The Context and Concept of Welfare Surveillance
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Master's thesis
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Preface

In daily life, we all see what is going on around us. Nevertheless, we see different things. My view on the world is different from yours, even though we are in the same open space. Even if we (think we) see the same thing, interpretation never leaves our minds. It makes us function. We collect facts and order them, to be able to make sense of the world, but we can never capture it fully. At the same time, there must be things, actions and objects that neither of us see, but in fact are there. Sometimes literally.

Now, if you start believing you have picked a religious paper to read, you are wrong. You are right in the middle of the introduction to my Master's thesis, which I wrote to finish my Political Science programme at Radboud University Nijmegen. The starting point is the conviction that the world and all of its so-called 'facts' are multi-interpretable, and that we are all aware of this. However, at the same time these multi-interpretable 'facts' are collected and stored by governments and companies. Our 'non-black-and-white-actions' do not only exist in our minds, or in our temporal actions, but also in data, stored on computers, somewhere in the clouds. That is where they become less interpretable, more 'black-and-white'.

A lot of normative responses to this development have been written. What I did in this Master's thesis is find out how [some of] this takes place, as empirical and 'physical' as possible. I theoretically constructed and embraced a concept of 'welfare surveillance': ways of collecting and handling data in four spheres of the welfare state: social assistance, housing, education and health care. I developed the concept using all kinds of social science literature, and studied one of the four spheres more deeply: surveillance in health care.

What I found out you will read at the end. It will be of no surprise that the end to this project is the starting point of a new one. Just as the end to this academic process is, the ending to a Master's Programme also indicates the start of a new phase in life. Before leaving student life behind, I wish to thank many of the members of the Department of Political Science for making me ask the most of myself, while paving a road full of opportunities. I wish to thank Niels Spierings for challenging me from my first academic assignment ever, years ago. I believe I made some progress along the way. From another point of view, I want to thank Andrej Zaslove for his flexibility in letting me study a topic that is new to the Department and the trust he had in me while spending my days behind the screen of the computer. Just as Mieke had, first from France and later at home.

Finally, I believe that to gain masterful skills in Political Science you need some peace and good people around you. I was given them, collected some and stored them all.

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Sjors Talsma, MSc.

1.   Introduction

Social scientists are now speaking of an increasing surveillance of everyday life (Lyon, 2004) or the development of surveillance societies (Lyon, 2006; Lyon, 2007; Marx, 2006; Mattelart, 2010; Murakami Wood, 2009; Rule, 1974; Whitaker, 2006) with digital and technological innovations standing at the forefront, as an important factor in the development of surveillance (Clarke, 1994; Graham & Wood, 2003; Haggerty & Ericson, 2006: 4). At the same time, in our information-driven society the role of technology and ICTs in the workings of the welfare state is of increasing importance. Electronic innovations and the continuing development of ICTs make it possible for the state to increasingly track its citizens. This so-called welfare surveillance is a feature that has developed itself from physical, with control procedures in person, to electronic (Gilliom, 2001). This is significant, since "political power is also inseparable from technical power" (Henman, 2006: 206) and "Politics is also technics" (ibid: 206).

This thesis will be a contribution to the construction of theory on welfare surveillance. What is the link between welfare state regime type and levels of surveillance? From a political scientists' perspective surveillance will be approached to be embedded in the context of the welfare state. The process of this thesis is one of theory building; during this process I will refine the theoretical work by testing it on a case. The welfare surveillance research field is young and relatively small-sized. This opens up the opportunity to perform groundbreaking, establishing, creative and innovative research. The field is still in need of both theoretical and empirical research. This thesis is in line with the most up-to-date and state of the art research in (welfare) surveillance and builds, among others, on Henman & Marstons examination of public and private surveillance practices in the Australian welfare state (Henman & Marston, 2008: 201). At the end of their article, they state that "there remains insufficient comparative research to determine whether surveillance practices in social democratic and corporatist welfare state regimes are similar to those in Australia, or if there are noticeable differences. National comparisons of welfare surveillance within and between welfare regime types is an area requiring further research" (Henman & Marston, 2008: 201). The major contribution of this thesis to this research challenge is the introduction of the concept of welfare surveillance. The research area is lacking of a broader concept that can be useful in studying welfare surveillance.

There is a good possibility that the level of welfare surveillance differs for different welfare regimes – that is where Henman & Marston's call for more research in this area comes from. However, it is important to have a clear view on what welfare surveillance *is*, before attempting to compare across cases, time or, as Henman & Marston suggest, welfare regimes. That is why this thesis is an attempt to expand Henman & Marston's case study of Australia, what results in a two folded objective: first, the formation of a concept of welfare surveillance, in order to help the

research field forward. Second, broadening up Henman & Marston's work, by measuring welfare surveillance, using the concept as a comprehensive outline of what welfare surveillance consists of. This way, this thesis is a combination of concept or theory formation and theory testing.

