussels-Capital Region responsible for equipment, infrastructure and mobility issues. The primary challenge is to facilitate economic development – and the growing need for mobility solutions – while improving quality of life and sustainable development" (CIRB-CIBG 2014). They own 512 surveillance cameras, mainly for safety reasons in tunnels (80%). The other locations are 'strategic crossroads' and highways. The tunnels Leopold II and Rogier have a plate recognition system initially aimed at checking that no car remains more than 20 minutes in a tunnel for pollution reasons. However, the police can access this information on demand, which happens approximately once or twice a week. This situation could become more systematised in the future with the regionalisation of CCTV. The plate pictures are stored for a month, and the video recordings for 72 hours. Mobiris will soon extend its storage capacity to prolong this duration to 14 days and better cater the police's desires. In terms of budget, the installation of a new camera cost between €5,000 and €10,000. The maintenance costs reach around €200,000 a year, for a total annual budget of about €1 million. There is an average of approximately 5% cameras out of order (Interview with Brecht Debusschere 2014; Delforge and Grouwels 2014).

**Public Transports (STIB/MIVB)**
The public transportation company in Brussels possesses 6,800 in their vehicles and 1,800 cameras in their buildings and stations (STIB 2013). In such a context, the map of the STIB/MIVB network (Brussels inter-municipalities transport company) network can actually be seen as the map of a huge CCTV network. According to a police chief of the Western zone, the public transport company employs experts able to trace people's travels on the network. According to the persons in charge of CCTV at the STIB/MIVB (interview with Cortoos, Blankaert and Helmons 2014), cameras are installed for two different goals: the dispatching of trams and metros on the one hand, and the securitisation of their 'customers' and employees. They receive approximately 1,500 requests a year from the police or the justice system to consult their recordings. They referred to the main targets of this monitoring as their 'undesired visitors' (a CCTV operator designed those undesirables as being mainly the homeless persons, the alcoholics, and the kids fighting as they come out of school). The current 'smart' cameras are now considered by the persons in charge as useless for crowded areas such as the ones they have to monitor. The STIB/MIVB network is the largest in the region and tends to become ubiquitous. Funded by the Brussels Capital Region, the cameras in the publicly accessible stations are meant to cover 90 to 95% of their surfaces. Nonetheless, the transport company refused to provide us with the exact locations of those cameras.

**Brussels Port**
A 2014 parliamentary question revealed that the Brussels Port owned 62 CCTV cameras on its infrastructures (Delforge and Grouwels 2014). The port has a crucial importance for the economy of Brussels, for example, the city can only function for three days without oil supply from the canal.
Fire Brigades

According to a personal communication with Captain Philippe Evrard, from SIAMU/DBDMH Brussels, the firemen do not have their own CCTV network. However, they have a control room in their offices, where they can receive images from different organisms with whom they passed conventions – i.e. MOBIRIS, the municipalities, the local polices and the public transportation companies STIB/MIVB and SNCF/NMBS. The system is fully operational for Mobiris. But for the municipalities and police zones, the firemen are still waiting for an efficient process to navigate among the hundreds of available cameras, and for the transport companies, the technical system has not been installed yet.

Discourses regarding cameras

The use of sensational events as trigger for public space surveillance

A first main striking discourse element is the use of a sensational event as trigger for the decision to launch a CCTV network, and for justifying the surveillance of public and open spaces by the authorities.

In Copenhagen, it is indeed from the meeting set up after the death of Anton Nije Hansen on Strøget in January 2008 between Lord Mayor Ritt Bjerregaard and the Copenhagen Police that the decision to initiate Copenhagen's CCTV surveillance network emerged (Politiken 2008). It is also not insignificant that the first area equipped with cameras and used as a trial zone for the rest of the plan is the same as where the event took place, and is not a zone with specifically high rate of criminality (Finnsson 2008).

In Brussels, things are a little bit less straightforward. Cameras were firstly installed for traffic reasons. It is the preparation of the Euro 2000, along with the potential risk of hooliganism and criminality it brought, that was the argument used for justifying the setting up of the first layer of cameras in public space in the centre (Constant vzw n.d.). Sensational events therefore were not used for triggering the launch of the city’s CCTV network per se, but for justifying its use for other purposes than traffic regulation, such as the fight against criminality or the control of demonstrations (FM Brussel 2007). Sensational events, the most emblematic being the death of Joe Van Holsbeek in the Central Station in April 2006, are used here as justifications for making the surveillance of the public space more acceptable (brusselsnieuws 2009; TV Brussel 2008a; Interview with De Wolf and Mahieu 2014).

A primary justification: CCTV as a solution to crime

This corroborates that the initially invoked arguments for using CCTV are that it would prevent and eradicate crime, as well as help solve criminal cases. Local politicians, police authorities, and other actors such as public transports companies draw on these crime-solving arguments in order to justify their decision to set up a video surveillance network.

In Copenhagen, statements released in the press by the local police and politicians, and DSB the regional S-train operator, all include these kind of justifications. Cameras are said to be useful when it comes to prevent serious crimes, vandalism, stabbings, and identifying criminals and suspects on the loose (Finnsson 2008; Stanners 2011; Isherwood 2012). Consequently, the areas that were selected to benefit from the next step of Copenhagen's CCTV plan were be those with a
high criminality rate (Maltesen 2008). Politicians even went further, saying that CCTV would solve criminality issues in problematic neighbourhood to the point that they would be crossed off the government’s ‘ghetto list’ in the future (Lindqvist and Gudme 2011).

In Brussels, justifications for the use of cameras in public space involves the prevention and solving of crime related issues, along with a greater variety of arguments. The spectre of criminality is of course inevitably raised, but other reasons are invoked such as vandalism and delinquency, terrorism, the control of gatherings, demonstrations and riots, the solving of criminal and judicial affairs, the implementation of road and traffic security, nuisance and incivilities (which are not illegal behaviours, but undesirable ones), and finally the fight against the feeling of insecurity (FM Brussel/TV Brussel 2007; TV Brussel 2008a; 7sur7 2008; brusselnieuws.be 2010; Van Garsse 2010; 2011a; 2011b; Interview with Neys and Weemaels 2014).

**Public Opinion**

Though, we can assert that shop owners regularly pressure political representatives for always more cameras (Tange 2009). And as the mayor of Koekelberg Philippe Pivin stated: “at the occasion of the elections of 2000, a questionnaire on the security had been sent to residents. Out of the 37 questions included in this questionnaire, a question was specifically about the surveillance camera. 25% of the people responded to the questionnaire, which is a fantastic response rate. 84% of those were in favor of using video surveillance. There is a demand of the people on this” (Tange 2009: 113-114 our translation). Information about public opinion’s on video surveillance in Brussels were not easy to find.

When the police decided in 2008 to launch their CCTV plan for Copenhagen, they did not fear the citizen’s opinion, as several recent studies have shown that the Danish population generally agrees with the use of cameras in the purpose of fighting crime. Professor Peter Lauritsen from Aarhus university investigates what he says to be a dramatic change in the population’s perception towards CCTV. He claims indeed that not so long ago, a large part of the public was against video surveillance, but that they are now accepting it when it comes to their own protection and security (Maltesen 2008). Indeed, a 2011 study entitled *Safety and security in busy spaces* conducted by the Danish domestic security agency PET revealed “that a majority of Danes backed CCTV as a way to improve safety and security” (Stanners 2011; Nilsson 2008). The 2004 Urbaneye survey of public attitudes towards CCTV in five European capital cities (London, Berlin, Helsinki, Copenhagen and Zurich) concluded that a majority of respondents were supportive of CCTV, even though they would draw a clear line on what they consider to be acceptable. Most respondent supported the use of CCTV in spaces such as banks or transportation facilities, but were against it in intimate spaces such as changing rooms. (Norris 2009: 9).

**Criticisms encountered**

In the global political spectrum, including a few nongovernmental organisation such as the Constant vzw and Human Rights League, no radical critique is really ever formulated. Only concerns towards CCTV’s efficiency and proliferation, constituting what we called earlier a critical support, and demands for a controlled, rational, and democratic use of it expressed (Ecolo 2014; Van Garsse 2012).
The main and most direct criticism addressed to CCTV in Copenhagen is that it has no preventive effect on crime. For example, Eva Smith, chairwoman of the Crime Prevention Council and professor of criminal procedure, claimed in 2008 when the open-street program for Copenhagen was announced, that video surveillance cameras couldn’t prevent unplanned crimes (Maltesen 2008). Also, the police operated a change of discourse in 2012 changed its discourse, recognising that the cameras in the Strøget cost too much and had no preventive effects, even though they helped solving the occasional case. From this assessment resulted the decision to drop the plan and not put up more cameras is the city (Isherwood 2012; Stanners 2012). Peter Lauritsen, head of the Forum for Surveillance Studies at Aarhus University and strong critic of Danish CCTV surveillance, also says that CCTV has minimal preventive effect, as most crimes are premeditated or committed by people under the influence of drugs and/or alcohol (Stanners 2012). Actually, Det Radikale Venstre (The Radical Left), Socialistisk Folkeparti (SF, the People’s Socialist Party) and Enhedslisten (Unity List) voted against the 2007 Video Surveillance Act, more permissive than the previously called Act on Prohibition of Video Surveillance, one of the main reasons being this very argument (Nilsson 2008).

The same actors address additional criticisms to CCTV. Eva Smith claims that the feeling of security it gives people is a false one (Maltesen 2008), an assertion backed by Nørrebro Handelsforening, the local Trade Association (NH 2014). Issues related to privacy also surfaced in political debates about the 2007 Act. For example, critical parliament member Simon Emil Ammitzbøll (Det Radikale Venstre) expressed concern on the matter. SF’s spokeswoman, Anne Baastrup, also pointed out the lack of guarantee that the images will be well-used, and advocated for the monitoring to be done by the Data Protection Agency and the local police only (Nillson 2008). Parliament member Line Barfod also stated that this law, together with the Danish civil registration information system (CPR), credit cards, and anti-terrorist laws, actually leaves very little personal freedom to people (Nillson 2008).

Jacob Mchangama, General Councellor for the Center for Politiske Studier (Cepos, an independent liberal think tank), Social Mayor of the Copenhagen Commune Mikkel Warming, and Nørrebro Handelsforening all believe that putting up cameras to solve is a last resort solution, often implemented without actually being convinced that it will work, a sign of powerlessness. They also fear, considering that the spread of video surveillance in Tingbjerg and Nørrebro made possible by the 2010 and 2011 amendments of the 2007 Video Surveillance Act, that the CCTV tool will become more and more used. Mikkel Warming adds that he does not agree with the putting up of the cameras, as they give people the impression that Nørrebro, and other areas where video surveillance is conducted, are more dangerous than they actually are (Lindqvist 2011). The Nørrebro trade union also expresses discontent regarding the spread of video surveillance in the district. They denounce the mechanism following which the more cameras are installed, the more people are being uncritical about their presence, allowing for greater chances of abuse (NH 2014). More largely, Nørrebro Handelsforening denounces the rise of surveillance society and the abuses it leads to, claiming that “a terrorist does not look a certain way”, and that “people with a different ethnic background, or people who behave strangely, will be considered suspicious for no reason” (NH 2014, our translation).
Results

Achieving the goal of having a map showing exhaustively was certainly an easier task in the case of Copenhagen than for Brussels. This is the result of a combination of several factors. First of all, the video surveillance network in Copenhagen is owned and managed by only one authority, the municipal police. Figuring out who to ask for information about the cameras location was therefore easier than in Brussels, where each police zone and communes have or have had their own network. The public CCTV network is simpler and easy to exhaustively map. Also, when we asked the Copenhagen police about the number of public cameras as well as their placement, they immediately answered with an exhaustive list of the devices they owned. They even gave us information about those located in closed spaces (such as, for example, in police station’s interrogation rooms, that are obviously not spaces accessible to the public). And finally, the CCTV network in Copenhagen is far less extensive than in Brussels, which made it easy to check the placement of every single one of the cameras.

Brussels

Fig. 15 - Public Open Street Cameras in Brussels Capital Region
**Map Methodology**

We have listed 868 public cameras monitored by the police or by municipal stewards in Brussels Capital Region. Among those, 54 are definitively out of order in Anderlecht but there is a plan to replace them in the near future (Interview with Neys and Weemaels 2014) so we decided to map them nevertheless. The exhaustive list of those cameras, their type, status and address can be found in Appendix 3, along with the source(s) for each camera. Out data were also confirmed by a recent article in the local newspaper *La Capitale* (2014) and by a parliamentary question asked by the green representative Céline Delforge (Delforge and Grouwels 2014).

We had chosen to work on public cameras as it seemed more realistic to access the data. We started to contact all institutional actors by email in 2013 in case it would have been necessary to conduct lots of fieldwork to fill the map.

**Institutional Sources**

The public registry of the Privacy Commission (CPVP n.d.) has been our first source: it has provided us with 293 cameras, or 34% of our total count. However, a total of 468 cameras (54%) are properly declared and accessible through the commission website, but some of them were not yet accessible when we started and we missed some others at first, because of the poor ergonomics of the registry. Indeed, open street CCTV schemes can only be found in the registry using the keywords 'ouvert' ('open' in French) or 'niet-besloten' ('not-closed' in Dutch) in the research bar, depending on the language in which the declaration was written. Local Polices have also given us lots 37% of our data. Directly, when we met the Southern and Western police zones representatives to conduct interviews (22%). Indirectly, through documents found on the Internet (ZP Marlow 2012: 49; Dauchy 2012), (13%). The municipality of Jette (2014) simply provides the list of their surveillance cameras on their website, with a Google map of their location and the ones of the relays.

**Local Newspapers**

As hinted by the Ministry of the Interior’s study (Mortelé and Deprins 2012), video surveillance’s usefulness is partly fictitious, hence the necessity to “clearly explain [its] efficiency” (p. 38). A paradox that the central police zone has well integrated, as they organised a press conference in September 2009 to advertise for the future implantation of more than 200 cameras. This information, together with the location of the cameras, was published in a Brussels local newspaper (*Vlan* 2009). The same happened in 2002, when *La Dernière Heure* (2002) published a short list of Koekelberg’s camera locations.

**Past Researches**

We were not the first ones to try to map surveillance cameras in Brussels. A geographic study from the University of Brussels (Dessouroux, Van Criekingen and Decroly 2009) already offered a map of CCTV schemes in the centre of the city. Another researcher of the same university, Alice Romainville (2005) had also contributed an alternative atlas of Brussels, by mapping the cameras of the whole Region, on the basis of a study by Jonathan Unger. Those two studies contributed to 8% of our list, although they already represented many more.

**Own Fieldwork**

Living in Brussels has allowed us to check the streets by ourselves. We have spotted 5% of the cameras this way. The fieldwork has also permitted us to double check if cameras were actually present where we thought they were and to precise the locations. 49% of the locations have
been checked this way or thanks to Google Street View, and could not find the camera in only 12 locations (in 11 cases because they were not yet installed), the only one left (Cimetière d’Ixelles) remains mysterious.

**Results for Brussels**

![Density of Public Open Street Cameras in Brussels Neighbourhoods](image)

**Legend**

Camera Density (per km²)
- Red: 41.86 - 97.06
- Dark Red: 34.21 - 41.86
- Orange: 22.64 - 34.21
- Yellow: 12.50 - 22.64
- Light Yellow: 4.35 - 12.50
- Light Green: 0.41 - 4.35
- White: No Camera

Authors: C. Debaillieul and P. De Keersmaecker

Fig. 16 - Density of Public Open Street Cameras in Brussels Neighbourhoods

The map shows that the neighbourhoods having most surveillance cameras are the Grand Place and the poorest part of Koekelberg, which adjoins Molenbeek.

Then come other parts of the city centre (Stalingrad and Aneessens), the popular and migrant neighbourhoods of Matongé and Molenbeek’s historic centre.

Rather high densities of public cameras can also be found in the European neighbourhood, in the traditional working class neighbourhood of the Marolles and Porte de Hal or in the Northern part of the city (Schaerbeek). The lone rectangle in the third category at the Western side, in
Anderlecht is the Astrid Park, which hosts the football stadium of the most important team in Brussels.

The camera density then tends to decrease as we take distance from the centre at the exception of some local commercial neighbourhoods where we can find the intermediate classes (Jourdan, La Chasse, Flagey...).

A large share of Brussels is actually not subject to public video surveillance. Notably the entire municipalities of Auderghem and Watermael-Boitsfort. With Woluwé and Uccle (which have rather low densities of cameras), they are part of the South-Eastern quadrant of the city, characterised by its relative wealth. The other parts of the city free of cameras are cemeteries and parks, and the rural neighbourhood at the West of Anderlecht.

**At a greater scale: what can be found around open-street cameras?**

For 362 cameras (42% of all listed cameras), we checked which elements were surrounding them. Nearly all public cameras are motorised, and therefore do not focus on one specific point. Also, most of them are black domes, making it very difficult to check in which direction they are ‘looking’. Hence we listed all the surrounding elements we thought could be of interest but nothing certifies that the cameras actually monitor those places. Listing the urban features was made through quick fieldwork, and analysis of Google Maps, Open Street Map, and Google Street View. It is therefore a quite rough analysis, far from an in depth ethnographic study of the places under surveillance. The chart below represents all features which were present in over 5% of our cases.

![Fig. 17 - Features likely to be found next to public open street cameras in Brussels](chart)

Many cameras were placed on secondary centres in the city, such as Town Hall squares, forecourts in front of churches, local retail nodes, or large intersections. Those nuclei gather by definition a number of various elements, making it difficult to differentiate between the one hand those that are the object of monitoring and can explain (or at least contribute to explain) the presence of a camera, and on the other hand those that simply co-occur with it on secondary centres.

Nevertheless, some tendencies clearly emerge. Places such as main roads, as well as metro, tram and bus stops, are places of arrival in – and escape from – a particular place or municipality.
With the crossroads and train stations, they are locations of high mobility. These types of spaces are usually monitored. On the contrary, places of very low mobility such as squares, bars, parks and parking lots are also often watched. A last category is places that call for protection for their intrinsic interest: monuments and touristic places (such as the Atomium, Manneken Pis, or Grand Place), national interests (Ministries, Royal Palace, or national symbols), or municipal interests (Town Hall, libraries, schools, or social housing). In this case, it seems that the local councils are behaving as private owners who protect their own belongings. As this analysis was not exhaustive, Regional and European interests do not appear in the chart although Flemish, European and Brussels-Capital Institutions located in Brussels are of course under video surveillance.

**Copenhagen**

**Map**

**Map methodology**

When we first collected data about the number of camera and their location, all information came directly from our exchanges with the police, the sole owner and responsible authority regarding public CCTV in open spaces. The municipality of Copenhagen informed us that there were no cameras owned by the municipality. This allowed us to build a map representing the totality of public cameras in open spaces in Copenhagen. Almost all of them have been verified (we went in person check that they were there), except for two of them that were located on a parking that we did not have access to. It is only later that we stumbled on a document detailing the location of some open street cameras owned by the municipality (although managed by the police) in residential areas of Nørrebro and Tingbjerg. We then found the number of these cameras through several sources: crowdsourcing, newspaper articles, and official documents. We did not have any previous material at our disposition, as we seem to be the first to attempt at building a map in this city.

On the map, we chose to represent with symbols the locations of the CCTV cameras of the three main police stations (blue squares), of the pedestrian shopping street of Strøget (pink triangles), and of the housing blocks that have cameras monitoring the street (green dots). We decided to add yellow polygons on the map to show what zones were supposed to be part of the CCTV plan for Copenhagen before it was aborted, as they were supposed to welcome cameras on their ground during the following phases of the plan.

**Observations**

We firstly observed that the cameras are located either around the three main city's police stations, like it is the case in Vesterbro (Copenhagen city station), Kastrup (Amager station), and Nordvest (Bellahøj station), and that the one of the main camera hubs (32 surveillance cameras) is located on the pedestrian shopping street of Strøget, between The Town Hall Square (Rådhuspladsen) and Nytorv. Strøget is the place where the first phase of the plan for CCTV placement in Copenhagen took place. The next areas to be covered by this plan were supposed to be Nørrebro, Tingbjerg, Axeltorv, Town Hall Square, and Gammel Torv, Vestergade and Nørregade (yellow polygons). They were chosen because of their high levels of criminality. Again, we can roughly observe that the two zones where the camera plan was supposed to
unfold itself were the city centre (again), and the Northern 'ghetto' neighbourhoods of Nørrebro and Tingbjerg.

We then had to adapt these observations to the newly found cameras, installed under the 2011 amendment legislation. Indeed, if we take these cameras into account, two new camera hubs appear in the north of the city (in Nørrebro and in Tingbjerg), challenging the clear-cut previous pattern where only Strøget seemed to appear as a relevant study area.