In comparative political science, comparing is important to "develop knowledge about society and politics and insights into what is going on, how things develop and, more often than not, the formulation of statements about why this is the case and what it may mean to all of us" (Pennings, Keman & Kleinnijenhuis, 2006: 4). Pennings, Keman & Kleinnijenhuis (2006) bring up the rise of populist parties as an example, to clarify this. With studying populist parties the first thing that has to take place is to come up with a well-suited definition of populism. A good definition of populism is needed to be able to analyze if the one party is more populist than the other (Pennings, Keman & Kleinnijenhuis, 2006: 4). In other words, the problem is not the observation of populist parties, but "more *how* to measure it properly from a comparative point of view" (ibid: 4). With the study of the phenomenon of welfare surveillance the situation is alike. Although there are a lot of different (types of) studies after welfare surveillance, there is a lack of a good definition of the subject matter. An investigation of the contemporary debate on (welfare) surveillance shows the strong normative character of it. It could even be said the field of surveillance research is part of an emancipatory genre, like critical, feminist or postmodern work, where there is "an intent to act to change oppressive circumstances" (Marshall & Rossman, 1999: 22). It is the task of this Master's thesis to step out of this normative continuum and develop an empirical account of what welfare surveillance is. A good concept or definition of welfare surveillance is needed to be able to analyze if the one country has a higher level of welfare surveillance than the other. It would be a major contribution to the research field of Surveillance Studies if one would become able to compare countries on their level of welfare surveillance. The establishment of a thorough definition and description of the concept is therefore necessary. That is why the task of this Master's thesis is to develop a concept of welfare surveillance that can be operationalized in a way that makes it measurable in different cases; across different countries.

Out of the literature on surveillance, literature on the welfare state, and studies after welfare surveillance, descriptions and variables are distilled and the concept of welfare surveillance is constructed. This concept is build up out of so-called building blocks and building bricks. Empirical realities differ across countries: that is why the concept of welfare surveillance should be one that is able to travel. It should be possible to, in order to understand welfare surveillance, discuss the building blocks and building bricks, even while performing research: at the same time it must be possible for other researchers to decide to investigate not all bricks, for whatever scientific reason. The concept of welfare surveillance constructed in this thesis should be one that can be used to study welfare surveillance in other cases as well, but at the same time it must be possible for others

to amend the concept.

In line with this reasoning, the research question that guides this thesis is: what is welfare surveillance and how can it be analyzed and compared across countries? Next to this theoretical main question, one of the subparts of the concept of welfare surveillance is actually measured: several of the building bricks (the combination of electronic patient files, health information exchange and national health records) of the welfare surveillance building block of healthcare. This leads to also answering the question: are there differences in healthcare surveillance (as a subpart of welfare surveillance) across welfare regimes, and if so, what explains these differences? The answers to both research questions and with that, the ending of this thesis, is a good starting point for a broader comparative empirical study after the level of welfare surveillance in different countries. Since it would require years to study welfare surveillance in multiple cases, this is more suited for a PhD-project than for a Master's thesis. That is why the ending of this thesis could be the beginning of a period in which welfare surveillance as defined in this thesis is extensively studied in many different cases. A study like this Master's thesis has not been done before and will contribute to a broader understanding of welfare surveillance around the world. Hopefully the combination of a definition of welfare surveillance plus an example of how it can be operationalized and measured (so it is comparable) will be of advantage for scholars of surveillance, and will contribute to the never ending quest for better knowledge of surveillance.

1.1   Structure and method of this thesis

In this paragraph the structure and method of this thesis are discussed. Structurally speaking, after above introduction, the research question is elaborated on. Next, the scientific and social relevance of this thesis are discussed. What then follows is a theoretical section on surveillance, followed by a discussion of the welfare state. Next, the current welfare surveillance literature is discussed and ultimately the concept of welfare surveillance is presented. What then follows is a case-study of the welfare state pillar of healthcare, plus a conclusion and discussion on the future of welfare surveillance theory.

Methodologically speaking, this thesis will result in a small stepping stone to explanations of the occurrence of welfare surveillance. The way this is done is exactly as a group of major political scientists (such as the well-known Theda Skocpol and Peter Katzenstein) describe it. It is in line with the work of scholars "who mainly pursue theoretically informed empirical political analysis, focusing on one or more countries, through diverse conceptual lenses and utilizing a variety of data, contemporary or historical, qualitative or quantitative" (Kohli, Evans, Katzenstein, Przeworski, Hoeber Rudolph, Scott & Skocpol, 1995: 2). This thesis will show a strong theoretical nature. In a literature study, literature from different strands of social science is brought together to let it make

sense under one umbrella of welfare surveillance. At the same time the empirical work that is done, will mostly have a qualitative character. This implies that the study of welfare surveillance in the different cases will result in thick descriptions of these cases. The empirical proof that is provided will both be secondary literature as primary data. Primary data indicates numbers as well as text. The approach to studying welfare surveillance empirically is not statistical. It is not said that it will never be possible to perform more quantitative, statistical research after welfare surveillance, but because of lack of data that path is not pursued in this thesis. At this point in time, with the question posed in this thesis, welfare surveillance lends itself best to be studied qualitatively. To be able to make the broadest comparison possible, a larger number of cases is compared on a smaller number of indicators. This way it is possible to investigate whether there is a connection between welfare state regime type and level of welfare surveillance. One of the basic features of a thorough scientific method is the formulation of a solid research question. That is what is done in the following paragraph.

1.2   Research question

In line with earlier introduction, the main research question that will be examined in this thesis is: **What is welfare surveillance and how can it be analyzed and compared across countries?** To answer this main question, several subquestions are necessary. These are: (1) what is surveillance? (2) what sort of welfare surveillance research is done before?; (3) how should welfare surveillance be defined; what should the concept of welfare surveillance look like?; (4) how can welfare surveillance be compared across countries? and (5) is healthcare surveillance (as a subpart of welfare surveillance) different in different welfare state regimes, and what is the explanation for this?

1.3   Scientific relevance

The research field of surveillance is relatively new and the number of researchers relatively small. The research field of welfare surveillance, when regarded as a subdiscipline of surveillance research, is even younger. At the same time, the amount of political scientific, or more specific, comparative political scientific work on welfare surveillance is hardly there – while at the same time, the work there is on welfare surveillance exhibits a normative view. This thesis will contribute to comparative political scientific research on welfare surveillance, and is, owing to its methods, in line with the "revival of interest in qualitative methodology", as put by Munck (2007: 56-57) and the task at hand is to use the comparative method as described by Lijphart, as a "method of discovering empirical relationships among variables" (Lijphart, 1971: 683): to find out what welfare surveillance is and how it operates in different countries. The development of an informed account of welfare surveillance is of importance since "without attention to evidence and systematic ways of collecting, comparing and

debating it, discussions of surveillance will be impoverished" (Raab, 2002: 554).
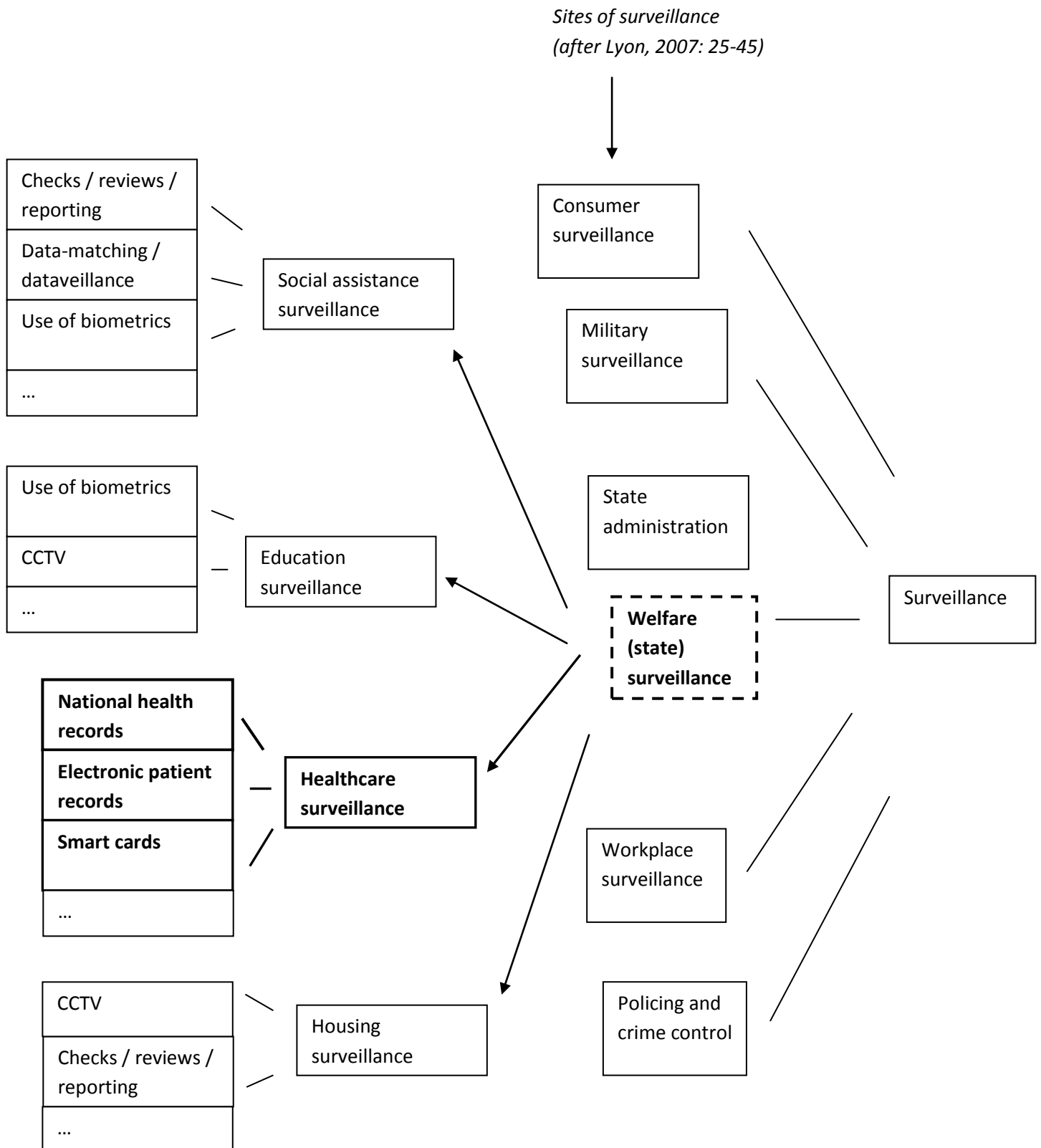
By examining welfare surveillance, this thesis will contribute to extending the knowledge on the topic, by creating the first broader definition of the subject. Studying welfare surveillance is directly linked to studying the welfare state, with its currently changing nature. After all, ICTs "provide the means through which new social policies can be developed, evaluated and administered" (Henman, 2006: 215) and this changes the political rationality of the welfare state, with a sharper focus on targeting and social risks (Henman, 2006: 215, Henman in Henman, 2006: 215).