The current situation in Copenhagen is therefore the following: there are 147 publicly-owned cameras in open spaces: 33 of them are on Strøget, 19 others around the three main police stations, 36 in Tingbjerg along Ruten and Lille Torv, and 59 in Nørrebro along several housing blocks all located around Mjølnerparken. This makes 52 open-street cameras installed by public authorities under the 2007 law, and 95 under its 2011 amendment.
Results analysis

Brussels

In order to precise the analysis of this spatial distribution, we calculated a set of Pearson correlation coefficients between the density of public cameras (number of cameras per km²) and different indicators. The correlation coefficients’ significance was tested with the Student’s t-test ($\alpha<5\%$) and the probability $p$ of error was calculated as well. The calculations were made at the neighbourhood scale when possible, otherwise at the municipal or police zone level when the inaccessibility of data required so. At the neighbourhood level, the uninhabited ones were not considered; while at the municipality and police zone level, we had to adjust the camera densities by subtracting forests and farmland from the municipalities’ and police zones’ superficies.

The goal of those calculations was to try to establish any kind of relation between the main concentration hubs of public cameras and the socio-economic structure of the city. Of course, correlation does not automatically means causation, and quantitative statistical analysis has its limits. However, this method can be interesting in order to:

- Test the claims of politicians and police authorities installing CCTV;
- Test the usual theoretical assumptions on the topic;
- Confront our results with the study on CCTV in Catalonia (Galdon Clavell, 2011a).

None of the indicators presented a correlation high enough to be considered a relevant explicative variable for CCTV installation. However, some of them presented significantly high correlation coefficients (positive or negative) that still deserve to be presented here. Though, we want to stress that the results we consider as relevant only show that our variables are somehow related.

At the neighbourhood scale, we found high and significant correlations between the density of public cameras and

- The share of young to middle-aged males (20-49 years old) in the population in 2011 ($r=0.602; p=1.62\times10^{-12}$);
- The share of foreigners in the population coming from Africa (Northern and Sub-Saharan) or other non-OECD countries in 2011 ($r=0.567; p=1.92\times10^{-11}$). The migration rate between the neighbourhoods and foreign countries presented a very similar correlation;

---

12 The Pearson correlation coefficient is a “measure of the linear correlation (dependence) between two variables X and Y, giving a value between +1 and −1 inclusive, where 1 is total positive correlation, 0 is no correlation, and −1 is total negative correlation” (wikipedia). The coefficient $r$ as such has no practical signification but its square $r^2$ is the coefficient of determination whose value represents the percentage to which the variation of a variable can be attributed to its correlated variable. In order to avoid false correlations due to limited sets, we used an adjusted coefficient: $r^* = r \sqrt{\frac{n}{n-2}}$, where $n$ is the number of degrees of freedom.

13 All statistics for neighbourhoods were found on the website of the Monitoring des quartiers/Wijkmonitoring, monitoringdesquartiers.irisnet.be
• The “share of households dissatisfied with the cleanliness in the immediate vicinity of their homes” according to the 2001 census ($r=0.545; p=1.54\times10^{-10}$);
• The unemployment rate in 2009 ($r=0.465; p=1.00\times10^{-2}$);
• The density of offices (m²/km²) in 2012 ($r=0.417; p=2.47\times10^{-6}$);
• The population density (inh./km²) in 2011 ($r=0.366; p=4.37\times10^{-5}$).

Inversely, we found significant negative correlations with

• The share of women over 39 in 2011 ($r=-0.582; p=4.06\times10^{-12}$) or more generally, the share of elderly (65+) in the population ($r=-0.517; p=1.84\times10^{-9}$);
• The average income per inhabitant, in euro, in 2010 ($r=-0.446; p=3.74\times10^{-7}$).

The same analysis at the municipality level allowed us to precise our comparison between the distribution of public and private cameras.

![Diagram of Private Camera Density in the Brussels Morphological Urban Agglomeration](image-url)

Fig. 19 - Private Camera Density in the Brussels Morphological Urban Agglomeration (Personal communication with the Privacy Commission).
We wanted to test if the absence of public cameras was compensated by the installation of private ones. As the map shows, this is not the case. Municipalities highly watched by public authorities also tend to have a higher number of private cameras on their territories. This was partly confirmed by the correlation measure between the densities of the public and private cameras \((r=0.400; p=0.0556)\). This means that the probability that this correlation is accidental is of 5.56\%, that is just over the 5\% threshold generally used in social sciences\(^{14}\).

As Galdon Clavell (2011a) found results infirming those of Hempel and Töpfer (2004) concerning the relation between CCTV and the importance of the tourist economy in local industry (number of hotel beds per capita), we tried to find a similar indicator for Brussels. So we compared the density of public cameras with the share of tax declarations in the fields of accommodation and catering in the total economic activities at the municipal scale\(^{15}\) and found a correlation in line with Hempel and Töpfer \((r=0.568; p=6.60\times10^{-3})\), confirming the relation between video surveillance and tourism.

Finally, we have evaluated the relation between the number of police agents per police zone and the camera density at this level. This was once again in order to compare with Galdon Clavell’s (2011a) results as she tested the argument sometimes used by police forces that they install CCTV to compensate a lack of police force in the field. Due to the limited number of police zones in the Brussels Region, it was impossible to calculate a significant correlation between the number of policemen per inhabitants and the density of public cameras; but if any, the relation between the two is rather positive, hence invalidating the argument.

Besides this quantitative analysis, we have also identified a few guidelines to foster the understanding of Brussels’ CCTV distribution:

The prevalence of cameras in the city centre probably take their source in a global city dynamics where tourism, an important retail sector, the European and other governmental institutions succeeded in dictating the necessity to convert Brussels in a safe city, and particularly safe for investments.

The district of Laeken, in the North-West, is particular as it belongs to the municipality of Brussels-City and is influenced by this status. It also hosted the Euro 2000 football competition and is the theatre for recent and future urban development; which brings us to the rationale behind the western area along the canal where the control of the racialised poor prevails, together with a slow gentrification process (see Dessouroux, Van Criekingen and Decroly 2009). For the part of Koekelberg bordering Molenbeek, the intention appears to be to create a symbolic ‘camera wall’ to separate from this ill famed municipality.

The absence of cameras in two of the south-eastern zone is not easy to theorise. It seems that there is simply no necessity, no insecurity problem or debate to be solved. If we identify CCTV as a populist measure to win electorate (Carr, 2014), we can also understand why a municipality like Auderghem does not require implement such a costly policy as its mayor easily gets elected on the first round of the local elections with an absolute majority.

---

\(^{14}\) If we have time, we could calculate the probability that they are negatively correlated in order to show how far it is unlikely. This would be the correct way to answer our hypothesis but it will just produce a ridiculously low number that will not bring us anything more for our analysis.

\(^{15}\) Data source: SPF Economie (2013).
Copenhagen

What zones are under surveillance?

In Copenhagen, analyzing the camera distribution was by far easier. Mainly because only a few of the city’s areas are being monitored (or were planned to be). Assessing why cameras were (going to) be placed there therefore did not necessitate the calculation of any kind of correlation. In this case, an exhaustive inventory of the types of places that are monitored, along with the authorities’ statements detailing their reasons to do so, is enough.

The actually placed and functioning open street cameras that the police declared to us are located in three different types of spaces:

- The commercial pedestrian street of Strøget, with 33 cameras, all directed at the walking crowd;
- The Town Hall Square (1 camera, that is part of Strøget’s network, but directly watching the square instead of the pedestrian street);
- And the city’s three main police stations, with 19 cameras in total (7 at the City station, 7 at the Amager station in the south, and 5 at the Bellahøj station in the north). All of those watch the police stations themselves (entrances, parkings, etc.) and their surroundings.

Then, there were two types of spaces that were supposed to be part of the next step of Copenhagen’s open street program: the northern areas of Tingbjerg and Nørrebro, and some parts of the city centre (again) with Axeltorv, the Town Hall Square, Gammel Torv, Vestergade, and Nørregade. We will detail here the traits that can be relevant regarding the installation of CCTV in these inner city zones:

- On the Town Hall Square (Rådhuspladsen), the town hall can obviously be found, as well the headquarters of the newspaper Politiken and of the Confederation of Danish Industries (Industrienhus). It is central a central square, located next to Strøget, and to H.C. Andersens Boulevard and Vesterbrogade, two of the city’s main axes. This square was already part of the first trial phase of the CCTV plan;
- Vesterbrogade is one of the city’s main axes, where the Tivoli amusement park has its main entrance, and other important tourist places such as hotels can be found;
- Axeltorv is an important square in central Copenhagen, that is located across Tivoli’s main entrance on Vesterbrogade, and next to Vesterport station (Copenhagen’s second central station);
- Gammel Torv is the oldest square in Copenhagen, and is located along Strøget, just next to where the currently existing camera network that goes all the way to the Town Hall Square begins.
The two districts of Nørrebro and Tingbjerg, both located in the north of the city and designated as 'ghettos', were also part the municipal plan to install CCTV, with a special focus on Nørrebro, as it is a more central and significant district than Tingbjerg, that is defined by the commune as a 'hotspot' necessitating specific security measures by the commune (KK n.d.b).

When the open-street CCTV plan was aborted by the police in 2012, local political authorities and actors were (and still are) very displeased, as it appeared that their plan would never be implemented. Indeed, when we contacted the communes and the municipal administration, they ensured us that only the police was carrying out surveillance of public spaces, and when we contacted the police, they immediately gave us a list of the devices they owned, ensuring us in a second official e-mail that the list was exhaustive.
However, considering the 2011 amendment and the possibilities it offers, there is actually a way for those neighbourhoods' public spaces to be monitored by public authorities. A document found on the website of the Copenhagen commune confirmed that this is actually the case: in 2011, 5\textsuperscript{16} different public areas were being monitored by the commune around residential blocks whose housing association already monitors the non-accessible to the public areas (although it is important to keep in mind that it is not the commune but the police that finances and carries out surveillance for cameras watching parts of the streets). These cameras are all located in Tingbjerg and Nørrebro (KK 2011):

- Ruten, and Lille Torv, in Tingbjerg have 36 cameras on the main road\textsuperscript{17} (Davidsen-Nielsen 2011);
- On Hothers plads, Nørrebro, there are 40 watching the street from the facade of the residence (crowdsourcing);
- Den Grønne Trekant ('the green triangle'), a block located between Aldersrogade, Rovinsgade and Vermundsgade, Nørrebro: 19 cameras (KK 2012b).

For the placement and management of these cameras, there is an annual 0.7 million kroner fund provided and administered by the Finance Administration (Safe City department) and the Technical and Environmental Administration (Urban Design department). This financial pool is shared between the commune, the housing associations, and/or the police depending on the placement of the camera (KK 2012b). The reasons invoked for placing this type of cameras all have to do with the improvement of the city’s security by carrying out surveillance in disadvantaged areas (KK 2011; 2012b, 2012c). Indeed, in order to apply for authorisation for CCTV monitoring, housing associations have to provide reports and accounts for vandalism, theft, arson, burglary, violence, drug trafficking, and deterrent behaviours such as harassment and threats (KK 2012a). Proving that a zone is dangerous and violent is therefore a requirement for demanding CCTV surveillance.

**What socio-economic profile for these areas?**

In order to try and answer our research question, it is necessary that we provide further information on the socio-economic structure of the areas under surveillance. The focus we provide here builds on the maps and data from the wider socio-economic structure of the city that we developed earlier (KK n.d.f). The spaces we will detail on here are the three main relevant camera hubs: Tingbjerg, Nørrebro, and Strøget.

Tingbjerg is a socio-economically very uniform zone, which might be due to its smaller size compared to the two other studied zones. It is indeed covered in totality with the highest shares of low income population (more than 48%), low-education population (more than 35%), out of work population (over 23.4%), and population from a non-western origin (more than 18%). In terms of safety index, it is designated as needing ‘significant effort’, therefore being part of the areas with the lowest safety index. The two other relevant zones for our study are Nørrebro and the city centre. The results in these zones are more nuanced, but trends can still be found. In general, Nørrebro has higher shares of low income, out of work, non-western, and low education

\textsuperscript{16} The document shows 6, but a more recent one explains that the planned surveillance on Jægerborggsgade has been abandoned in October 2012 (KK 2012c).

\textsuperscript{17} We are not sure that this number includes Lille Torv, but in lack of sources we will just assume that as Lille Torv is located along Ruten, it is included in the 36 open street cameras of the Ruten network.
population than the centre. But the centre zone is surprisingly unsafe by comparison with the distribution of previously presented socio-economic data. As this safety index is built based on police records and on a survey among Copenhageners related to crime and the sense of safety in their neighbourhood (KK, n.d.f), we can draw the conclusion that the safety index seems to be quite unrelated to the distribution of other socio-economic data.

**Ghettoes in Copenhagen?**

As Tingbjerg and Nørrebro are the two zones where the municipalities concentrate their CCTV efforts in residential areas, and as both these districts are part of the government's *ghettoliste*, we will also take a closer look at this specificity.

Each year, the government publishes a list of Denmark’s ghettoes (*ghettoliste*). The list includes public housing estates with at least 1,000 residents who meet three out of five predefined criteria (MBBL 2014a). Before, residential areas had to meet three criteria related to crime, ethnicity and unemployment in order to be stamped as a ‘ghetto’. But in December 2013, a bill submitted by the government, together with the Liberal Alliance and the Conservatives to amend these criteria was adopted by the parliament. There are now two additional criteria (income and education). And to be part of the stigmatising list, a residential area has to meet three out of the five relevant criteria. Because of this new definition, the Danish *ghettoliste* dropped from 40 to 33 ghettoes. Not because the situation has changed, but because the definition of ‘ghetto’ did. Starting now, a new list will be published in December each year by the Ministry for the city, residential and rural districts (*Ministeriet for By, Bolig og Landdistrikter*). The latest list published in February 2014 comprises therefore 33 ghettoes. (Jørgenssen 2013; MBBL 2014b).

The criteria are defined as follows:

- Unemployment: the proportion of 18-64 year olds that have no connection to the labor market or have no education exceeds 40% (average for the last two years);
- Ethnicity: the proportion of immigrants and descendants from non-Western countries exceeds 50%;
- Crime: the number of people condemned by the Penal Code (*straffeloven*), the Arms Act (*våbenloven*) or the Act on Narcotics (*lov om euforiserende*) is higher than 2.70% of the population aged 18 years and older (average for the last two years);
- Education: the proportion of residents aged 30-59 years who only have basic education (including education that is not recognised in Denmark) exceeds 50% of all residents from the same age group;
- Income: the average gross income for the population aged 15-64 years (excluding trainees) is less than 55% of the average gross income for the same group in the region (MBBL 2014a).

There was a lot of discussions regarding that change. The *Enhedslisten* (‘the unity list’, the parliamentary basis at the moment of the discussion) and the *Venstre* (‘right’) are both critical of the measure. Louise Schack Elholm’s (Venstre) arguments against the new criteria is that they put too little emphasis on the ‘crime’ and ‘ethnicity’ dimensions, arguing that they are what gives people a sense of insecurity in a neighbourhood, unlike the new ‘unemployment’ criterion.

---

18 A more detailed table of this socio-economic overview is available in Appendix 4.
To these criticisms, it was replied that a lot of areas on the list meet more than three criteria, and that the new added dimensions are all linked to each other (which is correct, if we take a look at the socio-economic structure of Copenhagen, where income, education, employment, and population of non-western origin have a similar spatial distribution), (Jørgenssen 2013). Carsten Hansen (social-democrat and parliament member) also argues that a more accurate, nuanced and relevant picture of those vulnerable neighbourhood is provided thanks to the new method, allowing for better and more efficient interventions (MBBL 2014). Though, it is necessary to point out that the utility of such a list is never questioned by politicians, the only criticisms addressed to it focus on its efficiency and therefore constitute a critical support. The racist dimension of the list is never addressed either, and even when the system is criticised, it is with the help of even more racist arguments (like when Schack Elhom stresses that ‘ethnicity’ is decisive in what creating a sense of insecurity amongst residents, and that this dimension should be more stressed in the definition of what is a ghetto). But the ‘ethnicity’ criterion is actually very questionable, as the people designated as ethnic are defined ‘immigrants and their descendants of non-western origin’. This is racist for several reasons. First of all, because using ‘ethnicity’ as a criteria to stamp an area as ‘ghetto’ implicitly states that the mere presence of people from a different origin is a problem and a source of insecurity in a local community. Besides the borderline racist nature of this kind of assumption, it is also highly stigmatising for the population pointed out as problematic. Also, the definition itself of who is included in this ‘ethnic’ population group is controversial: a share of approximately 1/3 of the immigrants and 2/3 of the descendants actually are of Danish nationality. Moreover, it is not the immigration itself that is considered an issue, only the one coming from non-western countries, even though the ‘western’ category does not follow any geographical logic (KK n.d.f). It is the cultural dimension of immigration that is therefore pointed out as a problem.

Still, according to this questionable definition, the Copenhagen Commune comprised four ghettos in February 2014: Aldersrogade and Mjølnerparken in Nørrebro, Tingbjerg/Utterslevhuse in Brønshøj, and Bispeparken in Bispebjerg (north of Nørrebro).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Aldersrogade</td>
<td>2,350</td>
<td>38%</td>
<td>73%</td>
<td>2.7%</td>
<td>41%</td>
<td>52%</td>
</tr>
<tr>
<td>Mjølnerparken</td>
<td>1,191</td>
<td>45%</td>
<td>86%</td>
<td>3.1%</td>
<td>55%</td>
<td>45%</td>
</tr>
<tr>
<td>Tingbjerg /Utterslevhuse</td>
<td>6,302</td>
<td>33%</td>
<td>70%</td>
<td>2.3%</td>
<td>56%</td>
<td>51%</td>
</tr>
<tr>
<td>Bispeparken</td>
<td>1,574</td>
<td>36%</td>
<td>58%</td>
<td>3.0%</td>
<td>51%</td>
<td>51%</td>
</tr>
</tbody>
</table>

Fig. 22 - The ghettos of the city of Copenhagen after the 5 new criteria (MBBL 2014a)

All of the areas meet the criteria of income and ethnicity, three of them those of crime and education, while the unemployment criterion is met only in Mjølnerparken (Nørrebro). Mjølnerparken actually meets all of the five criteria, while Aldersrogade and Tingbjerg only meet the required three. They actually wouldn’t be included in the ghetto list if it was not for the new legislation.

19 The western countries are the EU-countires, Andorre, Iceland, Liechtenstein, San Marino, Norway, Monaco, Switzerland, the Vatican, Canada, the USA, New Zealand and Australa (KK n.d.f).
It is relevant, though not surprising, to observe that all the monitoring conducted under the 2011 amendment of the Video Surveillance Act is focused on the two ‘ghetto’ districts of the city, that are the zones where the local council had initially planned to place under surveillance, and nowhere else. This proves that the law allows somehow for municipal monitoring, and offers a possibility to get round the 2012 police decision to not further pursue the plan for public monitoring of public spaces in Copenhagen.

**Comparative analysis**

**Differences**

The first and most obvious comparison that can be made when having a look at our two case studies is that the CCTV network in Copenhagen is almost ten times less extensive than in Brussels. Also, the Brussels network is expanding, a dynamic that seems will be going on in the future. Which is not the case Copenhagen where the last cameras were installed in 2012, and where to our knowledge, and according to the police and local authorities, there is no plan to further expand Copenhagen’s open-street network.

Also, the spatial distributions of the two networks differ greatly. In Copenhagen, the cameras are strictly limited to the main shopping street of the core centre, the three head police stations, and the two so-called ghettos. While in Brussels those three types of space are represented, the rationale is at the same time deepened with the surveillance of secondary centres and second-class commercial streets. In Brussels, there are in addition different sorts of spaces under surveillance: non-commercial gathering places such as squares, stadiums, or demonstration paths; spaces watched because of their intrinsic status such as monuments or governmental institutions; main roads, for purpose of traffic regulation; ‘hotspots’, for purpose of crime and nuisances deterrence. The CCTV deployment strategy of those two cities therefore differ, and a dynamic of *panopticism* can be observed in Brussels, while in Copenhagen the public CCTV network in public spaces is far more focused and limited in scope.

**What causes for these differences?**

**Distribution of power**

Except for Frederiksberg autonomous municipality, the power is centralised in Copenhagen and responsibilities are clearly attributed, while in Brussels the power distribution regarding public CCTV installation, management, and financing is very fragmented. There is a multitude of local interests and power struggles at stakes, a complex local geopolitics dynamic where municipalities, police zones, and other local actors are in competition with each other, having ‘cold turf wars’. This trend finds its culmination in Koekelberg, where the highest CCTV concentration in Brussels can be found and where many cameras were placed at the ‘border’ with the deprived municipality of Molenbeek. Philippe Pivin, its mayor, declared:

As for the theory that the network would only shift the problem to the surrounding municipalities, I am the mayor of Koekelberg and in charge of security for this territory. May the others take action or bear the consequences of their inertness (Moyart 2012, our translation).
A 'softer' defensive urbanism culture in Denmark

What might be the main reason for these differences is that Denmark seems to have a defensive urbanism culture that borrows more from the 'broken window theory' than from other more aggressive forms of defensive urbanism.

Indeed, in her article on situational prevention, Sandra Laville (2014) details how Copenhagen's way of designing out crime is more focused on rendering the space open and visible to all, as well as welcoming at the same time, with a minimum of physical obstacles and formal surveillance. The goal is still the same as any other kind of situational prevention: minimise crime and vandalism through urban and architectural design. But there is a wish to keep the city open, and therefore to have very minimal use of devices such as fences, cameras, and alarms.

In the first part of his paper on Scandinavian Exceptionalism in an Era of Penal Excess, John Pratt (2007) investigates the nature and roots of Scandinavian carceral culture. By exceptionalism, Pratt refers both to low levels of imprisonment (67 prisoners per 100,000 inhabitants in Denmark in 2006, 66 in Norway, 68 in Finland and 82 in Sweden), but also to prison conditions in these countries. These conditions are better in this region than in the rest of Europe, as imprisonment itself is considered to be the punishment for a crime, and therefore prison conditions try to be as close as possible to living conditions outside of it. Although it is necessary to precise that such quality of life in prisons did not exist until the 1960s, when prisoners protested against the welfare state and the conditions it was keeping them in. But let us keep in mind that even though the imprisonment conditions are as close as possible to the living conditions from the outside, the concept of prison in itself can never be human.

Pratt identifies three main causes for this Scandinavian exceptionalism. He states that in Scandinavia, there is a culture of equality and valued education. And that the specific form the welfare state took in these countries gave a material basis to these values of equality and education. Also, the proportional electoral systems of representation would have helped in the institutionalisation of the social democratic values. It seems like this welfare states played a quite extensive role in Scandinavian repressive culture in general, a culture of equality and provision of self-guaranteed security. First of all, because it reduces the need for spectacular punishments, as “the need for dramatic and highly symbolic spectacles of punishment [are] a way of reaffirming ruling class power” (p. 129). Secondly, because it was believed in Scandinavia that the welfare culture of sanction “would bring relief from crime as well as from other social problems” (p. 130). Crime is seen a social issue that can be solved by the state trough measures of treatment and rehabilitation of offenders.

Although Pratt's article focuses on prisons, his article and observations of the larger Scandinavian repressive culture allows to draw conclusion regarding defensive urbanism and video surveillance in Copenhagen, where the traditions of social welfarism "reduced criminogenic tendencies and led to a less severe punishment mentality" (p. 135). In the same line of thought, Norris (2004: 4) identified that the "disillusion with both social welfare approaches and the efficacy of criminal justice measures in prevention" as one of the main cause for the rise of the use for situational crime prevention measures. Considering John Pratt's assertions, we can ask ourselves if Denmark's 'disillusion' in welfare state approaches and the efficacy of criminal justice prevention did not happen yet. This might be a reason why situational prevention measures are softer in Denmark than in the other parts of Europe.
Also, the successful forms of welfare state present in Scandinavia, as well as their high level of wealth, simply allows the implementation of softer forms of defensive urbanism. Indeed, it is more expensive to design and build beautiful, open places from scratch and keep them clean, than to put up a few fences and cameras.

Although, the extensive and positive role given to the Scandinavian social-democrat welfare state can be nuanced. Indeed, it seems that maybe Denmark is less in need than Belgium to implement a harsh repressive culture. Even if the Copenhagen crime rate is higher than in Brussels, as said earlier we suspect that it is because reporting of crime is more extensive, and the statistics therefore very comprehensive. Indeed, if we take a look at Belgium’s and Denmark’s murder rates, it is significantly lower in Denmark. And in Laville's study of the Sibelius estate in Copenhagen (2014), inhabitants claim that offensive measures are not really needed as there is very little crime. Maybe this is the hint of a culture where social control is more interiorised.

**Policy transfer and inter-city competition**

Our state of the art and case studies have shown that CCTV proliferation is a commonplace phenomenon in ‘advanced’ cities. In a context of globalised competition between cities, public authorities tend to import techniques and policies from abroad, even without any pressure to do so. Or, in the words of Galdon Clavell (2013: 201): “a degree of international policy convergence has occurred.”

Public officials are often stuck in the short sightedness inherent to the election processes and their regular deadlines. They tend to look around for simple, vote-catching solutions they could put on their program and effectively fulfill if elected. The first advice the Belgian Ministry of the Interior gives to municipalities is to define a goal for their CCTV system (Mortelé and Deprins, 2012: 37) which exemplifies their lack of actual reason or target when installing the cameras and shows how it is firstly a political tool for the decision makers to do something...

However, this ‘policy transfer’ does not take place uniformly. This dynamic of policy importation is particularly visible in the case of Brussels where the CCTV proliferation and the future integrated network is explicitly inspired from the Parisian case. Right-wing MP and mayor Vincent De Wolf – one of the greatest partisan of the project – took part with other officials and police chiefs in a parliamentary delegation in Paris, whose object was to visit the city’s installations and try to inspire Brussels network from it. When we interviewed him, the politician expressed this competition logics very clearly by stating that Brussels used to be ahead of Paris in terms of CCTV but that the trend reversed and that the opposite situation prevails now. Hence the ‘necessity’ to take action. Copenhagen seems more closed to that kind of exterior influence, as we could not find any reference to other national model in the officials’ discourses.

This reminds us the business competition and its industrial espionage or how companies go ‘visit’ each other to try to uncover trade secrets and strategies, as well as the way the spied on company can take pride from being a model for the others.
**Similarities**

If the spatial distribution of CCTV in Brussels and Copenhagen differ, the main logics behind it are very similar: central commercial and touristic hubs, and areas concentrating poor immigrants (ghettos, hotspots) are watched uppermost.

**Why these similarities?**

Making its environment 'safer' is generally part of a city's strategy to increase its chances for attracting foreign and international capital. And in today's capitalist globalised economy, where cities are put in competition with each other, this is indispensable. As Galdon Clavell (2013) puts it, "in this context, CCTV contributes to a 'strategy of socio-spatial transformation' [...] where commercial and private interests impose their vision of an orderly city where investments thrive". This could explain why video surveillance strategies focus on residential areas labelled as highly unsafe, and on commercial and economic central hubs.

We can go further and say that there seems to be a special focus on these two types of spaces when they seem to coexist. For example, when cameras were installed in the Brussels-Centre police zone, the neighbourhood of Matongé was among the first and most monitored locations. This area is the historic Congolese neighbourhood, hosts a relatively poor population and encounters issues with drug traffic; but is also located next to the Avenue Louise's luxury shops, the Chaussée d'Ixelles commercial street, and the European Institutions. Similarly, the poorest neighbourhoods (Cureghem, Molenbeek, West Station) are located very next to the city centre and its commercial and touristic activity. *The reason for such fear of having unequal situations next to each other is because when inequalities are strong, visible, and stand alongside each other, social problems, including crime, have proven to be higher (Brennan 2012: 7-8). In this logic poverty itself is considered less of a problem than the differences of wealth, especially when they are spatially close.*

The same logic takes place in Copenhagen, where CCTV efforts focus more on Nørrebro than on Tingbjerg, even though Tingbjerg's socio-economic profile and safety index show a higher insecurity, and a higher concentration of poor, unemployed, lowly educated, and ethnic population. This is also because Nørrebro is at the same time more central and subject to gentrification dynamics, while Tingbjerg is quite isolated in the northwest of the city. This connects to Dessouroux, Van Criel and Decroly's analysis (2009) for Brussels centre and immediate surroundings where CCTV proliferation is part of a gentrification policy of 'beautification under surveillance'. In Copenhagen, there is a wish to gentrify ghettos, make them disappear – have richer, more educated people and less 'ethnic' minorities.
Conclusion

“Thus at the very beginning the urban heritage bifurcated; and the differences between the two great systems remain visible, though often disguised, throughout urban history. Two ways were in fact open for the development of human culture, once it has passed beyond the stage reached in the Neolithic community – the way of the village or the way of the citadel: or, to speak in biological terms, the symbiotic and the predatory. They were not absolute choices but they pointed in different directions. The first was the path of voluntary cooperation, mutual accommodation, wider communication and understanding: its outcome would be an organic association of a more complex nature, on a higher level than that offered by the village community and its nearby lands. The other was that of predatory domination, leading to heartless exploitation and eventually to parasitic enfeeblement: the way of expansion, with its violence, its conflicts, its anxieties, turning the city itself into an instrument, as Childe properly observes, for the ‘extraction and concentration of the surplus.’ This second form has largely dominated urban history till our own age, and it accounts in no small degree for the enclosure and collapse of one civilization after another.” (Mumford 1961: 89).

Our master thesis aimed at answering the following research questions:

How does the spatial distribution of public surveillance cameras reflect the socio-economic geographies of Brussels and Copenhagen? And how does this distribution shed light on urban policy strategies in these cities?

With the use of self-produced maps and semi-structured interviews, we conducted a comparative analysis in the two cities of Brussels and Copenhagen. Our result showed that the surveillance cameras were mainly located in the main consumption centres as well as in the most socio-economically deprived areas. The differences and similarities between the two cases were highlighted, and explanations were given regarding the origin of these trends, putting forward the policies underlying these spatial logics: we found that the two capital cities were subject to common trends under the neoliberal governance of insecurity, in a context of global city competition and diffusion of defensive urbanism. In this perspective, CCTV can be conceptualised at the intersection between private economic interests, local political stakes, and faith in technologic fixes. As Stephen Graham puts it, policies are shaped by “technophilic dreams and fetishistic urges for mastery and control. [...] Superior technology is thus the key to all locks, the silver bullet” (Graham, 2010: 162). Nonetheless, the actual uptake of CCTV takes different forms and intensities in our two case studies and had to be analysed in light of their local political economy (Galdon Clavell 2013).
BIBLIOGRAPHY


BOURDOUX, Gil L. (2009) Vidéosurveillance et police. Quel(s) coût(s) pour la police? Quel(s) coût(s) pour la société ‘?, in DEVRESSE, Marie-Sophie and PIERET, Julien (dir.) La vidéosurveillance. Entre usages politiques et pratiques policières, Brussels: Politeia pp. 9-26.


DE SILVA, Geraldine Ruth (2014) *Vs: Academic research – CCTV in Copenhagen*, e-mail to Copenhagen commune’s urban development, and technical and environmental administration departments (C98L@tmf.kk.dk), 24 Mar. [24 Mar 2014].


JUSTITSMINISTERIET (JM) and DATATILSYNET (DT), (2008) Pjece om tv-overvågning, Copenhagen: Justitminsteriet and Datatilsynet publications.


surveillance par caméra’, Moniteur Belge, 10 February, [Online]. Available:
www.privacycommission.be/sites/privacycommission/files/documents/01.02.02.14-
ar_pictogramme_10_02_2008.pdf [22 Aug 2014].

MONITEUR BELGE (2013) ‘Arrêté royal relatif aux plans stratégiques de sécurité et de prévention
et aux dispositifs Gardiens de la Paix’, Moniteur Belge, 7 November, [Online]. Available:

MORTELÉ, Jill and DEPRINS, Famke (2012) La vidéosurveillance dans l’espace public est-elle
vraiment efficace ? Une analyse quantitative, Brussels; SPF Intérieur, [Online]. Available:

MOYART, Johanne (2002) ‘Koekelberg sous haute surveillance’, La Dernière Heure, 3 May,

Diego: Harcourt.

NEWMAN, Oscar (1972) Defensible Space: People and Design in the Violent City, London:
Architectural Press.

Available: pol.dk/455251 [31 Aug 2014].

43, chap. 4.3, pp. 81-88.

NÖRREBRO HANDELSFORENING (NH), (2014) Masser af overvågning, [Online]. Available:
www.norrebro.dk/default.asp?id=&rflid=&pageload=cms&action=side&id=2566 [31 Aug
2014].

Prevention Purposes in Europe, Brussels: DG IPOL, [Online]. Available:
2014].


PIQUARD, Paulette and SCHEPMANS, Françoise (2014) ‘Interpellatie ingediend door Mevrouw
Paulette Piquard, Gemeenteraadslid, betreffende het overvallen van apotheken.’ in
Gemeentebestuur van Sint-Jans-Molenbeek zitting van de gemeenteraad van 26 februari 2014,

POLICE FÉDÉRALE BELGE (POLFED), (2014) Statistiques de criminalité, [Online]. Available:

[Online]. Available: politiken.dk/indland/EC456857/ritt-og-politiet-enige-om-oeget-
overvaagning-i-koebenhavn/ [17 Aug 2014].

119-137.


## Appendix 1: Brussels police zones and municipalities

<table>
<thead>
<tr>
<th>Police Code</th>
<th>Police Zone English Name</th>
<th>French Name(s)</th>
<th>Post Code</th>
<th>Municipality</th>
</tr>
</thead>
<tbody>
<tr>
<td>5339</td>
<td>Brussels-Centre</td>
<td>Bruxelles CAPITALE Ixelles or Polbru</td>
<td>1000</td>
<td>Brussels-City, including:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1020 Laeken</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1120 Neder-Over-Hembeek</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1130 Haren</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1050 Ixelles</td>
</tr>
<tr>
<td>5340</td>
<td>Brussels-West</td>
<td>Bruxelles-Ouest</td>
<td>1080</td>
<td>Molenbeek-Saint-Jean</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1081 Koekelberg</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1082 Berchem-Sainte-Agathe</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1083 Ganshoren</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1090 Jette</td>
</tr>
<tr>
<td>5341</td>
<td>Brussels-South</td>
<td>Midi</td>
<td>1060</td>
<td>Saint-Gilles</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1070 Anderlecht</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1190 Forest</td>
</tr>
<tr>
<td>5342</td>
<td>Brussels-South-East</td>
<td>Uccle/W-B/Auderghem or Marlow</td>
<td>1160</td>
<td>Auderghem</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1170 Watermael-Boitsfort</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1180 Uccle</td>
</tr>
<tr>
<td>5343</td>
<td>Brussels-East</td>
<td>Montgomery</td>
<td>1040</td>
<td>Etterbeek</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1150 Woluwé-Saint-Pierre</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1200 Woluwé-Saint-Lambert</td>
</tr>
<tr>
<td>5344</td>
<td>Brussels-North</td>
<td>Evere/Schaerbeek/Saint-Josse-ten-Noode Or Polbruno</td>
<td>1030</td>
<td>Schaerbeek</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1140 Evere</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1210 Saint-Josse-ten-Noode</td>
</tr>
</tbody>
</table>
## Appendix 2: Public open street CCTV distribution in Brussels

<table>
<thead>
<tr>
<th>Police Code</th>
<th>Police Zone</th>
<th>Camera Count</th>
<th>Share of total</th>
<th>Post Code</th>
<th>Municipality</th>
<th>Camera Count</th>
<th>Share of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>5339</td>
<td>Centre (Polbru)</td>
<td>342</td>
<td>39,4%</td>
<td>1000</td>
<td>Brussels-City, except for:</td>
<td>218</td>
<td>25,1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1020</td>
<td>Laeken</td>
<td>61</td>
<td>7,0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1120</td>
<td>Neder-Over-Hembeek</td>
<td>6</td>
<td>0,7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1130</td>
<td>Haren</td>
<td>6</td>
<td>0,7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1050</td>
<td>Ixelles</td>
<td>56</td>
<td>6,5%</td>
</tr>
<tr>
<td>5340</td>
<td>West (Ouest)</td>
<td>155</td>
<td>17,9%</td>
<td>1080</td>
<td>Molenbeek-Saint-Jean</td>
<td>71</td>
<td>8,2%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1081</td>
<td>Koekelberg</td>
<td>49</td>
<td>5,6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1082</td>
<td>Berchem-Sainte-Agathe</td>
<td>16</td>
<td>1,8%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1083</td>
<td>Ganshoren</td>
<td>5</td>
<td>0,6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1090</td>
<td>Jette</td>
<td>9</td>
<td>1,0%</td>
</tr>
<tr>
<td>5341</td>
<td>South (Midi)</td>
<td>126</td>
<td>14,5%</td>
<td>1060</td>
<td>Saint-Gilles</td>
<td>39</td>
<td>4,5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1070</td>
<td>Anderlecht</td>
<td>68</td>
<td>7,8%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1190</td>
<td>Forest</td>
<td>19</td>
<td>2,2%</td>
</tr>
<tr>
<td>5342</td>
<td>South-East (Marlow)</td>
<td>42</td>
<td>4,8%</td>
<td>1160</td>
<td>Auderghem</td>
<td>0</td>
<td>0,0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1170</td>
<td>Watermaal-Boitsfort</td>
<td>0</td>
<td>0,0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1180</td>
<td>Uccle</td>
<td>42</td>
<td>4,8%</td>
</tr>
<tr>
<td>5343</td>
<td>East (Montgomery)</td>
<td>53</td>
<td>6,1%</td>
<td>1040</td>
<td>Etterbeek</td>
<td>19</td>
<td>2,2%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1150</td>
<td>Woluwé-Saint-Pierre</td>
<td>9</td>
<td>1,0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1200</td>
<td>Woluwé-Saint-Lambert</td>
<td>25</td>
<td>2,9%</td>
</tr>
<tr>
<td>5344</td>
<td>North (Polbruno)</td>
<td>150</td>
<td>17,3%</td>
<td>1030</td>
<td>Schaerbeek</td>
<td>69</td>
<td>7,9%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1140</td>
<td>Evere</td>
<td>42</td>
<td>4,8%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1210</td>
<td>Saint-Josse-Ten-Noode</td>
<td>39</td>
<td>4,5%</td>
</tr>
</tbody>
</table>
## Appendix 3: Brussels Camera Locations