The goal of this thesis is to develop the concept of welfare surveillance, as a subpart of surveillance – not to develop a grand theory of (all of) surveillance. This goal is in line with Lyon's viewpoint on how surveillance theory should develop itself. He notes that "… the quest for an abstract grand theory of surveillance is a wild-goose chase, particularly if it is yoked with particular concepts and is supposed to have universal relevance. The theoretical task is better seen as an ongoing conversation in which concepts or theorems that prove helpful should be explored and used, but even if they loom large they should not be permitted to dominate the debate" (Lyon, 2007: 46-47). Finding an answer to the posed research question of this thesis is exactly that: the results are suited to play a role in the ongoing conversation on the development of surveillance theory. The introduction of a concept of welfare surveillance is necessary to be able to debate and explore it, but at the same time is flexible itself, because of its building blocks and bricks that can be removed, while others can be added. It is a study that puts questions about the dangers of surveillance on hold and instead wants to be as analytical and precise as possible, in understanding and explaining welfare surveillance[1]. If we would construct a figure out of surveillance research that has been done so far, and we would place the welfare surveillance approach of this thesis in it as well, the following figure shows how welfare surveillance relates to other types and studies of surveillance:

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[1] See Coutard & Guy (2007). With studies after CCTV as examples, Coutard & Guy indicate the importance of this type of surveillance research (Coutard & Guy, 2007: 725-728).

Figure 1: Surveillance overview

*Sites of surveillance
(after Lyon, 2007: 25-45)*

Checks / reviews / reporting	
Data-matching / dataveillance	Social assistance surveillance
Use of biometrics	
…	

Use of biometrics	
CCTV	Education surveillance
…	

National health records	
Electronic patient records	**Healthcare surveillance**
Smart cards	
…	

CCTV	
Checks / reviews / reporting	Housing surveillance
…	

Consumer surveillance

Military surveillance

State administration

Welfare (state) surveillance

Surveillance

Workplace surveillance

Policing and crime control

Above figure is the frame of reference to keep in mind while reading this thesis. It is the framework that can be referred to when speaking of the development of surveillance research. A final comment that should be made with reference to the scientific relevance of this thesis is that the typical comparative politics approach of this thesis to welfare surveillance brings the topic into the world of comparative politics. With power as primal feature of politics, political science and surveillance, this could easily be called a *must* for both the field of surveillance as political science. Lyon (2007) acknowledges this when he says that "Surveillance is always bound up with questions of power and its distribution, which is a key theme of political science" (Lyon, 2007: 20). At the same time, Lyon describes comparative studies of social sorting[2] at the nation-state level, in welfare administration, as valuable (Lyon, 2004: 142-143). All this makes for the (political) scientific relevance of this thesis.

1.4   Social relevance

The last decades, "Organizations have increasingly assumed that there is a need for large quantities of identified data about people. This "information richness" has assumed the dimensions of an imperative, to the extent that individuals who demur when asked for evidence of identity are frequently presumed to "have something to hide" (Clarke, 1994: 9). In contemporary societies, there is resistance to practices of surveillance: "various groups are dedicated to querying surveillance or at least to improving the prospects for data protection and privacy" (Lyon, 2007: 169). To this purpose, there are major organizations like the British Privacy International or the American based Electronic Privacy Information Center (ibid: 169-170) that show that the debate on surveillance is not 'just' a theoretical debate at all.

At the same time, at a higher level of abstraction, if the surveillance debate is placed in the broader theme of technology and society, one might realize that "The recognition of the significance of technology as a productive power in the shaping of public policy is not simply of intellectual interest" (Henman, 2006: 217) and "… it radically reorganises our analytical apparatus and understanding of policy processes and the production of policy. In doing so, technology and technological innovations have important implications for how we might understand the future directions and forms of political intervention in public policy" (ibid: 217). Here, Henman shows how important the development of technology for society is.

Beside it, in a world where technology is of increasing importance in both our daily lives as in politics, questions of power arise. Or, as Monahan states: "surveillance is about exercises of power and the performance of power relationships" (Monahan, 2011: 495). If we develop an informed account of how those in power use technology, if we are able to show how differences in the use of technology shape, create or build inequalities between people, we learn something about society

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[2] Also labeled classifying, or categorizing. See Lyon (2002) and Bowker & Star (1999).

and we will be able to make sense of our empirical reality. We get a better grip of what is going on in the world around us and why this is so. By comparing, classifying and categorizing we increase our understanding and knowledge of the world around us[3]. The topic of surveillance is one that is of utmost important for generations to come, for technology is of growing importance to social organization: in the use of personal data, for instance (Marx, 2006: 79). All this is what makes the search for an answer to the main question of this thesis socially relevant.

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[3] For more on this, see Jenkins (2000).

2.   Surveillance 'theory'

The usual metaphors used when speaking of surveillance are George Orwell's 'Big Brother' or Michel Foucault's Panopticon (Haggerty & Ericson, 2000: 606-607). However, "Surveillance Studies is a transdisciplinary field that draws from sociology, psychology, organization studies, science and technology studies, information science, criminology, law, political science and geography", is how Murakami Wood describes the study (2007: 245). In this chapter contemporary work on surveillance will be presented. There will be a general paragraph on surveillance and more specific on welfare surveillance. At the same time, the connection between comparative politics and (welfare) surveillance will be made, by showing how the topic of surveillance is suited to fit into a comparative politics approach.

2.1.   From Bentham to Foucault…

The origins of surveillance theory stem back to Jeremy Bentham and, later on, Michel Foucault. Bentham, in his 1791 'Panopticon' called surveillance 'a new mode of obtaining power of mind over mind, in a quantity hitherto without example' (Bentham in Mattelart, 2010: 7). The important feature in his work is the panopticon, which is "an architectural device featuring a central point […] that gives the prison warden a full view of the entire circle of the buildings honeycomb structure, whereas those under surveillance, who are housed in separate, individual cells, are seen without seeing the person who observes them. This mode of spatial organization underlay an overall project for society, a sort of utopia" (Mattelart, 2010: 7). Much later, in 1975, Foucault brought the surveillance society to light in a book called 'Discipline and Punish: The Birth of the Prison'. He described the panopticon as the "deep, solid substratum that continues to exert its power over society today" (Foucault in Mattelart, 2010: 8). In earlier societies, sovereignty combined with boundaries of territory played a role of major importance. The difference between sovereignty and discipline is the nature of the relationship. "Discipline […] is exercised over the bodies of individuals with their complicity." They are simply parts of the disciplinary machine (Mattelart, 2010: 8). However, Foucault moves away from a panoptic vision of a body-taming, soul-educating surveillance to another paradigm: that of 'biopolitics' and the 'security society' (Foucault in Mattelart, 2010: 8). The security society is an important feature in this thesis. This type of society "exerts its power over society as a whole, over 'the lives of human beings' (as opposed to the power of death which characterized the prerogative of the sovereign)" (Mattelart, 2010: 9). Welfare surveillance fits perfectly in this picture of societies with a growing focus on security and control.

2.2   … to Marx and Orwell

Nevertheless, while the study of (features of) surveillance knew its offspring with Bentham, others

like Marx, Weber, Durkheim and Orwell spoke of surveillance issues too, in a later stage[4]. Marx wrote of modern capitalist supervision, Weber of military-bureaucratic recordkeeping, Durkheim of surveillance in times of growing inequality and Orwell introduced the idea of Big Brother (Lyon, 2007: 50-53). This shows that despite the fact that the current field of surveillance studies is relatively young, the topic is touched upon for decades already. Murakami Wood shortly summarizes the development of the study of surveillance. He describes the development of the research field as emerging "through combination of the mainstream liberal sociological approach of Rule (1973) via Giddens (1985) which, following Zuboff (1988) and Gary Marx (1988), was combined with Foucault, in particular Discipline and Punish (1977), and its reading of Bentham's Panopticon" (Murakami Wood, 2007: 245). From this point on, it further developed itself into accounts of the surveillance society with a focus on technological aspects and the effects of the development of technology (Murakami Wood, 2007: 245). Although re-iterating the early history of surveillance (theory) and expanding on classical concepts would be interesting, that is what is done many times before (see for an overview, for instance Lyon, 2007). It is more enlightening to discuss the development of present surveillance theory, to discuss the state-of-the-art work, to focus on the surveillance society in its relationship with technology and to show what contemporary surveillance theory consists of. This is what is done in the next section.