<table>
<thead>
<tr>
<th>Post Code</th>
<th>Street Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>Rue Ravenstein/Baron Horta</td>
<td>Campspotting: GST</td>
</tr>
<tr>
<td>1000</td>
<td>Rue de la Reine/Rue Léopold Quai des Usines/Square Jules de Trooz/Willebroek/Av. Reine Avenue de la Chevalerie (Ridderschaplaan/Tervurense poort)</td>
<td>Campspotting: GST</td>
</tr>
<tr>
<td>1000</td>
<td>Avenue Louise/Square du Bois</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Rue de la Régence/Place Poelaert</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Square de Meues &quot;Porte de Jacqmain&quot;/Bd. Jardin Botanique/Bd. Jacqmain</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Place De Brouckère</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Bd. Midi/Rue Blaes</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Rue de la régence/Sablon</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Avenue Louise/Chaussée de Vleurgat</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Rue Belliard/Rue du Remorquier</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Bd. de l'Empiratrice/Rue d'Arenberg</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Place de la Monnaie</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Bd. Albert II/Place Solvay</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Place Fontaines</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Place Rogier/Progres/Boulevard Botanique Porte de Ninove/Quai Industrie/Sq.Auguste Smets/Av. Abattoir</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Bd. Albert II/Rue du Peuple Rue AntoineDansaer/Place du Nouveau marché aux grains</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Av. de Cortenbergh/Av. de la Renaissance</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Bd. Albert II/Bd. Simon Bolivar</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Rue Belliard/Chaussée d'Eterbeek</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Bd. Leopold III (OTAN)</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Rue Royale/Place des Palais</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Place Saint-Jean/Rue de l'hôpital</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Square Ambiorix/Rue Archimède</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Bd. Albert II/Rue Rogier</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Rue de l'Amigo</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Place des Martyrs Porte de Flandre/Bd. Bartélém/ Bd. Nieuport/Rue Damsaert</td>
<td>CBPL</td>
</tr>
<tr>
<td>1000</td>
<td>Rempart des Moines (5 blocs Foyer Bx)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Place Sainte-Catherine 9 / Rue de Flandre</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue des Six Jetons (rue Van Artevelde)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Boulevard de l'Abattoir (Arts et metiers)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Boulevard Dismude/Newvieme de Ligne</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Place du Beguinage</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Marche aux Poissons (cote Bois a Bruler ht 37)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue des Fabriques (rue de la Senne)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Quai aux Foins (KVS)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Nouveau Marche aux Grains/Houblon</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue de la Senne (rue Cuerens)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue des Commerçants (rue du Magasin)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue de la Montagne (rue des Bouchers)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Carréfour de l'Europe (boulevard de l'imperatrice)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue Tabora (Marche aux Herbes)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue du Lombard (rue de l'Etuve)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue de la Violette (rue des Chapeliers)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue du Marais (rue du Persil)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Boulevard Adolphe Max (rue de Malines)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue de la Fourche (rue Gretry)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue de la Roue (place des Wallons)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue des Minimes (rue J. Stevens)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue des Minimes (rue Watteeu)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue de la Paille/Rue de Ruysbroeck</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue Duquesnoy (rue de la Madeleine)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Bil Adolphe Max (rue du Pont Neuf)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue du Marche aux Fromages (rue des Eperonniers)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue des Comediens (rue SainteLaurent)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Eveque (place de la Monnaie)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Galerie des Princes (rue des Dominicains)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Boulevard de l'Empereur (rue de l'Escalier)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue Marche au Charbon (rue des Grands Carmes)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue des Bogards (rue du Midi)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue des Petits Carmes (rue du Pepin)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue aux Laines (place du Petit Sablon)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue de la Grande Ile/Riches Claires</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue au Choux (rue des OEillets)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Place de la Chapelle (entre rues Haute et Blaes)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Galerie de la Reine (rue des Bouchers)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue de la Regence (rue de l'Arbre)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue de la Tete d'Or (rue de l'Amigo)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Marche aux Herbes (Chair et pain)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Place Jardin aux Fleurs</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue du Grand Carme (rue de l'Etuve)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue du Marche aux Fromages (rue des Chapeliers)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Grand Place/ Rue au beurre Rue Antoine Damsaer (rue du Vieux Marche Aux Grains)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Place de la Chapelle (rue des Ursulines) Quai aux Foins [Quai aux Bois de construction/Rue Forté d'IH]</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue d'Anderlecht (rue Van Artevelde)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Marché aux Herbes (Colline)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue Auguste Orts (rue du Pont de la Carpe)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue de l'Etuve (rue de l'Amigo)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue des Teinturiers (rue Plattesteen)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue des Six Jetons (angle Grande Ile)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Boulevard Ansaphc / Rue de l'évêque</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Square Marguerite (rue des Patricies)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Carréfour Vautier/Wiertz (Parlement européen) Carréfour Montoyer/Wiertz (representation de Baviere)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Ch. d'Etterbeek (rue Jacques de Lalaing)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue Froissard (rue Juste Lipse)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Avenue de la Joyeuse entrée/Rue de la loi</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue Franklin (rue Stevin)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Av. Livingstone (rue Joseph II)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Avenue de l'Esplanade (Parlement European)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Avenue Louise (rue de l'Abbaye)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Rue du Bailli (Avenue Louise)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td>1000</td>
<td>Avenue Louise 59 (Conrad)</td>
<td>CPVP; Vlan</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1020</td>
<td>Boulevard du Centenaire (sans plus de précision)</td>
<td>Vlan 2009</td>
</tr>
<tr>
<td>1020</td>
<td>Rue de Wand (chaussée Romaine)</td>
<td>Vlan 2009</td>
</tr>
<tr>
<td>1020</td>
<td>Avenue de Versailles (avenue des Pagodes)</td>
<td>Vlan 2009</td>
</tr>
<tr>
<td>1020</td>
<td>Rue Gustave Schildnecht/Rue de Moorslede Houba</td>
<td>Vlan 2009</td>
</tr>
<tr>
<td>1020</td>
<td>StrooperCloître/F.Sterckx/Suyvenbergh/E.Salu</td>
<td>Vlan 2009</td>
</tr>
<tr>
<td>1020</td>
<td>Avenue Houba De Strooper / Boulevard De Smet De Naeyer</td>
<td>Vlan 2009</td>
</tr>
<tr>
<td>1020</td>
<td>Av. Houba De Strooper/av. Depaire</td>
<td>Vlan 2009</td>
</tr>
<tr>
<td>1020</td>
<td>Rue de Wand (Gros Tilleul)</td>
<td>Vlan 2009</td>
</tr>
<tr>
<td>1020</td>
<td>Cité Modèle (bloc 1 vers blocs 9-10-11 &amp; 12)</td>
<td>Vlan 2009</td>
</tr>
<tr>
<td>1020</td>
<td>Atomium</td>
<td>Vlan 2009</td>
</tr>
<tr>
<td>1020</td>
<td>Atomium et square Bouchout</td>
<td>Vlan 2009</td>
</tr>
<tr>
<td>1020</td>
<td>Avenue de l'Atomium (hauteur Salon 58)</td>
<td>Vlan 2009</td>
</tr>
<tr>
<td>1020</td>
<td>Rue de Wautier/Rue du Tivoli</td>
<td>Vlan 2009</td>
</tr>
<tr>
<td>1020</td>
<td>Avenue de Madrid/de l'Atomium</td>
<td>Vlan 2009</td>
</tr>
<tr>
<td>1020</td>
<td>Square Prince Léopold</td>
<td>Vlan 2009</td>
</tr>
<tr>
<td>1020</td>
<td>Square Jean Palfyn</td>
<td>Vlan 2009</td>
</tr>
<tr>
<td>1020</td>
<td>Square Clémentine</td>
<td>Vlan 2009</td>
</tr>
<tr>
<td>1020</td>
<td>Rond-point Offenberg</td>
<td>Vlan 2009</td>
</tr>
<tr>
<td>1020</td>
<td>Avenue Sténon Jean-Baptiste Depaire</td>
<td>Vlan 2009</td>
</tr>
<tr>
<td>1020</td>
<td>Boulevard Lambemont/Général Wahis/Gustave Latinis</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Avenue Rogier/Chausse de Haecht</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Avenue Rodenbach</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Rue François Degreef/Rue Royale-Sainte-Marie</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Rue Hancart/Chausse de Haecht</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Place Colignon/Rue Verhas</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Place Colignon/Rue Verwee</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Chausse de Helmet/Foyer Schaerbeekois</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Place Princesse Elisabeth/Avenue Monplaisir</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Place Gaucheret</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Brabant/Quatrecre</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Avenue de la Reine/Aerschot</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Liedts/Aerschot</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Aerschot/Hoovorst</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Ailes/Quiriaux/Pavillon</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Rue du Progrès</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Quiriaux/Gallait</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Rue du Progrès/Simon Bolivar/Gare du Nord</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Place Colignon/Rue Quinax</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Aerschot/Dupont</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Aerschot/entrée Gare du Nord</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Avenue Princesse Elisabeth/Rue Portaels/Verboekhoven</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Rue du Progrès</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Metsy/Waelhem/Place Verboekhoven</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Boulevard Lambertmont/Chausée de Haecht/Britsier</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Place de Houffalize/Jerusalem</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Rue Gallait/Rue de Locht</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Place de la Reine/Rue Royale-Sainte-Marie</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Avenue Louis Bertrand/Glycines</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Vandemersch/Place Lehon</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Rue Chaumontel/Stroobants/Walkiers</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Avenue Ernest Renar/Suffrage universel</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Rue Creuse/Rue Henri Berge</td>
<td>Dauchy</td>
</tr>
<tr>
<td>1030</td>
<td>Rue des ailes/Pavillon</td>
<td>Dauchy</td>
</tr>
</tbody>
</table>

**Citations:**

- Boulevard Simon Bolivar / Avenue de lÆHéliport
- Chaussée dÆAnvers (rue Masul)
- Allée Verte (place des Armateurs)
- Chaussée dÆAnvers (avenue de la Reine)
- Rue des Péniches (rue de la Dyle)
- Rue des Péniches (quai de la Voirie)
- Chaussée dÆAnvers (rue Gilbert)
- Avenue du Port/Tour & Taxis
- Avenue du Port (rue Picard)
- Avenue du Port (square Saintelette)
- Avenue du Port (sans plus de précision)
- Av. du Championnat (Sette tribune 2)
- Av. de Marathon (r° inconnu)
- Av. du Gros Titleu/Av. Van Praet (Adresse exacte manquante)
- Av. de lÆAtomium
- Av. de Madrid/Av. des Magnolias
- Av. du Parc Royal
- Rue Claessens/Outre-Ponts/Chaussee de Vilvoorde
- Av. Houba de Strooper/Av. des Sports
- Av. des Athlètes/Av. de lÆImpératrice Charlotte
- Av. de Bouchout/Av. du Football
- Bd. du Centenaire/Av. de Miramar/Av. Impératrice Charlotte
- Av. Van Praet (Pont)/Ch. de Vilvorde
- Place Emile Bockstael
- Av. Houba de Strooper/Av. de Bouchout
- Chaussée Romaine (Parking C)
- Av. des Athlètes (Parking Kinepolis)
- Av. des Athlètes (Stade Tribune 4)
- Avenue du Parc Royal/Parvis Notre-Dame
- Avenue du Parc Royal/Avenue de la Dynastie
- Bd. Emile Bockstael/Rue Bogaerd
- Avenue Jean Sobieski/Place Saint-Lambert
- Av. Bouchout (Planetarium)
- Rue des Palais Outre-Ponts (plaine de jeux)
- Rond-Point de Meer
- Champ de la Couronne (sans précision)
- Bd. E. Bockstael (sans plus de précision)
- Rue Marie-Christine (sans plus de précision)
- Champs de lÆEglise (place de la Maison Rouge)
- Place Willems
- Rue Marie-Christine (rue de la Royauté)
- Emile Bockstael (Pouchkine)
- Rue de Wand (av. Wannecoutre)
- Rue de Wand (av. de la Brise)
- Rue de Bessuyghem (coin des Cerises)
- Wannecoutre (sans plus de précision)
- Cité Modèle (bloc 2 vers blocs 5-6-7 & 8)
- Cité Modèle (bloc 2 vers bloc 1 & 3)
- avenue de Madrid (sans plus de précision)
- place Louis Steens (hauteur Primerose)
- Rue de Mutsaert (avenue des Pagodes)
- Avenue de Versailles (rue de la Tour Japonaise)
- Place Louis Steens
- Avenue du Football (sans plus de précision)
1030 Chaussee de Haecht/AmÉt Pigge  Dauchy 1040 Rue Gray/Rue du Sceptre  Mail Mahieu 28/07/2014
1030 Boulevard du Roi Albert II/simon Bolivar  Dauchy 1050 Place du Luxembourg (numéro manquant)  CBPL
1030 Rubens/vervée/chaussée de haecht/amÉt pigge  Dauchy 1050 Rue du Viaduc 128  CPVP, SDD
1030 Rue de Jerusalem/Houffalize  Dauchy 1050 Rue du Viaduc (numéro inconnu)  CPVP, SDD
1030 Place de Houffalize/Discailles/Vogler  Dauchy 1050 Chaussée de Wavre 205  CPVP, Vlan
1030 Place Sainte Marie/chee de Haecht/Seuthin  Dauchy 1050 Rue du Viaduc 133  CPVP, Vlan
1030 Olivier/Geefs/thiefry/Josaphat  Dauchy 1050 Place du Chatelain  CPVP, Vlan; SDD
1030 Rond Point Dailly/Artan/markebach/van hammaee  Dauchy 1050 Place du Chatelain (rue du Page)  CPVP, Vlan; SDD
1030 Place des Bienfaiteurs/rogier/rue au bois  Dauchy 1050 Coin Ermitage/chaussée d'ixelles  CPVP, Vlan; SDD
1030 Place des Bienfaiteurs/rogier/devreeese  Dauchy 1050 Rue du Trone/Idale  CPVP, Vlan; SDD
1030 Place de la Patrie/Avenue Chazal  Dauchy 1050 Place Sainte Croix/Place Flagey  CPVP, Vlan; SDD
1030 Avenue Auguste Reyers/Opale  Dauchy 1050 Place Adolphe Sax (Square Verhaeren)  CPVP, Vlan; SDD
1030 Avenue de Roodebeek/cité ouvrière de linthout  Dauchy 1050 Rue Gray/Rue Dillens/Rue des Cygnes  CPVP, Vlan; SDD
1030 Avenue de Roodebeek/victor hugo  Dauchy 1050 Place Brugmann (entre Rues Bouillon et Darwin)  CPVP, Vlan; SDD
1030 Avenue Paul Deschanel (arte Azaelee)  Dauchy 1050 Chaussée de Waterloo/chaussée de vieugart  CPVP, Vlan; SDD
1030 Avenue Paul Deschanel/avenue voltaire  Dauchy 1050 Rue du Page/Rue Fourmois  CPVP, Vlan; SDD
1030 Avenue des Azalees/Rue fontaine d'Amour/entréeJosphat  Dauchy 1050 Avenue des Saisons/chaussée de Boondael  CPVP, Vlan; SDD
1030 Rue Waelhem/Général Enens  Dauchy 1050 Place Petite Suisse  CPVP, Vlan; SDD
1030 Avenue Voltaire/Rue Général Enens  Dauchy 1050 Square du Vieux Tilleul/chaussée de boisfort  CPVP, Vlan; SDD
1030 Boulevard lambermont/avenue Bertrand  Dauchy 1050 Rond Point du Cimetière d'Ixelles  CPVP, Vlan; SDD
1030 Place de Helmet/vandevele/Lambotte  Dauchy 1050 Place Fernand Coq  CPVP, Vlan; SDD
1030 Chaussée de Helmet/Huart Harmoir/vandevele PlacePrincesseelisabeth/avenue Rodenbach/Picquart  Dauchy 1050 Avenue Buyl/Avenue Brillat-Savarin  CPVP, Vlan; SDD
1030 Rue Charles Meert/chaussée de Helmet  Dauchy 1050 Chaussée d'ixelles 3  CPVP, Vlan; SDD
1030 Place Lehon  Dauchy 1050 Rue Saint-Boniface 8  CPVP, Vlan; SDD
1030 Rue Dupont/rue des palais  Dauchy 1050 Egmont/champ mars/esplanade  CPVP, Vlan; SDD
1030 Avenue Rogier/Daily  Dauchy 1050 Avenue Général de Gaulle coin place Flagey  CPVP, Vlan; SDD
1030 Place Daily  Dauchy 1050 Place Flagey (rue Vergnies)  CPVP, Vlan; SDD
1030 Place Daily/Avenue Chazal  Dauchy 1050 Carrefour Sceptre-Couronne  CPVP, Vlan; SDD
1030 Place des chasseurs ardennais/leon mahillon/max  Dauchy 1050 Coin Rue Van Aal/Rue Jean Van Volsem  CPVP, Vlan; SDD
1030 Rue Brichuau/Rue des Palais (commissariat koban) Relevé de terrain  CPVP, Vlan; SDD
1030 Rue Général Enens/Rue des Ailes Relevé de terrain  CPVP, Vlan; SDD
1030 Rue Général Enens/Rue Metsys Relevé de terrain  CPVP, Vlan; SDD
1030 Place Meiser (plasky)/chee de louvain Relevé de terrain  Dauchy  CPVP, Vlan; SDD
1030 Place Liedts (arrêt de bus) Relevé de terrain; Dauchy  CPVP, Vlan; SDD
1040 Rue Général Leman  CPVP 1050 Boulevard de la Plaine/avenue arnaud frateur  CPVP, Vlan; SDD
1040 Rue Commandant Ponthier  CPVP 1050 Longue-vie/paix  CPVP, Vlan; SDD
1040 Avenue de Tervuren/Méthode  CPVP 1050 Boulevard Général Jacques/Hippodrome  CPVP, Vlan; SDD
1040 Rue des Tongres 3 CPVP 1050 Avenue de l'Université 39/avenue Général Derauche  CPVP, Vlan; SDD
1040 Rue Commandant Ponthier/Promenade Hyppolite Rolin CPVP 1050 Rue de l'Ermitage 52  CPVP, Vlan; SDD
1040 Rue Gray/Jétang CPVP 1050 Rue Du Page/Place d'armes  CPVP, Vlan; SDD
1040 Avenue Jules Malou 74 CPVP, Desouroux 1050 Galerie Matonge  CPVP, Vlan; SDD
1040 Rue Alex Marcette 17 CPVP 1050 Buy/Heger  CPVP, Vlan; SDD
1040 Place Saint-Antoine 47 CPVP 1050 Place de Londres 3  CPVP, Vlan; SDD
1040 Avenue Jules Malou 28 CPVP 1050 Rue Sans Souci 10  CPVP, Vlan; SDD
1040 Chaussée de Wavre 673/rue des champs/la chasse CPVP 1050 Rue du Balli 104  CPVP, Vlan; SDD
1040 Rue de Haerne/Rue Philippe Baucq CPVP 1050 Avenue Marguerite Youcenar (couverture place a. sax) CPVP, Vlan; SDD
1040 Rue de Theux 29 CPVP 1050 Rue Longue Vie/Rue Bourre CPVP, Vlan; SDD
1040 Avenue de la Chasse 2-4 CPVP 1050 Rue de la Croix/Rue du Couvent Desouroux; CBPL
1040 Rue de Theux 59 CPVP, Mahieu 1050 Chaussée d'ixelles/Rue du Berger GST; CPVP
1040 Avenue des Casmes 2/La Chasse/Rue Northomb CPVP, Mahieu 1050 Rue de la Paix 59/chaussée de Wavre Relevé de terrain
1040 Av. de Tervuren/Avenue des Celtes Relevé de terrain 07/2014; GST (2009)
1040 Rue des Nerviens 127 Mahieu 1050 Chaussée de Wavre/65/solvay/Naples/Longue Vie/Paix/Longue-Vie Relevé de terrain
1040 Chaussee de Wavre/65/Solvay/Naples/Longue Vie/Paix/Longue-Vie GBPL; GST; CPVP
1040 Chaussee de Wavre 101/athène/Prince Albert/Paix CPVP, Vlan; SDD
1040 Chaussee de Wavre/Longue Vie/Solvay 40/Naples Vlan; SDD
1040 Place Flagey/Rue Lesbroussart Vlan; SDD
<table>
<thead>
<tr>
<th>No.</th>
<th>Street Name/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1050</td>
<td>Rue de la Paix 59/Chaussée de Wavre</td>
</tr>
<tr>
<td>1050</td>
<td>Avenue Franklin Roosevelt/Avenue Paul Heger</td>
</tr>
<tr>
<td>1050</td>
<td>Boulevard Général Jacques/Avenue de la Couronne</td>
</tr>
<tr>
<td>1050</td>
<td>Rond-point de l'Étoile</td>
</tr>
<tr>
<td>1060</td>
<td>Chaussée de Forest 181/Rue de la Perche</td>
</tr>
<tr>
<td>1060</td>
<td>Place Monchar (Horta)/Rue du Lycée 56/Chaussée de Waterloo</td>
</tr>
<tr>
<td>1060</td>
<td>Rue de l'Argonne 55/Rue de Mérode/Av. Porte de Ha/Av. Midi</td>
</tr>
<tr>
<td>1060</td>
<td>Av. A. Demeur 37/Place Van Meenen/Av. Paul Dejaer</td>
</tr>
<tr>
<td>1060</td>
<td>Hôtel des Monnaies 199/Chaussée de Waterloo (Barrière)</td>
</tr>
<tr>
<td>1060</td>
<td>Rue Théodore Verhaegen 1/Alsemborg/Parc (Bruxelles St Gilles)</td>
</tr>
<tr>
<td>1060</td>
<td>Place Victor Horta 2/Rue Blerot (entrée Gare du Midi)</td>
</tr>
<tr>
<td>1060</td>
<td>Avenue de la porte de Hal 17/Jean Volders/Fontainas</td>
</tr>
<tr>
<td>1060</td>
<td>Tunnel piétonnier Vétérinaires/Fontainas</td>
</tr>
<tr>
<td>1060</td>
<td>Rue de Parme 69/Rue Mont Blanc (Maison Pelgrims)</td>
</tr>
<tr>
<td>1060</td>
<td>Rue de France 40 (stationnement bus)</td>
</tr>
<tr>
<td>1060</td>
<td>Rue de France 52/54 / Rue Charles Parenté</td>
</tr>
<tr>
<td>1060</td>
<td>Rue de France 87 (Dispatching SCN)</td>
</tr>
<tr>
<td>1060</td>
<td>Rue de l'Instruction 154/Rue Bara (entrée gare du Midi)</td>
</tr>
<tr>
<td>1060</td>
<td>Rue Blerot 1/Place Horta/Esplanade Europe (Gare du Midi)</td>
</tr>
<tr>
<td>1060</td>
<td>Rue Fontainas 47/Vlogaert/Place des Héros</td>
</tr>
<tr>
<td>1060</td>
<td>Théodore Verhaegen 139/Place Bethléem/Bernier</td>
</tr>
<tr>
<td>1060</td>
<td>Rue Hôtel des Monnaies 89/Métal/Place Marie Janson/Victoire</td>
</tr>
<tr>
<td>1060</td>
<td>Avenue Fonsny 47A/Rue de Hollande (Gare du Midi)</td>
</tr>
<tr>
<td>1060</td>
<td>Chaussée de Waterloo 111/Rue Dethy/Coenen</td>
</tr>
<tr>
<td>1060</td>
<td>Chaussée de Forest 47/Vlogaert/Andenne/Square Jacques Frantz</td>
</tr>
<tr>
<td>1060</td>
<td>Rue de Parme 1/Croix de Pierre/Bordeaux/Écosse</td>
</tr>
<tr>
<td>1060</td>
<td>Avenue Fonsny/Claes (entrée gare du Midi)</td>
</tr>
<tr>
<td>1060</td>
<td>Rue de la Victoire 1/Henri Jaspar/Waterloo (Porte de Hal)</td>
</tr>
<tr>
<td>1060</td>
<td>Rue Dethy 57/Gaillard/Prague/Lisbonne</td>
</tr>
<tr>
<td>1060</td>
<td>Avenue Fonsny 103A/Rue des vétérinaires/Avenue du Roi</td>
</tr>
<tr>
<td>1060</td>
<td>Tunnel Vétérinaires/Avenue Fonsny/Av. du Roi</td>
</tr>
<tr>
<td>1060</td>
<td>Rue de France 95/97 / Vétérinaires/Deux Gares</td>
</tr>
<tr>
<td>1060</td>
<td>Avenue Fonsny/Rue d'Angleterre (Gare du Midi)</td>
</tr>
<tr>
<td>1060</td>
<td>Rue de l'instruction 157/Place Horta/France (Gare Midi)</td>
</tr>
<tr>
<td>1060</td>
<td>Rue de la Commune 1/Croix de Pierre/Baron Bouvier</td>
</tr>
<tr>
<td>1060</td>
<td>Avenue Henri Jaspar 114/Berckmans/Petite Ceinture</td>
</tr>
<tr>
<td>1060</td>
<td>Chaussée de Waterloo 64/Parvis St Gilles/Volders</td>
</tr>
<tr>
<td>1060</td>
<td>Place Antoine Delporte 20/Ducpétiaux/Prison de Saint-Gilles</td>
</tr>
<tr>
<td>1060</td>
<td>Avenue Fonsny/Rue de Hollande (Gare du Midi)</td>
</tr>
<tr>
<td>1060</td>
<td>Place de la Constitution/Esplanade de la Constitution 23/Prison de l'Espoir</td>
</tr>
<tr>
<td>1060</td>
<td>Rue de Mérode 46/Rue d'Angleterre</td>
</tr>
<tr>
<td>1060</td>
<td>Argonne/Fonsny/Midi (Pont Argonne)</td>
</tr>
<tr>
<td>1060</td>
<td>Rue Bethléem 10/Chaussée de Forest/Rue du Danemark</td>
</tr>
<tr>
<td>1070</td>
<td>Square Jules et Edmond Miesse</td>
</tr>
<tr>
<td>1070</td>
<td>Chaussée de Mons/Rue des Transalv</td>
</tr>
<tr>
<td>1070</td>
<td>Rue de Feniennes 37/Bongniez/Jorez</td>
</tr>
<tr>
<td>1070</td>
<td>Rue des Goujons 112</td>
</tr>
<tr>
<td>1070</td>
<td>Chaussée de Mons 301/Square Albert 1er</td>
</tr>
<tr>
<td>1070</td>
<td>Rue Gheude 70/Bongniez/Square Peugeot</td>
</tr>
<tr>
<td>1070</td>
<td>Place du Conseil 8/Fiennes/Moreau (Maison communale)</td>
</tr>
<tr>
<td>1070</td>
<td>Rue Georges Moreau 69/Rue Eloy</td>
</tr>
<tr>
<td>1070</td>
<td>Square de l'Aviation 24/autoroute/Lambert Crickx</td>
</tr>
<tr>
<td>1070</td>
<td>Rue Ropsy Chaudron 2/Chaussée de Mons</td>
</tr>
<tr>
<td>1070</td>
<td>Rue heyyaert 197/Compass</td>
</tr>
<tr>
<td>1070</td>
<td>Bd. de la Révision/Brogneiz/Instruction</td>
</tr>
<tr>
<td>1070</td>
<td>Place Alphonse Lemmens/Cuylié/Rosée/Odon</td>
</tr>
<tr>
<td>1070</td>
<td>Mons/Habermann/Av. Franklin Roosevelt</td>
</tr>
<tr>
<td>1070</td>
<td>Rue Jorez (Terrain de basket Clémenceau)</td>
</tr>
<tr>
<td>1070</td>
<td>Rue de la Clinique 80/Jorez (Clémenceau)</td>
</tr>
<tr>
<td>1070</td>
<td>Chaussée de Mons 42/Habermann (hôtel Van Belle)</td>
</tr>
<tr>
<td>1070</td>
<td>Avenue des Missionnaires 2/Chaussée de Ninove (Match)</td>
</tr>
<tr>
<td>1070</td>
<td>Rue des Deux Gares 2/Vétérinaires/France</td>
</tr>
<tr>
<td>1070</td>
<td>Chaussée de Mons 54</td>
</tr>
<tr>
<td>1070</td>
<td>Chaussée de Mons 118-120/Rue du Compas</td>
</tr>
<tr>
<td>1070</td>
<td>Rue de Veeweyde 142-144/Liedel</td>
</tr>
<tr>
<td>1070</td>
<td>Rue des Deux Gares 22/Bara/Kuborn</td>
</tr>
<tr>
<td>1070</td>
<td>Avenue Gounod 98/Place Verdi (métro Veeweyde)</td>
</tr>
<tr>
<td>1070</td>
<td>Rue Victor Rauter 34 (Parc Rauter)</td>
</tr>
<tr>
<td>1070</td>
<td>Chaussée de Mons 78/Rue de Liverpool/Meersman</td>
</tr>
<tr>
<td>1070</td>
<td>Rue des deux gares 79A (Petite île)</td>
</tr>
<tr>
<td>1070</td>
<td>Rue Xonneux 2/Ch. de Mons/Dovres/Rauter</td>
</tr>
<tr>
<td>1070</td>
<td>Chaussée de Ninove 436/Chaussée/Cordiaut/La Reine</td>
</tr>
<tr>
<td>1070</td>
<td>Rue des Deux Gares 12 (immeuble MBLE)</td>
</tr>
<tr>
<td>1070</td>
<td>Rue Goujon/Carpentier (Mémorial Juif)</td>
</tr>
<tr>
<td>1070</td>
<td>Chaussée de Mons?</td>
</tr>
<tr>
<td>1070</td>
<td>Chaussée de Mons, proximité Veeweyde</td>
</tr>
<tr>
<td>1070</td>
<td>Chaussée de Mons ? proximité Bizet</td>
</tr>
<tr>
<td>1070</td>
<td>Rue Ropsy Chaudron ? (abattoirs)</td>
</tr>
<tr>
<td>1070</td>
<td>Brogniez/Rossini ?</td>
</tr>
<tr>
<td>1070</td>
<td>Boulevard Sylvain Dupuis ?</td>
</tr>
<tr>
<td>1070</td>
<td>Rue de l'instruction ?</td>
</tr>
<tr>
<td>1070</td>
<td>Delacroix ?</td>
</tr>
<tr>
<td>1070</td>
<td>Parc du Peterbas ?</td>
</tr>
<tr>
<td>1070</td>
<td>Parc du Peterbas</td>
</tr>
<tr>
<td>1070</td>
<td>Parc du Peterbas ?</td>
</tr>
<tr>
<td>1070</td>
<td>Rue Victor Rauter ? Parc Rauter ?</td>
</tr>
<tr>
<td>1070</td>
<td>Odon/Mégiessiers ?</td>
</tr>
<tr>
<td>1070</td>
<td>Rue du souvenir/rue de Birmingham ? (Aumale/Parc Forestier)</td>
</tr>
<tr>
<td>1070</td>
<td>Boulevard Sylvain Dupuis/Parc des Orangers</td>
</tr>
<tr>
<td>1070</td>
<td>Chaussée de Mons ?</td>
</tr>
<tr>
<td>1070</td>
<td>Rue Wayez/Chaussée de Mons</td>
</tr>
<tr>
<td>1070</td>
<td>Place de la résistance/Wayez/Greve</td>
</tr>
<tr>
<td>1070</td>
<td>Rue Gouverneur Nens 1/Digue du Canal</td>
</tr>
<tr>
<td>1070</td>
<td>Avenue Théo Verbeek (sur l'entrée du stade)</td>
</tr>
<tr>
<td>1070</td>
<td>Square Église Rombaux</td>
</tr>
<tr>
<td>1070</td>
<td>Bd. Maria Groeninx-De May/Rue Adolphe Willems</td>
</tr>
<tr>
<td>1070</td>
<td>Avenue d'Iterbeek/Luizenmolen</td>
</tr>
<tr>
<td>1070</td>
<td>Bd. Maria Groeninx-De May/Bd. Sylvain Dupuis</td>
</tr>
<tr>
<td>1070</td>
<td>Rue de la compétition/Avenue d'Iterbeek</td>
</tr>
<tr>
<td>Rue Jules Besme 2/Avenue du Pantheon</td>
<td>PZ 5340</td>
</tr>
<tr>
<td>Rue Steparman 10/Rue Leon Autrique (Centre Sportif Victoria)</td>
<td>PZ 5340</td>
</tr>
<tr>
<td>Boulevard Léopold II 230/Rue de l'Eglise Sainte Anne Rue de la Carriere 1/Place de Bastogne/Avenue de la Paix</td>
<td>PZ 5340</td>
</tr>
<tr>
<td>Rue Felix Vande Sande 1/Rue des Braves</td>
<td>PZ 5340</td>
</tr>
<tr>
<td>Avenue du Pantheon 100/Avenue de la Basilique</td>
<td>PZ 5340</td>
</tr>
<tr>
<td>Rue Herkoliers 39/Rue de l'Eglise Sainte Anne Chaussée de Jette 248/Boulevard Léopold II/Rue Vandervoot</td>
<td>PZ 5340</td>
</tr>
<tr>
<td>Avenue de Jette 2/Boulevard Léopold II</td>
<td>PZ 5340</td>
</tr>
<tr>
<td>Rue des Tisserands 4</td>
<td>PZ 5340</td>
</tr>
<tr>
<td>Rue Herkoliers 97/Boulevard Léopold II (Simonis)</td>
<td>PZ 5340</td>
</tr>
<tr>
<td>Chaussée de Jette 190/Rue de la Securite/Herkoliers Rue Van Bergen 2/Place Vanhuffel/Rue George-dit-Marchal</td>
<td>PZ 5340</td>
</tr>
<tr>
<td>Avenue de la Liberte 15/Rue du Parc Elisabeth Rue de l'Ammistice 8 (Godiva, chocolatier)/Metro Simonis</td>
<td>PZ 5340</td>
</tr>
<tr>
<td>Rue Herkoliers 81/Rue Jules Debecker Rue Francois Delcoigne 39/Impasse (Ecole Stroobants)</td>
<td>PZ 5340</td>
</tr>
<tr>
<td>Rue Schmitz 5 (creche)</td>
<td>PZ 5340</td>
</tr>
<tr>
<td>Rue Leon Autrique 4 (Parking Hall de la Paix) Rue Emile Sergijes 48/Chaussee de Jette/Houzeau de Lehae</td>
<td>PZ 5340</td>
</tr>
<tr>
<td>Rue Schmitz 66/Tisserands</td>
<td>PZ 5340</td>
</tr>
<tr>
<td>Rue Herkoliers 35</td>
<td>PZ 5340</td>
</tr>
<tr>
<td>Rue de Ganshoren 29 (Debaileu)</td>
<td>PZ 5340</td>
</tr>
<tr>
<td>Rue de l'Ammistice 5 (Poste Simonis) Rue de Ganshoren 69 (en face du) &quot;maison directeur&quot;</td>
<td>PZ 5340</td>
</tr>
<tr>
<td>Place communale (Hotel de ville)</td>
<td>PZ 5340</td>
</tr>
<tr>
<td>Rue Docteur Charles Leemans 10</td>
<td>CPVP</td>
</tr>
<tr>
<td>Rue de Grand Bigard 239</td>
<td>CPVP</td>
</tr>
<tr>
<td>Place Docteur Schweitzer 22</td>
<td>CPVP</td>
</tr>
<tr>
<td>Avenue du Roi Albert 33</td>
<td>CPVP</td>
</tr>
<tr>
<td>Rue Auguste Denie 36/t Hof te Overbeke</td>
<td>CPVP</td>
</tr>
<tr>
<td>Avenue du Hunderenveld (Bloc A/garage)</td>
<td>CPVP</td>
</tr>
<tr>
<td>Avenue du Hunderenveld (Centre Sportif)</td>
<td>CPVP</td>
</tr>
<tr>
<td>Rue de l'Eglise, numero inconnu</td>
<td>CPVP</td>
</tr>
<tr>
<td>Avenue du Roi Albert/Hunderenveld (Arret STIB)</td>
<td>CPVP</td>
</tr>
<tr>
<td>Rue de Grand-Bigard (face ancienne Eglise)</td>
<td>CPVP</td>
</tr>
<tr>
<td>Rue Hubert Blauwet/Chaussee de Gand</td>
<td>CPVP</td>
</tr>
<tr>
<td>Chaussée de Gand/Gare SNGB</td>
<td>CPVP</td>
</tr>
<tr>
<td>Chaussée de Gand/Chaussee de Zellik</td>
<td>CPVP</td>
</tr>
<tr>
<td>Avenue de la Basilique/Rue Auguste Van Zande</td>
<td>CPVP</td>
</tr>
<tr>
<td>Place Oscar Ruelens Rue de Grand Bigard 300/Arret STIB Place de l'Eglise</td>
<td>CPVP</td>
</tr>
<tr>
<td>Place Guido Gezelle Parking de la Maison communale/Avenue des Villegas 25</td>
<td>CPVP</td>
</tr>
<tr>
<td>Terrain de foot derriere le hall des sports Rue Vanderveken</td>
<td>CPVP</td>
</tr>
<tr>
<td>Rue au Bois (Terrain de football)</td>
<td>CPVP</td>
</tr>
<tr>
<td>Av. Charles Quint 1/Av. des Gorees Nationales</td>
<td>CPVP</td>
</tr>
<tr>
<td>Rue Jules Layhay 282</td>
<td>Jette; CPVP</td>
</tr>
<tr>
<td>Rue Henri Werne 70/place Laneau</td>
<td>Jette; CPVP</td>
</tr>
<tr>
<td>Rue Antoine Baeck 2B</td>
<td>Jette; CPVP</td>
</tr>
<tr>
<td>rue Leon Theodor 128/rue Lenoir</td>
<td>Jette; CPVP</td>
</tr>
<tr>
<td>Code</td>
<td>Location Details</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>1210</td>
<td>Rue Brialmont/Royale Dauchy</td>
</tr>
<tr>
<td>1210</td>
<td>Rue Verbist 3/Place Saint Josse Dauchy</td>
</tr>
<tr>
<td>1210</td>
<td>Arrêt Botanique/Royale/Brialmont Dauchy</td>
</tr>
<tr>
<td>1210</td>
<td>Place Saint-Josse Dauchy</td>
</tr>
<tr>
<td>1210</td>
<td>Place Madou Dauchy</td>
</tr>
<tr>
<td>1210</td>
<td>Rue du Pole/Brialmont Dauchy</td>
</tr>
<tr>
<td>1210</td>
<td>Chalet/Commune Dauchy</td>
</tr>
<tr>
<td>1210</td>
<td>Place Houwaert Dauchy</td>
</tr>
<tr>
<td>1210</td>
<td>Cadrans/Merinos Dauchy</td>
</tr>
<tr>
<td>1210</td>
<td>Ferme/Braemt Dauchy</td>
</tr>
<tr>
<td>1210</td>
<td>Verbiest/Eckelaers Dauchy</td>
</tr>
<tr>
<td>1210</td>
<td>Rue Jospeh Dekeym Dauchy</td>
</tr>
<tr>
<td>1210</td>
<td>Brialmont/Pole/Meridien/Union Dauchy</td>
</tr>
<tr>
<td>1210</td>
<td>Rue Traversiere Dauchy</td>
</tr>
<tr>
<td>1210</td>
<td>Willems Dauchy</td>
</tr>
<tr>
<td>1210</td>
<td>Chaussee de Louvain Dauchy</td>
</tr>
<tr>
<td>1210</td>
<td>Chaussée de Louvain Dauchy</td>
</tr>
<tr>
<td>1210</td>
<td>Rond-point Madou Dauchy</td>
</tr>
</tbody>
</table>
# Appendix 4: socio-economic data for the studied zones in Copenhagen

<table>
<thead>
<tr>
<th></th>
<th>Tingbjerg</th>
<th>Nørrebro</th>
<th>Centre</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Share of low income population</strong></td>
<td>Over 48% of low income population.</td>
<td>In almost all the district, more than 33% of the population has a low income, the 33-40.9%, 41-47.9%, and more than 48% shares equally sharing the districts surface, with the last category mainly located in the north.</td>
<td>Generally, there is between 26% and 40.9% of low income population, with a few scattered areas with more than 48%, and a few other with less than 25.9% low income population.</td>
</tr>
<tr>
<td><strong>Share low education population</strong></td>
<td>More than 35% of the Tingbjerg population has no education higher than an elementary degree.</td>
<td>There are mostly areas where 18-24.9% of low education population. Then the 14-17.9% and the 25-34.9% shares equally cover the rest of the surface, while the over 35% share is barely represented.</td>
<td>Mostly areas with 14-17.9% of low education population. The 0-13.9% and the 18-24.5% shares equally cover the rest of the surface, while there are almost no areas where more than 25% of the population is highly uneducated, except for a zone in the east that has more than 35%.</td>
</tr>
<tr>
<td><strong>Share of the population out of the job market</strong></td>
<td>Over 23.4%</td>
<td>13.7-23.3% are the most represented shares, with a few scattered areas with 11.8-13.6% and over 23.4% of out of work population.</td>
<td>Mostly 13.7-23.3% of the population is out of the job market, with a few areas that have shares over 23.4% in the east.</td>
</tr>
<tr>
<td><strong>Share of the population with a non-western background</strong></td>
<td>More than 18% of the population is of a non-western origin in all Tingbjerg.</td>
<td>The district is mainly composed of zones where at least 15% of the population is of a non-western origin.</td>
<td>The area mostly has a population composed of 3-5.9% of residents from a non-western background. Some scattered areas have 6-14.9%.</td>
</tr>
<tr>
<td><strong>Efforts needed related to the safety index</strong></td>
<td>Significant efforts are needed in all the zone.</td>
<td>Significant efforts needed in the north, intensive in the south, while in the rest of the district the effort needed are ordinary or have been reduced.</td>
<td>Significant efforts needed in the zone were Strøget is located, as well as where cameras where to be put up initially.</td>
</tr>
</tbody>
</table>

Data source: KK n.d.f
Appendix 5: Interview questionnaire

Preparation:

- Name:
- Place:
- Date and time:
- Any other important information:

Q1: Introduction et more personal question

Our icebreaker is an introduction question: could you introduce yourself? And precise what is your occupation? For who do you work?

Q2: “Link” question (link between the more personal information from the first question and our research topic)

What is the link between your professional occupation and CCTV?

Q3: Location of cameras in the relevant area

Can you tell us how the placement of CCTV cameras in your city/commune/public transport network happened?

Subsidiary questions: they aim at trying to get additional information, and/or at trying the interviewee in case he/she finds the initial question not precise enough.

Launching if the CCTV network

- When was the first camera installed?
- Where was it placed?
- What event(s) did trigger this installation?
- What arguments were used to justify/support this installation?
- How did the camera installation spread/how did the network develop?
- Did you encounter any significant opposition/criticisms/obstacles?

In general

- What is the ‘typical’ decision process when it comes to installing cameras?
  - Who generally initiates the idea/demands for cameras?
  - What instances have a power of decision?
- Which actors have a role to play in the process?
  - What is their respective importance?
  - What are their positions and arguments?

Current situation

- What is the budget allocated for the CCTV network (in numbers)?
- What part of the surveillance budget is allocated to CCTV compared to other means of prevention/surveillance?
- How many cameras do you have?
- Where are they located?
- Where are they more numerous? Why?
Appendix 6: Interview with Benjamin Goltzberg (Municipality of Schaerbeek)

12/02/2014, 3p, at the Schaerbeek municipality offices, by Corentin Debailleul

This transcript summarizes the most important information but the recording might provide a few more interesting elements.

I have been advisor in situational & technical prevention for the Schaerbeek municipality for 7 years. I studied architecture. My function is broader than the more usual ‘advisor in techno-prevention’ against theft, subsidised by the Ministry of Interior. I made my master thesis on surveillance cameras in Brussels. I am specialized in protection against theft and for the protection of particular sites, this is where CCTV might then intervene in my job.

I am not able to answer precisely your questions concerning the locations of CCTV cameras. However, I can tell you that Schaerbeek has chosen the company Optimit as consultant for the last set of cameras, in collaboration with the police. A hundred of cameras are being installed (right now?). Before that, there were only a few cameras on a few strategic locations like Liedts Square, Meiser Square and Colignon Square. On the Meiser Square, it is not for delinquency reasons that cameras were installed, but for traffic related issues. Cameras find all their usefulness in traffic management. The cameras meant to regulate the traffic are calibrated accordingly and only serve this purpose. Schaerbeek has remained for years with only 3 or 4 cameras while there were a dozen of them in Saint Josse and in Evere, that are much smaller communes. It is the police zone who really brought and supported the project to install the new cameras, and who convinced the politicians who did not oppose it and were not frightened by the expenses.