2.3   Contemporary surveillance theory

Social scientists are speaking of an increasing surveillance of everyday life or the development of surveillance societies (Lyon, 2006; Lyon, 2007; Marx, 2006; Mattelart, 2010; Murakami Wood, 2009; Rule, 1974; Whitaker, 2006) with digital and technological innovations standing at the forefront, as an important factor in the development of surveillance (Clarke, 1994; Gandy Jr., 1989; Graham & Wood, 2003; Haggerty & Ericson, 2006: 4). Surveillance (and its instruments) can occur in many different ways: from dataveillance (Clarke, 1988) to CCTV surveillance (Murakami Wood, 2009). It developed itself from earlier mentioned classical concepts towards a concept where technological developments are of increasing importance. It "can be seen as a distinct 'worldview' and 'mode of ordering' in modern culture" (Donaldson & Wood, 2004: 374) and "issues of categorization have increased importance as a result of the growing prominence of new and more visible technologies of surveillance" (ibid: 374). Lyon: "The new technologies make automation and permanent record-keeping possible, the body may be watched, assessed and manipulated in new ways, everyday surveillance is local and immediate, and yet the data of large populations are captured for sorting and sifting" (2007: 54). Graham and Wood make a comparable statement when they state that "Digitization facilitates a step change in the power, intensity and scope of surveillance" (Graham &

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[4] See also Murakami Wood (2007).

Wood, 2003: 228) and "… it allows the active sorting, identification, prioritization and tracking of bodies, behaviours and characteristics of subject populations on a continuous, real-time basis" (ibid: 228). At the same time, "Surveillance is universal in the sense that no one is immune from the gaze" (Lyon, 2007: 56). Surveillance is something all of us living in developed societies are confronted with. In his 2007 'Surveillance Studies: An Overview', David Lyon states that "surveillance refers to processes in which special note is taken of certain human behaviours that go well beyond idle curiosity" (Lyon, 2007: 13). Surveillance "is the focused, systematic and routine attention to personal details for purposes of influence, management, protection or direction" (ibid: 13) and it "is endemic to modern societies" (ibid: 13). Information technology plays an important role in surveillance[5]: "… digital devices only increase the capacities of surveillance or, sometimes, help to foster particular kinds of surveillance or help to alter its character" (ibid: 15). Surveillance "… is always hinged to some specific purposes. The marketer wishes to influence the consumer, the high school seeks efficient ways of managing diverse students and the security company wishes to insert certain control mechanisms […] entry in to buildings or sectors. So each will garner and manipulate data for those purposes " (ibid: 15). What is important about surveillance is the fact that "It usually involves relations of power in which watchers are privileged" (ibid: 15) and it "is a set of practices, while […] it connects with purposes" (ibid: 15). A comparable notion of surveillance stems from Coleman & McCahill, who state that "Surveillance possesses a classificatory impulse related to the ability to socially sort and order activities, people and events" (Coleman & McCahill, 2011: 37). This has serious consequences because "This renders it a medium of power which goes beyond its technical functioning, whereby someone or some agency makes a decision about what it is necessary to know and for what purpose and in doing so initiates surveillance that reinforces and reflects predominant institutional, commonsensical or social values" (ibid: 37).

Through time, surveillance practices developed into routine and systematic operations (Dandeker in Lyon, 2006b: 3). Dandeker describes it as follows: "The exercise of surveillance involves one or more of the following activities: (1) the collection and storage of information (presumed to be useful) about people or objects; (2) the supervision of the activities of people or objects through the issuing of instructions or the physical design of the natural and build environments. In this context, architecture is of significance for the supervision of people – as for instance in prison and urban design; (3) the application of information gathering activities to the business of monitoring the

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[5] As Frissen puts it: "ICT and government, or public administration, are intensely intertwined. The nature of public administration explains this, for its primary processes always have been the processing of information and communication. So the dominant technology of our age affects the heart of government" (Frissen, 1997: 111). This becomes clearer when Frissen speaks of the Dutch government, where "central control is facilitated by the increasing use of computer matching" (Frissen, 1999: 115) which "spread all over Dutch public administration in order to detect and prevent social security and tax fraud" (ibid: 115).

behavior of those under supervision, and, in the case of subject persons, their compliance with instructions" (Dandeker, 1990: 37).

There is debate between those writing on surveillance, who are attempting to construct surveillance theory, on whether the panopticon is still relevant today (Lyon, 2006b: 4-9). The so-called post-panoptics (Boyne, 2000) are focusing on other factors than just the panopticon. "Deleuze, Hardt and Negri, and Agamben, see other factors at work, not only new technologies but new political regimes" (Lyon, 2006b: 9). In other words, surveillance theory is still developing itself[6]. Lyon states that "… surveillance theories produced within what might be called a modernist frame are as incomplete as those that some would dub postmodern" (ibid: 10) and "Modern ones relate to the nation-state, bureaucracy, techno-logic and political economy, whereas the postmodern ones tend to focus on the ways in which digital technologies 'make a difference'[7]. The one set relies on Marx, Simmel, Weber, Durkheim, and the other on Lyotard, Baudrillard and Foucault. And of course, they do not appear, ultimately, in neat 'sets'. This is merely a handy heuristic" (ibid: 10). Lyon exemplifies how surveillance theory is still in the making when he speaks of "The challenge as I see it is to move beyond the fads and fashions of social and political theory that so easily dismiss previous work as boring, irrelevant or stuck in the wrong paradigm" (ibid: 10) and he shows there is useful work to find in several fields of research when he declares that "Cultural theories […] focus on matters such as the constitution of the subject by discursive – including digital – means" (ibid: 10). The discussions on surveillance show that there are multiple ways of studying the topic (ibid: 9-12).