The Mayor (bourgmestre) is at the same time the municipality chief and the police chief. When the local police is a police zone, the different mayors whose municipalities are comprised in the zone have to find an agreement together. The police managed to ‘sell’ their project to the municipalities, it was obvious then that it was going to be funded by public funds, that is by the municipalities. This situation is shocking: the police should fund its own projects but as the municipalities fund them, it's actually a way to indirectly increase police budgets. It costs approximately 30,000€ for each camera. Cameras are probably well used, there are not ‘bad’ but it’s a lot of money and I am not convinced it is worth it. Schaerbeek is not in position to spend so much money if it is not clear how useful the project actually is. I have no problem with cameras. Some people talk about the ‘Big Brother’ society, I do not believe in that. My only problem is that it costs a lot. It would probably be better to have more cops on the streets. It is the same logic when supermarkets employees are progressively replaced by self-scanning machines. It is the society we are living in. It follows an economic logic: the machines simply cost less money.

Back to his job more particularly: I have changed my mind, and now I do not believe that it is possible to prevent vandalism through the setting of public space. There is no criminogenic space, delinquency and criminality are societal problems which find their cause, their root in socio-economic issues. If a government decided “now we put all our efforts into providing employment”, there might be a whole set of crimes and acts of vandalism that would decrease. However, situational prevention can be efficient at a very local level, when it comes to reinforce
a specific place against vandalism, but then probably with the implication that vandalism will migrate a bit further.

I understand that some people attack the buildings made by the ‘neighbourhood agreements’ (contrats de quartiers). Young people living in the neighbourhood see that there are flows of money and that they do not benefit from it. Even if the money goes sometimes for them when it is invested in building housing or facilities for everyone. It is a critique of modern architecture, which is made to be shown in international publications, but when a building is vandalized, then they do not show the pictures.

*About the new “sustainable neighbourhood agreements”:* Should we make one project that everyone can benefit a little bit from, or should we make one big exemplary project? As I followed the latest development concerning passive housing, here I think public authorities in Belgium are very advanced. I guess if it projects are developed for housing, it will be less vandalized than if it is just the window of a greener Brussels. There is now a new neighbourhood contract for the Rasquinet Park, which is the one that has been the target of a lot of vandalism. But I am not sure exactly what’s going on there, so I will not comment further.

Intuition anyway plays a big role when it comes to decide where to place the cameras, serious studies are not always conducted. Tein Telecom was chosen to elaborate the installation plan and Fabricom takes care of the installation properly.
Appendix 7: Interview with Camille Neys and Daniel Weemaels (South Police zone)

25/03/2014, 10am, at the South Police zone headquarters, by Corentin Debailleul and Pauline De Keersmaecker

Summary: We interviewed Camille Neys, Chief of police and dispatching director, and Daniel Weemaels, operational programmer of the police zone. They gave us an overview of the history and the current situation of CCTV in their zone, municipality by municipality. They then commented on the plan for having a unique CCTV network for the city of Brussels, saying that they were not enchanted to share the equipment they invested in, and that such a unification required for all the different actors to have the same equipment, which is currently not the case. They detailed the issues they encountered when using CCTV, and gave us their advice about their utility. They also told us about the Télépolice system, a collaboration between the shops and the local police. The question of the decision making process has also been discussed.

At the of the interview, we were invited to visit the control rooms with the watch screens, along with a little technical demonstration of how their devices work.

Camille Neys est commissaire de police et directeur du dispatching, tandis que Daniel Weemaels, est le programmeur opérationnel de la zone de police. Camille Neys déclare préférer ne pas être enregistré, les notes qui suivent sont donc partielles et partielles.

Entrée dans la salle, on nous rappelle d’emblée que la zone couverte par la police de la zone-midi est 6ème de Belgique en termes de criminalité, et a sur son sol 3 prisons, Forest National, des installations Seveso, etc. Une zone compliquée, chaude, où plein de choses se passent.

Une cinquantaine de caméras ont auparavant été installées par la commune à Anderlecht (avant la réforme des polices). Elles ont été installées en partenariat avec Numéricable. La commune paye les caméras, tandis que Numéricable fournit les réseaux en fibre optique. Il y a rapidement eu un litige entre les deux, qui a terminé au tribunal (l’entretien n’était pas fait, le matériel est vite devenu défectueux et obsolète, ...). Aujourd’hui, ces caméras ne fonctionnent plus (elles sont toujours présentes mais ne fonctionnent pas).

La police a d’autres caméras que celles-là (il nous donnera la liste en fin de conversation).

Pour 2014-2015, le plan pour la zone de police est de remplacer toutes les caméras, qui seront donc gérées par la police exclusivement. Il y a environ 100 caméras prévues dans le contrat: 2 à Saint-Gilles, 1 à Forest, le reste à Anderlecht.

À Saint-Gilles, beaucoup de caméras communales n’ont même jamais été installées car le projet n’a finalement jamais abouti. À certains endroits des pictogrammes ont néanmoins été placés (même si pas de caméras) pour décourager la formation de dépôts clandestins d’immondices.

Ce qui est en fait nécessaire en matière de caméras de surveillance, c’est une unité du point de vue du fonctionnement, et aussi du point de vue de la prise de décision. Il y a d’ailleurs un projet en cours de création d’une centrale d’imagerie pour la région de Bruxelles-Capitale, plus ou moins à l’image de ce qui se fait à Paris. Un des problèmes est que ça implique que les polices locales et les communes doivent toutes céder leur matériel, matériel dans lequel elles ont
investit. Un autre problème est celui de la compatibilité des matériels de ces différents organes. Il existe actuellement déjà un système informatique global entre les polices des différentes communes.

Pour en revenir à Anderlecht, il y a sur le territoire de la commune environ 100 caméras administrées par la police, elles sont opérationnelles en théorie. Il arrive néanmoins qu’il y ait des soucis. Il y a par exemple beaucoup de travaux autour de la gare du Midi, il arrive donc qu’il y ait des câbles coupés. Il y a aussi un problème de manque de personnel. Les images ne sont donc évidemment pas toutes visionnées en direct. Elles sont aussi stockées, 72h, en fonction de la capacité des serveurs. Elles peuvent légalement être stockées jusqu’à un mois, mais c’est trop cher. L’usage fait de ces images est un usage réactif (si quelque chose se passe, on en fait usage). Mais nous n’avons pas assez de personnel que pour pouvoir en avoir un usage proactif.

Il n’y a pas de caméras intelligentes à Anderlecht. Des caméras ANPR (reconnaissance automatique de plaques d’immatriculation) sont néanmoins prévues pour la zone. Elles permettent de repérer les voitures volées ou en défaut d’assurance. Il existe des tas de caméras intelligentes (qui détectent les objets restés immobiles depuis trop longtemps, qui observent automatiquement les rassemblement de plus de 10 personnes, ...). Mais on n’en veut pas car cela signifie qu’il y aura aussi plus d’alarmes, ce qui nécessite plus d’infrastructure et de personnel pour pouvoir intervenir, mais aussi traiter le suivi des affaires. C’est impossible pour les 900 policiers de la zone, déjà fort occupés. La zone a seulement 2 caméras ANPR embarquées (pas fixes, mais sur véhicule). En avoir plus que cela serait impossible en termes d’effectif que ça impliquerait pour être efficace. Aux USA et en Grande-Bretagne, les caméras ANPR sont notamment fixées sur les bennes à ordures, et elles sont programmées pour prévenir la police lorsqu’une plaque recherchée est détectée à l’arrêt, ce qui est plus malin.

Concernant les caméras privées (des commerçants, principalement) à laquelle la police à accès, cela se fait toujours sur initiative privée. Le matériel, lui, est fourni par Télépolice. Ce sont les privés qui doivent faire la demande et payer l’abonnement pour avoir accès à ce service. A la base, le service était limité aux pharmacies et bijoutiers mais s’est aujourd’hui généralisé. Il existe environ 60 commerces disposant de ce service. En 2013, il y a eu 2 interventions réelles, le reste des appels étant accidentels.

Concernant les drones/bodycams (qu’il y a notamment à Schaerbeek), ils ne sont pas envisagés à Anderlecht, notamment car la légalité de ces dispositifs est discutable (cadre légal inexistant). Néanmoins les bodycams pourraient être utiles lorsqu’il s’agit de lever des doutes dans les cas où c’est la parole du policier contre celle du citoyen. En Italie, les carabinieri sont bien plus avancés: leurs smartphones sont convertibles en bodycams et leurs voitures de police sont équipées d’une tablette qui filme à la fois la route et ce qu’il se passe dans la voiture. Mais en Belgique, ce genre de décision est fort compliquée en raison des nombreux niveaux de pouvoir impliqués, ça peut prendre jusque 10 ans.

En général, la décision de placer une caméra de surveillance relève effectivement de la police locale, en fonction principalement de son expérience du terrain: zones à plus forte criminalité, où le plus d’interventions se font, quartiers à problèmes. Les données du CIZ (Centre d’Information Zonal) sont aussi utilisées. Chaque zone a un CIZ, et chaque zone suffisamment importante, a des analystes et produit des chiffres. Il est par exemple prévu dans le plan pour 2014-2015 d’avoir 4 caméras place Lemmens (près de Cureghem). À cet endroit il y en a déjà eu
2 installées par la commune, mais elles ont presque immédiatement été cassées, incendiées, sabotées. Les futures caméras se surveilleront l’une l’autre... Aussi, lorsque les caméras sont placées en hauteur sur la façade d’un immeuble, une coopération entre voisins peut permettre d’aller sectionner les câbles depuis des appartements privés. Le sabotage est un gros problème, l’un des principaux. Et pas seulement pour les caméras de surveillance "classiques". Il y a par exemple eu des cas d’ordinateurs disparus, rendant le système antérieur au système Télépolice actuel inutilisable.

Nos interlocuteurs sont sceptiques quant à l’efficacité des caméras. En soi, les caméras ne sont pas une solution miracle, et ne vont pas faire drastiquement baisser la criminalité (peu de personnel, problème de cadre légal selon lequel une infraction constatée par caméra n’est légalement pas reconnue¹, sabotage, effet dissuasif trop peu important, ...). La pression pour l'installation de plus de caméras provient très souvent du monde politique. Les images récoltées sont principalement utilisées pour lutter contre la délinquance au niveau local (pour les questions de sécurité publique et de sécurité routière), mais elles sont aussi parfois utilisées par la police judiciaire. Lutter contre la sécurité publique ne devrait pas se faire uniquement en plaçant des caméras de surveillance. L’aménagement et le mobilier urbains sont primordiaux. Mais à Bruxelles, la solution automatique, c’est la caméra, même lorsque c’est insuffisant ou pas utile.


Le cas de Koekelberg: c’est la seule commune de Bruxelles (19 communes) qui garde ses caméras, refuse de les donner à la police (ce qui semble très limite niveau légal).

Pour ce qui est de la STIB/SNCB, il y a un projet en cours selon lequel la police deviendrait cliente de ces organismes, et pourrait avoir accès à leurs images en direct. Avec De Lijn, il y a déjà des accords et un projet en cours en face de la gare du Midi, à la station de bus. Lorsque des caméras financées par De Lijn seront installées, la police les gérera et en stockera les images. Dans cet accord, donc, De Lijn financerait les caméras et le réseau de fibre optique les connectant aux commissariats, en retour ne devra pas investir dans des structures de visionnement, et verra aussi la sécurité de ses arrêts/stations/... améliorées car les éventuelles interventions de la police gagneront en efficacité.

La question des caméras embarquées (comme par exemple celles de la STIB) est aussi une donnée à considérer dans ce genre d’accords. Pour l’instant, la police de la zone midi possède 1 caméra embarquée (un commissariat mobile, AKA "le van" ou « le camping-car »).

¹ Compte comme preuve lorsque les images sont demandées et utilisées par la police judiciaire dans le cadre d’affaires judiciaires (par ex. sur un trafic de drogue)
Appendix 8: Interview with Carla Scarlata (Brussels-West Police Zone)

26/03/2014, 5pm, at the Police Station of the Brussels-West Zone, by Corentin Debailleul

Carla Scarlata is the police superintendent in charge of the coordination in case of ‘zone events’, that is events that take place on more than one municipality in the police zone or that are so big that they necessitate the intervention of numerous policemen.

In Molenbeek, the first cameras were installed more than 20 years ago. The network was made of optical fibre and installed by the company Coditel that had a monopoly on TV cables at that time. Using the same cameras 20 years later is a source of a lot of problems, although some of the cameras are already replaced with new dome models. There is a new project scheduled to modernise this equipment. Indeed, the municipality is planning to install its own optical fibre network and to develop a three techniques solution: some cameras will use optical fibre, some will use cables on facades, and some will use airwaves. The demand for cameras comes from the police but also from citizens putting pressuring the municipality. The main locations for surveillance cameras are the ‘hot spots’, whose definition depends on the typology and population composition, as well as from data on criminality. But the problem is that criminality can be displaced, while cameras are fixed and the budget is limited. It is impossible to install cameras on every corner and to pay people to process so many datas.

When asked to detail the concept of ‘hot spot’. The police superintendent gave examples of areas where there were a lot of

- violent thefts (particularly bag extortion from women in their cars);
- trouble of public order at night, when young people gather to drink and socialize;
- regular unauthorized dumping of waste.

According to the ‘zonal security plan’ (plan zonal de sécurité), as established by the chief of the police zone, the priority is to fight aggressions. Therefore, the camera locations also have to follow this guideline.

4 or 5 years ago, the municipalities of Berchem St. Agathe, Jette and Ganshoren had decided to finance surveillance cameras, sharing the costs together with the police zone that paid for the operating system.

In Koekelberg, the surveillance system exists for quite a long time, and was installed thanks to funds from the ‘security contracts for big cities’ (contrats de sécurité des grandes villes). The mayor does not want the cameras to be watched by policemen, so the images are watched by the ‘peacekeepers’ (gardiens de la paix), municipal employees who usually take care of street tranquillity. There can be a direct connection, image and sound, between the police and the peacekeepers in case of necessity.

The police zone detains some automatic number plate recognition (ANPR) cameras on police vehicles and a ‘Command Car’ (or mobile police station), which holds a surveillance camera on its roof. They have no drone nor bodycams nor intelligent cameras.

The ideal would be to use the cameras in a ‘proactive’ way. This is not done in this zone, as it would require much higher staff investments. The cameras are only used in a reactive way: after the events happened in order to try to identify a suspect. Sadly, the camera is often poorly
oriented or the wrongdoers are too far away or know how to bypass the difficulties. The cameras are fixed: they can move if controlled by operators and their joystick but they do not follow automatic sequence movements (which will be the case with the new cameras in Molenbeek).

The stocking capacity depends on the bandwidth. In places where there is a lot of circulation, the images are kept for 7 days. Where there is less activity, it is up to 12 days.

The cameras also suffer vandalism. Particularly in case of retaliation after a particular police action, or in difficult areas where people do not want the police to have an eye on their activity.

There are usually between 10 and 50% of out of order cameras in the zone. Due to sabotage but also due to the vulnerability of the optical fibre network: the cables often get cut when renovations occur or other construction works.

The federal police uses a camera on an helicopter and its images are available in the western dispatching, thanks to an agreement with the Centre Police (Bruxelles-Capitale/Ixelles).
Appendix 9: Interview with Brecht Debusschere (Mobiris, Bruxelles Mobilité)

2014-07-10, 10am, at the region of Brussels-Capital Ministry offices, by Corentin Debailleul and Pauline De Keersmaecker

Summary: Brecht Debusschere, who is responsible for the operation of the Mobiris management centre, told us about the history of their CCTV network, whose sole purpose is for traffic management and regulation. He also told us about about the current situation of Mobiris’ CCTV network, detailing what kind of new and ‘intelligent’ technologies they are using and for what purposes. He detailed the relationships between Mobiris and the police, and gave us his opinion on the plan for the unification of Brussels’ CCTV network at the regional level.

At the of the interview, we were invited to visit the control room, along with a little technical demonstration of how their devices work.

Brecht Debusschere est le responsable de l’exploitation du centre de gestion de Mobiris. Mobiris s’occupe de la gestion du trafic à Bruxelles. Les caméras de surveillance de Bruxelles-Mobilité se trouvent principalement dans les tunnels, où se situent environ 80% de leurs caméras. Le reste est situé sur les carrefours stratégiques (environ 15 carrefours sont couverts) et les autoroutes (mais c’est limité car il n’y a que 13km d’autoroutes sur le territoire de la région de Bruxelles-Capitale). Il est prévu que le nombre de caméras en surface soit augmenté. Il existe 350km de voiries régionales, dont seuls 30km sont couverts par la vidéosurveillance. Les voiries principales sont équipées. Il existe des projets d’expansion pour le futur.

Deux opérateurs visionnent les images en continu (24h sur 24 et 7 jours sur 7), par shifts de 8h. L’opérateur ‘trafic’ est spécialisé dans la gestion du trafic et des accidents, ainsi que dans les contacts médias, STIB, pompiers et police. L’opérateur ‘technique’, lui, s’occupe de toute la partie surveillance et autres préoccupations techniques : gestion de la ventilation des tunnels, de leur ouverture/fermeture, réparation de problèmes avec les feux de signalisation ou éclairage public. Ils ont donc une sorte de dispatching.

La technologie évolue : dans les tunnels, les caméras sont fixes et permettent de ce fait une analyse automatique des images détectant toute anomalie dans un délai de 30 secondes. Par anomalie, on entend un véhicule à l’arrêt, un piéton, de la fumée, une voiture en contresens ou même une absence de véhicule. Des niveaux de couleurs s’affichent en fonction de la fluidité du trafic, facilitant la détection d’embouteillages. Ce système n’existe actuellement que dans les tunnels Belliard et Cinquantenaire mais devrait être étendu aux autres tunnels, en priorité ceux de plus de 300m (ce qui est le cas des 12 principaux tunnels de Bruxelles). La surveillance vidéo de ce type de tunnels est d’ailleurs imposée par une directive européenne (qui a été transposée dans le droit belge en 2008).

Les tunnels Léopold II et Rogier disposent d’un système de reconnaissance de plaques, installé suite à un arrêté gouvernemental sur la pollution. La ventilation dans ces tunnels est mauvaise, et le système de reconnaissance de plaques est utilisé dans le but de contrôler si une voiture y reste plus de 20 minutes, afin de fermer le tunnel en cas de ralentissement trop important. L’usage de ce système n’est donc pas répressif même si la police est bien sûr demandeuse d’accès à ces caméras, ce qui n’est pas (directement) le cas pour le moment. La police n’a accès à
ces informations que sur demande, dans le cadre d’enquêtes, ce qui arrive en moyenne 1 à 2 fois par semaine. Par exemple, en juin, un automobiliste qui avait pris la fuite suite à un accident mortel a été identifié de cette manière. Pour raisons de sécurité, un seul employé spécialisé à accès à ces images. Cette situation pourrait évoluer dans le futur, avec la régionalisation de la vidéosurveillance à Bruxelles. Pratiquement, les données (images, pas vidéos) sont stockées un mois et ne sont accessibles que par un fonctionnaire agréé. Ces deux caméras sont les seules à avoir fait l’objet d’une déclaration auprès de la commission pour la protection de la vie privée, ce qui n’a pas été nécessaire pour les autres, puisqu’elles ne servent pas à identifier des personnes.

Les images des autres caméras (mobiles lorsqu’elles sont situées sur les carrefours) ne sont conservées que durant 72h à cause des capacités de stockage limitées, ce qui est un peu court, en particulier pour faire face aux demandes de la police. Il est donc prévu d’étendre cette capacité de stockage à 14 jours (légalement elle peut l’être jusqu’à un mois).


Les décisions d’installer de nouvelles caméras, pour une part sont directement le fruit de la législation qui l’impose. D’autre part, ces décisions sont issues d’études d’identification de besoins et des risques menées par des groupes de travaux formés en interne. Par exemple la décision de mettre des caméras sur des carrefours stratégiques fut prise car les conséquences en cas de blocage sont importantes à ces endroits. Certaines propositions sont également issues de l’industrie privée, qui, suite à la construction d’un dossier, sont éventuellement ouvertes au marché public.

Dans le futur, une centrale des feux (responsable de la gestion des feux de signalisation), va être établie. Les informations et images circulent par un réseau de fibres optiques qui est propre à Mobiris, pour des raisons de sécurité.

Concernant le budget, Brecht Debusschere doit se renseigner, mais il affirme que les dépenses tournent autour de un million d’euros par an. L’outil ‘caméra’ et son installation en eux-mêmes ne sont qu’un petite part de l’investissement par rapport au coût que représente le réseau en fibre optique, à l’intégration d’une caméra dans le système, et surtout à la maintenance. Environ 5% des caméras sont défectueuses en permanence. C’est parfois dû au fait qu’un câble est coupé lors d’un chantier à Bruxelles.

Bien que la police dispose parfois de caméras le long d’axes régionaux qui intéressent Mobiris en termes de gestion du trafic, il est souvent nécessaire d’installer une seconde caméra au même endroit car les caméras de police ne sont pas forcément dirigées dans une direction intéressante. Par exemple à Arts-lois, la caméra de la police est dirigée 95% du temps vers l’ambassade américaine et non pas sur la circulation. Une caméra Mobiris est donc présente au même endroit. C’est aussi le cas au carrefour Av. Buyl/Bd. Général Jacques, Bd. Mettwie, Basilique de Koekelberg, Chée Alsemberg/Brugman.
Le rôle de Mobiris est complémentaire à celui de la police. Dans le futur, avec le projet d'unification de la vidéosurveillance au niveau régional, les images de Mobiris seront partagées avec la police et utilisées à d'autres fins que la gestion du trafic, ce qui ne pose aucun problème à Mobiris. En cas d'accidents détectés sur les routes. En cas d'incidents mineurs ou de ralentissements, ce sont les médias qui sont prévenus (info trafic) et les tableaux lumineux à l'entrée des tunnels sont adaptés.

Le projet de vidéosurveillance à l'échelle régionale, c'est encore en discussion. Les autres services participant auront accès aux images selon leurs propres besoins.

Les opérateurs de police dans les dispatchings font un travail assez différent de ceux de Bruxelles Mobilité. À la police, les caméras servent plutôt comme aide pour évaluer une situation dont ils auraient été prévenu, si un policier détecte quelque chose sur une caméra, ce serait parce que par hasard il est devant l'écran à ce moment-là, alors qu'à Bruxelles mobilité, les opérateurs doivent vraiment détecter les problèmes.

**Complément par email daté du 2014-07-10**

Suite à notre rendez-vous ce matin, je vous envoie en annexe le document récapitulatif de nos caméras.

Concernant les budgets : il faut savoir qu'il y a beaucoup de variables qui ont une influence (présence du réseau, utilisation d'un poteau, etc.). Compte tenu de ces éléments : l'installation d'une nouvelle caméra sur un carrefour coûte entre € 5.000,- et € 10.000,- (TVA comprise). L'entretien de toutes nos caméras (y compris une partie du réseau de transmission) tourne autour de € 200.000,- par an (TVA comprise). Ces montants son bien évidemment des ordres de grandeur, chaque site est différent et chaque année d'entretien est différente aussi.
Appendix 10: Interview with Christine Rouffin and Nathanaël Bailly (Brussels Observatory for Prevention and Security)

2014-07-10, 3pm, at the Brussels Observatory for Prevention and Security offices, by Corentin Debailleul and Pauline De Keersmaecker

Summary: the Brussels Observatory for Prevention and Security is a recent service whose status is still a little bit unclear. Christine Rouffine, its director, and Nathanaël Bailly, its attaché analyst, told us a little bit about the observatory and gave us a few information related to our research topic. But they were more interested with hearing about our thesis than about actually giving us information on Brussels CCTV network and unification plan.

Christine Rouffin est la directrice de l’Observatoire Bruxellois pour la Sécurité et la Prévention, tandis que Nathanaël Bailly en est l’attaché analyste.

Nous avons rencontré Mme Rouffin et Mr Bailly en pensant qu’il jouaient un rôle central dans la plan de mutualisation de la vidéosurveillance à Bruxelles. Il s’est avéré que ce n’était pas le cas. La discussion qui est ici rapportée est donc bien moins importante que prévu, car elle ne concernait qu’épisodiquement notre sujet de recherche. Nos deux interlocuteurs étaient en réalité plus intéressés d’entendre ce que nous avions à dire des caméras à Bruxelles que de nous en parler.

Dans les statistiques policières de criminalité (SPC), il apparaît en 2008 des statistiques relatives à des faits liés aux caméras de surveillance, dans la même sous-rubrique que les problèmes de droit d’auteur et de protection de la vie privée ; rubrique principale protection de la personne. Une cinquante de faits sont recensés en 2013, et il serait intéressant de savoir exactement ce que cette catégorie de faits recouvre. Ils nous conseillent de contacter Yves Verbrugghe, « dirco » à la banque nationale de statistiques de la police (02 223 97 04).


Un de leurs objectifs est de réunir tous les acteurs de la sécurité de tous les niveaux (fédéral, régional, communal et local) à Bruxelles: maisons de justice, universités, bourgmestres, ministres. Le tout pour former un « comité d’orientation », plus ou moins similaire à un conseil d’administration [première comparaison de leur activité avec le monde de l’entreprise]. Un protocole de collaboration doit être signé. Celui-ci est déjà prêt mais il faut attendre la formation du nouveau gouvernement pour pouvoir le signer.

Ici, dans le centre de recherche de l’observatoire, ils ont un « produit » [nouvelle métaphore entrepreneuriale] qui est le diagnostic régional de prévention et sécurité. On est ici à un « tournant stratégique », car en attente de la formation du gouvernement pour pouvoir aller plus
loin. Le tout se fait sous l’autorité du ministre-président, qui fait le lien entre les différents fonctionnaires impliqués. Ce diagnostic, c’est vraiment leur « core business » [encore]. En ce qui concerne la méthodologie, ils ont choisi d’évoluer en deux parties pour l’établir : la première partie est une sorte d’état des lieux statistique de la situation (contextualisation statistique), et la deuxième est l’établissement d’une définition de la sécurité et du champs d’action de l’observatoire. L’acceptation du concept de « sécurité » est large et comprends 5 domaines/thèmes :

1. Mobilité
2. Sécurité civile
3. Étique et société civile
4. Cadre de vie
5. Activités sociales, économiques et culturelles

Ils s’intéressent donc à des thèmes comme vivre en ville, se divertir, la mobilité, le cadre de vie, les activités sociales/culturelles ou économiques ; avec des études sur les violences intrafamiliales, la prostitution, les transports en commun. Le but étant de neutraliser ou confirmer certains lieux communs en matière de sécurité. En ce moment, des hypothèses de causalité sont en train d’être formulées sur base de données démographiques et socio-économiques.
Appendix 11: Interview with Sylvie Murengerantwari (Ministry of the Interior)

2014-07-11, 2pm, phone interview, by Corentin Debailleul

Summary: Sylvie Murengerantwari, local advisor for the ministry of the Interior. She told us about the Camera Consult project, launched by the Ministry of the Interior to support and guide municipalities in their decisions regarding CCTV, and security and prevention matters in general.

Sylvie Murengerantwari est conseillère locale pour le ministère de l’intérieur, direction générale Sécurité et Prévention, direction sécurité locale intégrale, en charge du projet Camera Consult.

« Notre mission est d’offrir un soutien aux communes et une évaluation des politiques locales. Dans le cadre du plan stratégique de sécurité et prévention, des subsides sont attribués aux villes et aux communes. Nous allons sur le terrain pour prendre contact et évaluer. Tous les 4 ans, nous devons aussi approuver les 195 plans zonaux de sécurité [des zones de police] (il s’agit d’un avis consultatif). En tant que conseillère locale, ma fonction est vraiment d’être un intermédiaire entre le ministère et les communes ou les chefs de corps des zones de police, ou encore au niveau provincial avec la commission provinciale sur la sécurité et la criminalité (coordonnée par le gouverneur, elle rassemble les chefs de corps, les bourgmestres et les instances judiciaires).

Il existe aussi des ‘experts thématiques’: pour les cambriolages, les drogues, les différentes formes de violence et, dans mon cas, pour la vidéosurveillance dans l’espace public. Pour les différentes thématiques abordées, nous fournissons des outils ou des manuels qui vont servir et appuyer les politiques locales.

Concernant le budget de l’enveloppe globale, je dois me renseigner, je vous tiens au courant.

Le budget est réparti entre 109 villes et communes (pour cette répartition, voir l’arrêté royal du 7 novembre relatif aux plans stratégiques de sécurité et de prévention et aux dispositifs Gardiens de la Paix. Après vérification : €2 462 600 pour Bruxelles ; €67 351 pour Auderghem ; €224 325 pour Etterbeek ; €222 135 pour Evere ; €358 225 pour Forest ; €277 532 pour Ixelles ; €39 660 pour Jette ; €286 743 pour Koekelberg ; €592 355 pour Molenbeek-Saint-Jean ; €529 170 pour Saint-Gilles ; €531 080 pour Saint-Josse-ten-Noode ; €1 003 094 pour Schaerbeek ; €167 389 pour Uccle ; €71 722 pour Woluwé-Saint-Lambert ; total Belgique : €35 074 835 ; Au total, ça fait donc 6 830 000 pour la région bruxelloise, soit 19,5% du budget national). Pour une ville moyenne comme Namur, c’est environ 600 000 € par an, pour une petite ville comme Ciney, environ 40 000 €.

Tout cela représente donc des montants assez considérables, qui vont aux différents services de sécurités, aux gardiens de la paix, à toutes sortes de coordinateurs. Il m’est impossible de dire quelle part est attribuée à la vidéosurveillance mais ces subsides visent à lutter contre toutes sortes de phénomènes pour lesquels la vidéosurveillance est utilisée, comme les cambriolages, les différents types de vols, les drogues etc. ou encore les ‘nuisances sociales’. Donc il est possible qu’une commune utilise les subsides pour installer de la vidéosurveillance ou mette en place des SAC dans ce cadre-là. Mais il n’y a donc pas de politique du ministère de l’intérieur pour
activement développer la vidéosurveillance comme ça peut être le cas dans d'autres pays [en France par exemple].

De plus, installer des caméras de surveillance rentre dans la catégorie 'investissements' qui est limité à 10% du budget prévention par un arrêté royal [En effet : Art. 30. § 2. Maximum 10% de l'allocation financière peuvent être utilisés afin de couvrir les investissements réalisés par les communes dans le cadre de la mise en œuvre du plan stratégique. En DECEMBRE 2013. — Arrêté ministériel déterminant les modalités d'introduction, de suivi, d'évaluation et déterminant les modalités d'octroi, d'utilisation et de contrôle de l'allocation financière relatives aux plans stratégiques de sécurité et de prévention 2014-2017].

Néanmoins, ces dernières années, nous avons eu énormément de demandes de la part des communes qui souhaitaient installer des caméras de surveillance. Particulièrement depuis 2007 avec la loi caméra. Le problème c'est que ce qui a été fait n'était pas toujours très concluant malgré de lourds investissements consentis. D'où la création du programme Camera Consult car la vidéosurveillance requiert beaucoup de connaissances juridiques, techniques, etc. Les grandes villes ont les 'ressources intellectuelles' pour se le permettre, ce qui n'est pas toujours le cas dans les plus petites villes.

Dans un premier temps pour lancer Camera Consult, nous avons rassemblé des acteurs-clés qui ont les connaissances, pour former des groupes de travail. On a réalisé aussi des visites sur le terrain. Nous avons évalué les dispositifs de 7 villes différentes. Il y avait du positif et du négatif, des lacunes et des points forts. Les lacunes résidaient au niveau du manque de stratégie, de buts précis, de manque de connaissances des spécificités techniques (faut-il pouvoirs identifier des visages ou des plaques d'immatriculation etc.) pour résumer, un manque de cohérence. Au final, tout ça a permis à la création d'un guide à destination des villes et des communes.

Le plus gros point faible, c'est que les systèmes n'avaient jamais été évalués ! Pourquoi, je ne sais pas. Peut-être par manque de temps, par peur des résultats, ou même par manque des connaissances pour le faire.

*Qu'est-ce qu'un lieu stratégique ou non stratégique pour placer une caméra ?*

Le problème était principalement que les communes avaient utilisé une approche subjective : « on va placer une caméra dans tel endroit 'à problèmes' ». L'approche que nous proposons nous est d'établir un véritable diagnostic local de sécurité, pour avoir une image la plus complète possible en matière de criminalité et pouvoir établir une méthode cohérente incluant les 3 principes qui doivent être respectés d'après la loi caméra, à savoir de finalité, de proportionnalité, d'efficacité et de subsidiarité [pour plus de détails: http://www.privacycommission.be/sites/privacycommission/files/documents/01.02.02.62-circulaire_loi_cameras-point3.pdf].

À vous entendre, on croirait presque que vous luttez contre les communes pour qu'elles limitent leur usage de la vidéosurveillance ?

Non, on ne lutte pas contre. Chaque commune est bien sûr libre de faire ses propres choix. Ce qu'on va faire, c'est aller sur le terrain présenter notre guide, tenter de faire prendre conscience aux acteurs de toutes les conséquences de tels ou tels choix, que les choses ne soient pas prises à la légère. Mais nous donnons seulement des conseils, nous n'avons pas de pouvoir de décision.
Existe-t-il à votre connaissance d'autres subsides qui permettraient l'installation de caméras ?

Au niveau de la région bruxelloise, il existe des subsides en termes de sécurité de la RBC pour les communes, je ne crois pas que ça existe en Wallonie. Sinon, il y a aussi les contrats de sécurité qui pourraient inclure des caméras. À Bruxelles, il existe également les fonds destinés à l'organisation des sommets européens. Mais je crois que sinon, les montants sont si élevés que des subsides ne sauraient suffire, les investissements se font sur fond propre.

Mais la vidéosurveillance n'est pas LA priorité à nos yeux. Nous souhaitons plus mettre l'accent sur l'engagement de personnel de terrain afin d'améliorer le sentiment de sécurité.

N'y a-t-il pas une contradiction dans le fait d'attribuer des fonds destinés à la prévention à la vidéosurveillance ?

Non, nous n'avons pas de soucis avec cela dans la mesure où les caméras ont un effet dissuasif sur les auteurs et un effet positif sur le sentiment de sécurité des citoyens. De plus, nous travaillons dans le cadre d'une sécurité locale intégrale : ce qui signifie que nous avons une approche globale. Nous voulons éviter que les communes fassent de la prévention seules dans leur coin, il faut faire le lien avec les autres partenaires de la charte sécuritaire (police, parquet). C'est en mettant tout le monde autour de la table qu'on arrive à l'efficacité. Plus on est à aller dans un même sens, plus on a de chances d’atteindre notre but.
Appendix 12: Interview with Vincent De Wolf and Christian Mahieu (Etterbeek municipality and Brussels-East Police Zone)

2017-07-17, 11am, at Etterbeek Town Hall, by Corentin Debailleul and Pauline De Keersmaecker

Summary: we interviewed Vincent De Wolf, the Mayor of Etterbeek. He had invited Christian, responsible of the telematics service from the Brussels-East Police Zone. They both told us about the CCTV history and situation for the municipality and the police zone. Vincent De Wolf detailed on the criticisms he faced from the population, and on his opinion on the matter. While Christian Mahieu gave us more detailed and technical information about the police zone's CCTV network as well as his views on the Irisnet 2 plan.


Nos questions avaient été fournies à l’avance à la demande du secrétariat du bourgmestre.

Vincent De Wolf :

Initialement, les communes étaient à la manœuvre pour ce qui est de l’installation de caméras de surveillance. Etterbeek fut la seconde commune à en installer après Koekelberg [aussi une commune MR]. Cette installation s’était faite dans le cadre d’un contrat de sécurité, aujourd’hui appelé contrats de société. Une chambre forte avait été construite dans l’hôtel communal pour y visionner les images. Ces caméras ancienne génération y étaient visionnées par des stewards de stationnement. Ce visionnage s’effectuait à mi-temps, pour tenter d’éviter l’inévitable fatigue et distraction des stewards qui doivent surveiller plusieurs écrans à la fois.

À l’époque il y avait eu quelques plaintes, venant plutôt des jeunes. [Le bourgmestre prend alors une voix caricaturale de type ‘jeune de banlieue’: « Ah, mais alors tu vas m’mater avec tes caméras pendant qu’j’embrasse ma meuf dans la rue ?! » ]. Mais l’espace public étant public, il n’y a pas à s’inquiéter du fait d’y être vu. Les gens doivent de toute façon faire le choix de ce qu’ils font dans la rue, par définition aux yeux de tous, avec ou sans caméras. Rien ne change fondamentalement avec les caméras de vidéosurveillance.

On a le cas de Joe Van Holsbeek, qui était un ‘fils d’Etterbeek’. C’est ça l’objectif de placer des caméras: identifier des auteurs de faits graves, aider à élucider des faits criminels grave. Autre exemple, ce jeune Roumain qui avait été jeté par-dessus la rambarde à deux étages de haut dans le métro bruxellois [sensationnaliste et anecdotique]. Un autre objectif est évidemment de faire du préventif.

Par contre, la réactivité immédiate de l’ancien système de caméras statiques était quasi nulle. Pratiquement jamais un steward n’a appelé la police pour signaler un fait qu’il aurait constaté en visionnant les caméras. Il y avait trop peu de personnel pour ça. Le système n’était pas efficace. Donc il y a un an, il a été décidé de concert avec la police d’installer des caméras intelligentes. Ces caméras permettent de repérer automatiquement quand ‘quelque chose’ se passe: un attroupement ou un changement de couleur, tout ce qui serait inhabituel. C’est la police qui gère le système: les images sont maintenant visionnées au dispatching de la zone de police.
J’ai fait partie d’une délégation parlementaire à Paris, qui était très fort en retard et est maintenant très fort en avance par rapport à Bruxelles sur la question. Paris a maintenant un réseau intégré de fibre optique. Il existe des accords avec les stades, les grandes surfaces, les centres commerciaux, les sociétés de gestion de parkings, etc. avec la possibilité pour la police d’avoir accès aux images en temps réel. Chez nous, les réglementations n’étant pas harmonisées, tout est fort compliqué en termes de législation. Moi, par exemple, alors qu’en tant que bourgmestre responsable de la sécurité, je n’ai pas accès aux images de la STIB. Il n’y a pas de collaboration entre la STIB et les communes (en tous cas pour le moment). La collaboration avec les pouvoirs privés est donc beaucoup plus compliquée qu’à Paris. Une collaboration et coordination sont également nécessaires entre la commune d’Etterbeek et la zone de police ainsi qu’avec les deux autres communes de la zone, ce qui rend les chose d’autant plus complexes.

En termes de placement des caméras de vidéosurveillance, cela ne se fait évidemment pas au hasard. Les endroits privilégiés sont :

- Les commerces et magasins (librairies, bijouteries, pharmacies, etc.) ;
- Aussi à l’aide des fonds pour l’organisation des sommets européens, nous avons placé des caméras sur les parcours de manifestation, qui sont toujours les mêmes quand il s’agit de manifestations européennes : Avenue de Tervueren, Cinquantenaire, Rue Belliard ;
- Du reste, nous nous basons sur les statistiques policières de délits et de troubles à l’ordre public pour déterminer quels sont les endroits les plus touchés par la criminalité.

**Christian Mahieu est en charge du service télématique, il s’occupe entre autres des caméras de surveillance et du programme ASTRID:**


En ce qui concerne les budgets, 160 000€ ont été déboursés par la commune d’Etterbeek et 700 000€ par la zone de police. L’acquisition des caméras proprement dites se fait à charge de la commune, le reste des charges de gestion et d’enregistrement (le réseau de transmission, les installations permettant la visualisation, etc.) se faisant à charge de la zone.

Une caméra coûte environ 25 000€, les images sont conservées 30 jours, tout le réseau est hertzien. On voit vraiment une différence de qualité. Avant il était impossible de se payer une caméra HD, c’était beaucoup trop cher. [Les prix ont malgré tout augmenté, le bourgmestre semble se souvenir que les caméras ancienne génération coutaient environ 10 000€, les images étaient alors conservées 48 à 72h].

La police dispose de trois postes de visualisation seulement. Et les agents du dispatching chargés de la visualisation doivent également répondre au téléphone, il leur est donc impossible de regarder les images en permanence. Mais c’est la meilleure manière de faire, car il est physiquement impossible d’uniquement regarder des images sur des écrans durant 8 heures. Peut-être que la nouvelle technologie permettra une meilleure efficacité de détection qu’avec
l'ancien système. Par contre, l'utilité de ce système est très claire dans le cas de l'aide à l'intervention et à l'action sur le terrain. La police a la possibilité de retourner facilement 10-15 minutes dans le passé pour visualiser ce qu'il s'est passé quelque part, augmentant l'efficacité de l'action des agents sur le terrain.

[Mr. De Wolf nous demande alors s'il peut nous laisser en compagnie de Mr. Mahieu, car il a un agenda fort chargé. Il précise qu'il se devait malgré tout de nous recevoir en tant qu'ancien de l'ULB]

Concernant le plan Irisnet 2 de mutualisation de la vidéosurveillance, supervisée par le CIRB, certaines choses doivent encore être mises en place, concernant la vie privée par exemple. Il ne faudrait pas que MOBIRIS ait accès aux images de la police lorsque celle-ci filme quelqu'un de près, avec un visage visible et identifiable, dans le cadre d'une enquête. Il y a aussi des problèmes de compatibilité technique entre systèmes de transmission hertzien et de fibre optique. Sur ce sujet, toutes les zones de police sont un peu du même avis : elles sont frileuses, et ont peur de perdre de leur autonomie, « qui a la main sur le joystick de contrôle de la caméra ? ». Quoique ça pourrait aussi être l'occasion de déléguer, d'alléger la charge de travail.

La vidéosurveillance a ses qualités, notamment en matière de préventif, mais n’est pas le moyen, la réponse à tous nos soucis. Les caméras ne vont pas tout régler, mais elles s’avèrent tout de même être utiles.