As we have seen so far, surveillance theory has developed itself from its offspring, the rather broad accounts in Bentham's work, into more specific theoretical or scientific conceptions in leading scholar David Lyon's work; still theory is in the making. Then what would be the right path to pursue at this point? What is clear is that, however interesting, the surveillance theory building process is moving beyond the panopticon. One of the possible paths to follow in thinking on and studying surveillance is Foucault's concept of governmentality, which is exactly what Lyon (2006b: 12) and Haggerty (2006) propose: "… rather than contribute any single such explanatory model in place of the panopticon, Haggerty hints that another Foucauldian theme, governmentality, should be seen as a source of useful insights that serve to frame a range of activities under the surveillance studies

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[6] Another way in which this development can be seen is the fact that for a long time, issues of surveillance have been dealt with mainly in terms of its influence on privacy. It is as Brighenti states: "Concerns about the political effects of surveillance are often interpreted as the task of protecting private life against surveillance" (Brighenti, 2010: 51) and "We need to replace the false dichotomy of surveillance and privacy with a more nuanced and pluralist understanding of the social working of surveillance" (ibid: 51).

[7] The fact that surveillance theory is still in development also occurs in the approach to answering the research question of this thesis, because it shows both modern as postmodern touches by declaring the role of the nation-state and bureaucracy as relevant, but at the same time is focusing on how digital technologies are of importance.

rubric" (Lyon, 2006b: 12). This once again clarifies that there is no single surveillance theory and that in studying surveillance it is possible to draw from several schools of thought.

For this reason, it is not possible to perform a political scientific project like this Master's thesis in the regular way of placing an existing theory in contrast with empirical facts, to find out what could be wrong with the theory, and how the theory could be improved. This thesis is part of a development that is taking place earlier on: the study of the previous studies and cases of welfare surveillance serves to improve our knowledge on how welfare surveillance is operating. It is attempted to discover how welfare surveillance operates and why this is so. A governmentality approach is useful in achieving this goal. Previous authors on welfare surveillance have focused solely on welfare as in terms of social assistance to, for instance, the poor. This thesis makes the case for broadening up this perception of welfare surveillance whereby all four major pillars of the welfare state are taken into consideration. In a way, one might argue 'welfare surveillance' becomes 'welfare state surveillance'[8]. The reason for doing this is that each welfare state regime type has a logic of its own, whereby not only welfare programs in terms of social assistance play a role. The way a state operates in terms of social assistance can be placed in the broader logic of the welfare state regime type (these logics are referred to as to the regime types described by Esping-Andersen, 1990). It is unexpected that a generous welfare state has a rigorous and demanding social assistance program, where it is also unexpected that a restrictive welfare state has a generous social assistance program. In other words: when making statements on welfare surveillance as in social assistance, it makes sense to encounter them in their broader logics of welfare state regime types. This justifies the more comprehensive perspective. This makes it worthwhile to, where possible, examine all four pillars of the welfare state when speaking of welfare surveillance.

This examination of the surveillant-ness of welfare states is embedded in the theoretical perspectives of neo-liberalism and governmentality. The feature of surveillance is in line with the development of welfare state restructuring from a neo-liberal perspective, as described by Larner (2000). Surveillance can be a means in achieving a minimalist state, where "neo-liberalism is associated with the preference for a minimalist state" (Larner, 2000: 5). Larner (2000) describes different notions of neo-liberalism and she argues that discussing this is not only relevant in the academic world, but is directly linked to the political (ibid: 6). She makes the case for understanding neo-liberalism in a governmental sense: "Neo-liberalism is both a political discourse about the nature of rule and a set of practices that facilitate the governing of individuals from a distance. In this regard, understanding neo-liberalism as governmentality opens useful avenues for the investigation of the restructuring of welfare state processes" (ibid: 6). The surveillance practices that are taking

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[8] More on this in the paragraph 'concept', when discussing the naming guideline of Goertz & Mazur (2008).

place in welfare states are an example of these new processes, and thereby the viewpoint of governmentality is a logical one to investigate and discuss welfare surveillance in. This means that the *context* of welfare surveillance practices is one of neo-liberalism and governmentality.

Originally, this second term was introduced by Michel Foucault. In his 'Governmentality', he gives prominence to 'discipline' as an important factor in politics. He states that "all the institutions in which it had developed in the seventeenth and eighteenth centuries […] all this can only be understood on the basis of the development of the great administrative monarchies, but nevertheless, discipline was never more important or more valorized than at the moment when it became important to manage a population; the managing of a population not only concerns the collective mass of phenomena, the level of its aggregate effects, it also implies the management of population in its depths and its details" (Foucault, 1991: 102). The topic of (welfare) surveillance is typically one of managing the population of a country. What is more, as Zureik & Hindle state, "Foucault's notion of governmentality is useful in furthering our understanding of governing beyond the formal conception of the citizen and her relationship to the state" (Zureik & Hindle, 2004: 113). Foucault's view on how society developed itself to what it is right now is that "we need to see things not in terms of the replacement of a society of sovereignty by a disciplinary society and the subsequent replacement of a disciplinary society by a society of government; in reality one has a triangle, sovereignty-discipline-government, which has as its primary target the population and as its essential mechanism the apparatuses of security" (Foucault, 1991: 102).