Pour la localisation et le placement des caméras, nous nous basons sur une analyse de sécurité. On fait un tri des faits de criminalité (au sens très large du terme) qui nous semblent appropriés [c’est donc assez subjectif, nous n’avons pas réussi à savoir quels fait étaient en pratique sélectionnés]. On prend aussi contact avec les autres services de maintien de l’ordre. Et on s’inquiète de la fluidité du trafic. Il en résulte que les caméras sont placées pour la protection des commerces, à proximité des transports en commun, arrêts de bus, parcs, espaces publics, des « bâtiments frappés d’un statut diplomatique », des axes de pénétration dans la capitale. On avait aussi le white star, une équipe de foot en seconde division. Avant que la décision ne soit réellement prise, on se rend sur place avec un élévateur, afin d’avoir une idée d’à quoi ressemblera la vision qu’on aura à l’aide de la caméra. On ne monte pas trop haut, pour que l'angle de vue permette des identifications de visage ou de plaque d'immatriculation. Les détails techniques sont donc également déterminants en matière de choix de placement des caméras. La question du coût est évidemment aussi déterminante.

La décision est prise par le conseil communal après consultation du chef de corps. [à la question : « le conseil communal a-t-il jamais dit non ? » la réponse est non car « les dossiers sont bien préparés » maintenant il y a toujours matière à discuter « et pourquoi ici et pourquoi pas plutôt là ? » etc].
Appendix 13: Interview with Chris Cortoos, Luc Blanckaert, and Johan Helmons (STIB/MIVB)

2014-07-28, 9am at the STIB/MIVB offices at the Manhattan Tower, by Corentin Debailleul and Pauline De Keersmaecker

Summary: Chris Cortoos, whose function as described in his email signature is: “Techno-prevention Manager, SU Field Support, Operations”. When we met him, he described it as: responsible person for technoprevention (securing stations and warehouses), and for the ‘celluling’, or image division (the treatment of demands coming from the police, from employees, or from the public to see access CCTV-recorded images, as they are the only service except for the technical one to have access to those images). Mr. Cortoos had also invited two colleagues that he referred to as his “assistants”, Johan Helmons and Luc Blanckaert, who deal with securing the sites owned by the STIB/MIVB. They works mainly during the initial phases, before the setting up of cameras, preparing the files. They work in collaboration with the Brussels Region which pays for the installation of cameras in the publicly accessible places (the buildings of the STIB/MIVB are legally considered as privately owned). The cameras in the closed areas are financed by the STIB/MIVB. Mr. Cortoos firstly tested us by checking our knowledge of the CCTV jurisdiction in Belgium. He repeated many times during the interview “You have to read the legislation, it’s really important, too many people talk about CCTV and don’t know anything about it”.

The interview was followed by a visit of the security watch room in the metro/tram station Rogier where we met two operators around 10:30 am. We only took notes and did not record the interview so we cannot differentiate the different persons as they were constantly answering and commenting altogether.

Pourquoi place-t-on des caméras ?

Pour deux raisons principales :

- Partie ‘opérationnelle’ (dispatching métro et tram) ;
- Partie sécurisation de nos clients et de nos employés.

Il n’est pas possible de distinguer clairement quelles caméras sont placées pour quels objectifs, car les caméras placées à des fins opérationnelles servent en même temps un but de sécurisation. L'inverse en revanche n'est pas vrai (une caméra placée pour des raisons de sécurité n’a pas obligatoirement un but opérationnel).

L’installation de caméras a commencé dès 1968 avec le réseau de pré-métro qui allait jusqu’à Porte de Namur, et de Schuman à De Brouckère. Des caméras étaient placées sur les quais et aux kiosques de vente. On poussait l’industrie belge à l’époque, puisque le contrat avait été passé avec ASEC et Philips. Le début de l’existence du réseau sous-terrain et les exigences en matière de sécurité que cela implique ont donc marqué le début de l’utilisation de caméras par la STIB.

On reçoit plusieurs demandes par jour pour consulter nos images (environ 1500 demandes/an). Les demandes viennent du parquet, de la police et moins souvent en interne (parfois pour des faits ridicules tels un vol de boîte à tartines dans un frigo commun, là on dit non, les gens se
rendent pas compte du travail que ça représente, on va pas faire tout ça pour trois tartines).
Dans les dispatchings opérationnels, les opérateurs ne regardent les caméras qu’en cas de problèmes pour orienter la réaction. Au contraire, dans le dispatching sécurité, les opérateurs regardent des images en direct en suivant des ‘planchettes’ spécifiques [une partie de leurs écrans est aussi programmée pour afficher les images de caméras qui réagissant à certains stimuli]. Les systèmes de caméras intelligentes aident au visionnage optimal des images.

Toute la flotte est équipée de caméras embarquées, à l’exception de 5 bus de remplacement et du tram-restaurant. Concernant la manière dont on signale au public la surveillance par caméra, on fait effectivement attention. Même si chez De Lijn, c’est ‘plus correct’ que chez nous. [Nos interlocuteurs insistent sur le fait qu’ils doivent faire particulièrement attention à respecter les règles car il sont « sous surveillance », doivent rendre des comptes précis et ne sont pas toujours très appréciés, aussi par certains médias].

Vous avez abordé la question du début de la mise en place du réseau de caméra. Comment celui-ci s’est-il développé au fil des années?

Le développement des caméras de surveillance s’est fait chaque fois qu’il y a eu prolongation d’un axe du réseau ou inauguration d’une nouvelle gare. Il y avait maximum 16 caméras (en moyenne 10-11) par station par le passé, en raison de limitations techniques, et ce jusqu’en 1998-1999 avec l’arrivée de la caméra couleur. Cette évolution permettait d’affiner les images, même si les caméras perdaient grandement en efficacité avec la diminution de la luminosité qui affectait beaucoup le rendu des couleurs ; ce qui posait problème car la luminosité était réduite le soir pour faire des économies d’énergie. Les opérateurs avaient toujours accès aux commandes pour ré-augmenter l’éclairage, mais ça prenait bien une minute et parfois au bout d’une minute, ce qui devait être éclairé avait déjà foutu le camp. Puis vers 2002-2003 est venu l’enregistrement des images. Les grandes phases de ce développement suivent les progrès de la technologie. Au bout de cinq ans, une caméra est obsolète. Puis, les demandes évoluent aussi, on veut toujours être capables de voir plus.

Nos ‘visiteurs non-souhaités’ adaptent également leurs comportements. Prenons l’exemple des ‘sous-quisais’, ce sont des endroit pas fréquentables mais malgré tout fréquentés. Lorsqu’on en a bloqué l’accès à la station Ribaucourt alors qu’ils étaient occupés par des toxicomanes, ceux-ci se sont déplacés vers la station Yser. Vous voyez, nous sommes malins mais eux ils sont malins aussi. Ils ont trouvé d’autres endroits pour faire leur cuisine. Enfin, en cas de problèmes, on trouve des solutions. Pour ce faire, nous collaborons aussi avec toutes sortes d’a.s.b.l., ainsi qu’avec la police. Nous devons parfois aussi faire de la chasse au ‘mythe urbain’ ou ‘mythe citadin’, comme lorsqu’on nous avait dit : « Il paraît que des prostituées s’adonnent à leur business dans les ascenseurs de la station Yser ». Alors on a contacté nos agents sur place, qui nous ont confirmé « on trouve effectivement des préservatifs à proximité ». Néanmoins, bon, c’est compliqué car pour des raisons de sécurité, il n’est pas possible de bloquer les ascenseurs. Donc nos agents ont visionné en particulier les images dans les ascenseurs et ils n’ont jamais rien constaté…

Il reste toujours le mystère des préservatifs aux alentours…

Oui mais ça vous comprenez, les prostituées demandent 50€ : 20€ pour l’hôtel, 30€ pour le reste, donc si elles peuvent économiser 20€ c’est pas plus mal ! Alors utiliser des recoins
sombres de la station, ça leur est utile. Toujours est-il qu’elles n’utilisaient pas les ascenseurs, et les caméras nous ont aidé à débouter ce mythe urbain.

**Qu’en est-il de la question des budgets consacrés aux caméras?**

C’est payé par la région, et nous avons des contras-cadres avec les fournisseurs. Mais je ne peux pas vous en dire plus parce qu’en réalité je ne sais pas. Nous ne sommes pas matérialistes nous, vous savez ! [Rires].

En termes d’employés dédiés à la surveillance par caméra, il y a 3 personnes par shift et par dispatching (les dispatchings sont au nombre de 5: bus, tram, métro, bâtiment, et sécurité). Dans le dispatching tram, ils regardent principalement les croisements. De façon générale, les opérateurs font du soutien à l’intervention ou regardent ce qu’il se passe en cas d’alarme PACS (alarme silencieuse), mais il est évident qu’ils ne peuvent regarder continuellement ce qui se passe en direct.

**Avez-vous beaucoup affaire à des questions de vandalisme contre vos caméras?**

Nous n’avons pas de vrai problème de vandalisme contre nos caméras, ça arrive mais pas de façon systématique. Étonnamment.

**Considérez-vous les caméras comme utiles?**

Lorsqu’on constate un incident au niveau de la sécurité, ce sont nos propres agents de sécurité qui interviennent dans 90% des cas, sauf s’il y a des gens qui tirent des coups de feu ou quoi. Dans ce cas là on appelle plutôt la police. Elle arrive aussi automatiquement dès qu’on appelle une ambulance. Les caméras nous sont donc très utiles en termes d’aide à l’action sur le terrain et d’identifications des besoins d’une intervention (comment interviennent- on, avec combien d’agents, appelle-t-on la police etc.). Les caméras sont également utiles lorsqu’il s’agit d’identifier des personnes suite à un évènement (ceci n’est possible que depuis qu’on enregistre les images).

Les événements de Delta ou de Porte de Namur constituent des pressions pour mettre plus de caméras ou renouveler le réseau. Au début, seules quelques caméras à but opérationnel existaient. Suite aux incidents, il y a eu de 30 à 40 caméras par station. Nos ‘voyageurs non souhaités’ le savent aussi, et adaptent leurs comportements. Ils savent où se trouvent les caméras et contournent la difficulté. Mais maintenant ça ne va plus être possible, chaque caméra est surveillée par une autre, au moins. Nous avons 90-95% de visibilité dans les stations, plus moyen de s’échapper. Aussi, nos nouveau modèles de caméras (dômes) sont plus utiles parce qu’il est difficile de voir vers où leur œil est dirigé. À Saint-Guidon, il nous faudrait deux caméras dans le plafond, ça ce serait parfait, mais pour des raisons techniques, on ne peut pas, les techniciens ne sont pas d’accord.

La police fédérale a le même accès aux images que les équipes sécurité STIB.

**Qu’est-ce qui va changer pour vous avec le projet de mutualisation de la vidéosurveillance en Région de Bruxelles-Capitale ?**

Une plate-forme d’échange des images va se constituer. Nous, on va se connecter là-dessus seulement en temps réel. Ils ne vont pas reprendre notre réseau. On va leur envoyer certaines
images. Nous avons le plus grand réseau de caméras à Bruxelles et nous voulons en rester maîtres. On travaillera aussi en collaboration avec la SNCB dans les stations 'intermodales' - un mot qui ne veut rien dire - ce n’est pas encore en place mais c’est un projet en cours.

Pour nous, ce projet de mutualisation, ça ne sert à rien. Nous n’y avons aucun intérêt en tout cas. Il faut savoir aussi que lorsque vous avez accès à plus d’images, vous avez aussi plus de responsabilité. Vous ne pouvez plus dire ‘on ne savait pas’, et aujourd’hui certaines zones de police sont bien contentes de ne pas devoir se charger de la sécurité dans le métro: il faut connaître les stations, ça requiert des formations, du personnel... Bref, les zones de police ne sont pas spécialement motivées non plus.

Il s’agit plutôt d’une initiative politique, non ?

Oui, Milquet [alors ministre de l’intérieur] a écrit une loi qui nous oblige à partager nos images. Mais l’arrêté n’est pas encore signé. À la STIB, on n’est pas d’accord. Il y a des problèmes dans le texte qui doivent être corrigés avant. Donc officiellement, on sait rien faire, c’est bloqué. Bon, nous, de toute façon, on n’est pas demandeurs.

Pourriez-vous nous fournir une liste avec le nombre de caméras par station ?

Non, ça vous n’aurez pas. Vous savez, il y a deux étudiants qui nous écrivent, enfin deux prétendus étudiants, nous on ne sait pas qui vous êtes puis vous nous demandez des plans de nos installations de sécurité...

Mais ce qu’on peut vous dire c’est que toutes nos stations sont équipées. Il n’y a pas de caméras à l’extérieur. Les caméras sont placées en fonction du type de construction, du nombre de piliers qui bloquent la vue, du nombre d’accès, du nombre de niveaux de la station. Une petite station simple et calme comme Demey a environ 36 caméras, puis une grosse station comme ici à Rogier en compte peut-être 150. Je ne connais pas les chiffres exacts. L’objectif, c’est que de 90 à 95% de la station soit couverte. Parfois c’est un vrai casse-tête à cause de l’architecture, à Porte de Hal, par exemple. Il faudrait éviter à la construction ces petits coins où les ‘bandes de jeunes’ peuvent faire leurs petites affaires, vous voyez. En tous cas, ce qu’on peut dire, c’est que le port du capuchon est intéressant et utile. Mais maintenant, avec le nombre de caméras sous différents angles, on finit toujours bien par avoir une image du visage. Si quelque chose de grave se passe, on le choppe toujours. Tu peux plus échapper. Bon certains sont pas très malins non plus. Il fait son truc puis il rentre dans la rame et il enlève son capuchon alors que toutes les rames sont équipées de caméras.

J’ai vu cet article d’un journaliste flamand qui disait qu’il n’était pas parvenu à faire valoir son droit de visualiser les images de vidéosurveillance sur lesquelles il était présent...

C’est un problème vous savez. Il y a beaucoup de gens. Ils demandent puis systématiquement je réponds « non » puis, s’ils ne répondent plus rien, moi je suis content. Des demandes internes sont refusées aussi. Je réponds immédiatement « ça on ne fait pas ». Il y a les montants à justifier aussi. Le fait est que la législation est très stricte en termes d’accès aux images. Les caméras sont installées dans un but précis, qui doit être justifié pour chacune d’entre elles, et les images ne peuvent servir qu’à ça. Par exemple les caméras ne peuvent pas servir à surveiller la qualité du travail des employés. Donc quand une demande ne se conforme pas à ce pour quoi la caméra est installée, on dit non. On n’est pas toujours aimés non plus. On est surveillés par tout le monde.
Certains médias ne nous sont pas favorables. Donc on doit vraiment respecter les règles. Parfois ma direction me demande pourquoi on agit de telle ou telle façon, alors j’explique: les risques, les répercussions possibles, alors après ils sont d’accord.

On peut aussi installer des caméras en surface, en extérieur, mais il faut faire une demande à la commune. Ça peut être très utile pour gérer le tram, les arrêts. Mais par contre, en terme de sécurité, là on ne veut pas avoir à gérer la sécurité en extérieur, c’est le rôle de la police. De Lijn, à Gand, a des caméras en plein centre-ville pour gérer ses trams. Un tram passe au travers d’une rue commerçante, il faut pouvoir le dévier en cas d’affluence prolongée. Le gros problème de la vidéosurveillance pour la police c’est qu’ils n’ont pas le personnel. Et quand on place des caméras, leur utilité dépend aussi de certaines décisions de gestion. Combien de stewards? Comment visionnent-ils les images? Quelles technologies intelligentes allons nous utiliser et comment? Ce sont des questions qui se posent.

Encore un an et demi et notre projet d’installation de vidéosurveillance sera terminé. Puis on lancera un nouveau projet de caméras intelligentes. Pour le moment, dans le métro, les systèmes ne fonctionnent pas : il y a bien trop de monde et d’activité. Les vendeurs de caméras racontent beaucoup de choses mais nous on sait ce qu’on veut.

Chez MOBIRIS, il y a par exemple un système qui permet de détecter des piétons dans les tunnels, vous n’utilisez pas ce genre de système ?

[Sourires]. Non, ça n’est pas vraiment efficace. Chez nous, les systèmes sonneraient perpétuellement, ce n’est pas fiable, dans des bureaux peut-être mais pas dans nos stations. Vous avez des gens qui dansent, qui sautent, qui courent. Si les opérateurs reçoivent continuellement des alarmes, ils n’y prêtent simplement plus attention. Bien sûr, s’il y a quelqu’un sur la voie, on doit stopper les voitures. Mais par contre, si c’est un renard bon... On prévient le conducteur qu’il y a des renards et puis voilà. Puis les opérateurs font correctement leur boulot, ils savent se taire. La STIB a pour mission de fournir un certain nombre de kilomètres de voyage par an. Si on ne remplit pas le contrat, ça coûte beaucoup d’argent.

Pour les caméras intelligentes, on a trouvé, ou plutôt développé quelque chose. Ça coûte autant que tout le budget disponible. C’est donc encore un fantasme. Le problème des techniques conventionnelles de détection des humains, la détection de CO_{2} et des battements de cœur, qui sont utilisées pour détecter les clandestins par exemple, ne fonctionnent pas pour nous. La première méthode en raison de l’aération des stations et des déplacements de masse d’air avec les rames qui passent, la seconde parce qu’il y a simplement trop de gens. Mais en joignant les deux techniques, on tient peut-être une solution. Mais enfin ça reste juste une idée, une fantasme. L’avantage des caméras, c’est aussi que vous pouvez les placer et voir là où il est impossible de placer un homme. Puis un agent, ça coûte 60.000€/an. Si vous arrivez à avoir un système intelligent qui permet à un seul agent de surveiller de nombreux endroits, c’est tout de suite plus intéressant. Mais pour le moment, ça ne marche pas du tout, 95% des alarmes indiquant des soi-disant situations dangereuses sont des fausses alertes, c’est proprement inutile. Nous n’utilisons pas non plus de système avec prise de son. Il n’y a pas de microphone, il y a beaucoup trop de bruit dans le métro, ça ne va pas, enfin pas encore.

Je vous invite à consulter le site de la Privacy Commission, il ont fait une analyse intéressante des différentes législations dans divers pays. Il faut être particulièrement pointu sur la législation. Il y a tellement de gens qui racontent n’importe quoi, parfois même la police... Nous
on déclare nos caméras comme ayant un objectif de « surveillance », comme ça peut recouvrir pas mal de choses différentes, ça nous permet d'utiliser les images en toutes circonstances, c'est le plus efficace.

[Mr. Cortoos nous indique qu'il a été par le passé consultant pour différentes municipalités en vue de l'installation de systèmes de vidéosurveillance urbain].

[Visite dans les locaux de surveillance pour la sécurité, sous-sol à Rogier, où nous rencontrons deux opérateurs :]

Pour le moment c'est calme : le cinéma [parle des prostituées etc.], c'est pas pour le moment. Les gens qu'on ne veut pas sont en vacances... Mais ils reviennent en septembre !

[Tentative de rires feints]. Et c'est qui les gens que vous ne voulez pas ?

Oh là, ça... Il y toutes sortes de gens qui nous emmerdent. Surtout les SDF et il y en a beaucoup ! Aussi, les alcolos qui emmerdent les conducteurs... Souvent, on a aussi la sortie des écoles, il y a des bagarres.

[Une alarme silencieuse est enclenchée par un chauffeur de bus, l'opérateur se renseigne sur ce qu'il se passe]

On ne sait pas avoir l'accès immédiat aux images dans les bus, par contre on peut avoir le son.

Qu'est-ce que vous faites si vous voyez des gens passer par-dessus les portiques ici sur les images ?

On ne fait rien, vous savez, c'est de la fraude, il ne s'agit pas en soi d'un problème de sécurité. Mais vous seriez étonnés de voir qui passe par-dessus les portiques, y a pas d'âge ou de classe particulière. Vous penseriez que ce sont seulement les jeunes mais pas du tout ! On a aussi des personnes âgées, des hommes en costume, on a même eu quelqu'un qui avait un abonnement en ordre ! Quand on lui a demandé pourquoi il passait par-dessus, il a simplement répondu que c'était plus facile que de valider son abonnement, allez comprendre ! Ces portiques, ça ou rien...

Vraiment ça ne sert à rien ? Il me semble que les ventes de ticket de métro ont quand même pas mal augmenté depuis leur installation, non ?

Cortoos : Oui, oui, les portiques sont efficaces on a plus de ventes de tickets mais aussi et surtout moins d'agressions, moins de problèmes dans nos stations.

[le temps passe, les opérateurs discutent avec Mr. Cortoos, l'atmosphère est détendue]

Un opérateur : « Vous n'êtes pas graffiteur, j'espère ? »

Non, non, pas sur la STIB !

[Sur le mur, une carte de Bruxelles délimite 13 zones d'interventions ne recouvrant pas l'entièreité de la RBC : seulement le centre, la première couronne, la majorité du réseau de métro. Mais la majorité du Sud de la ville et des endroits comme Berchem, l'extrême Nord ou Est sont absents des zones d'intervention et appartiennent à un district général où « quasiment aucune intervention ne sont nécessaires, le district est seulement couvert par des voitures d'intervention de la STIB].