This again underlines the importance of Foucault's thinking for surveillance research. In modern political life, in the nowadays political functioning of societies, it seems apparent that sovereignty, discipline and government all three play a role. Surveillance mechanisms are targeted at populations (to control) and are functioning to increase knowledge, and with this security and protecting the achieving of (governmental) goals. Nevertheless, how can this rather ambiguous idea of 'governmentality' be described more precise? Foucault is referring to three things in particular: the first is an "ensemble formed by the institutions, procedures, analyses and reflections, the calculations and tactics that allow the exercise of this very specific albeit complex form of power, which has as its target population, as its principal form of knowledge political economy, and as its essential technical means apparatuses of security" (ibid: 102), the second is the "tendency which, over a long period and throughout the West, has steadily led towards the pre-eminence over all other forms (sovereignty, discipline, etc.) of this type of power which may be termed government, resulting, on the one hand, in the formation of a whole series of specific governmental apparatuses, and, on the other, in the development of a whole complex of *savoirs*" (ibid: 102-103) and third the "process, or rather the result of the process, through which the state of justice of the Middle Ages, transformed into the administrative state during the fifteenth and sixteenth centuries, gradually

becomes 'governmentalized'" (ibid: 102-103). The so-called governmental state is "defined no longer in terms of its territoriality, of its surface area, but in terms of the mass of its population with its volume and density" (ibid: 104) and "could be seen as corresponding to a type of society controlled by apparatuses of security" (ibid). Surveillance measures are typical for a security society. For government keeping records of the people of a country is of utmost importance. In this light, Poster writes that "The structure of databases and their relation to society are best disclosed by reference to the work of Michel Foucault, in particular his analysis of discourse. The linguistic quality of the database, its implications for politics, can best be captured by a theory, like Foucault's, that problematizes the interdependence of language and action" (Poster, 1990: 69). Throughout history, the state has been changing, as shown by Foucault. In the current age digital technology and the ever developing technical possibilities substantiate the expectation that this development of the state has not stopped an in fact could be indefinite. The major impact of the increasing use of databases is apparent when Poster states that "Drastic changes in the means and relations of communication are making a shambles of the delicate balance in the social order that was negotiated and struggled over during the epochs of nineteenth-century industrial capitalism and twentieth-century welfare statism" (Poster, 1990: 71) and "… in short the entire social infrastructure must be recalibrated and synchronized to the databases of the mode of information" (ibid: 72).

In other words, surveillance is here to stay; it is apparent that the governmental perspective of Foucault is the right surrounding to embed currently developing surveillance in. A Foucauldian governmentality theoretical perspective is also used by Henman, who "draws on the Foucauldian governmentality framework to argue that surveillance be conceptualized as governance" (Henman, 2004: 174). He states that: "An examination of targeted surveillance must take account of the associated practice of targeted governing and consider the technologies, practices and rationalities that make targeting thinkable, practicable and justifiable" (ibid: 174). Furthermore, Foucault's thinking is useful because he believes research should be directed "towards domination and the material operators of power, towards forms of subjection and the inflections and utilisations of their localised systems, and towards strategic apparatuses. We must eschew the model of the Leviathan in the study of power. We must escape from the limited field of juridical sovereignty and State institutions, and instead base our analysis of power on the study of techniques and tactics of domination" (Foucault, 1980: 102).

Joseph (2010) also labels the governmentality approach attractive, because "it goes beyond a narrow focus on the direct exercise of state power to look at more subtle methods of power exercised through a network of institutions, practices, procedures and techniques which act to regulate social conduct" (Joseph, 2010: 225). The applicability of the concept of governmentality to this thesis is confirmed by Joseph, when he writes that "Foucault talks not of the end of sovereignty

or state power, but the emergence of the triangle sovereignty-discipline-government with its new concerns for population and the optimization of health, welfare, happiness and labour productivity" (Joseph, 2010: 226). Final reassurance for the choice of this typical theoretical perspective comes from both Henman and Henman & Adler when the former declares that "A conception of surveillance as governance provides a more complete analytical approach to surveillance. It helps to point beyond the technologies and activities of data collection and analysis, to the complementary governmental processes and discourses that locate surveillance" (Henman, 2004: 177) and the latter state that: "The strength of the governmentality approach is the detailed analytical attention it gives to the everyday discourses, practices and devices that make spaces and subjects amenable for governing. It is attuned to the ways in which welfare administration constitutes and acts on welfare subjects and, in turn, defines the nature of welfare" (Henman & Adler, 2003: 140).

All above descriptions, plus declarations of defendants of the governmentality approach make clear the theoretical link between practices of surveillance and governmentality. The final part of this chapter focuses more on the causality of surveillance, and on determinants of (welfare) surveillance: what is it that influences levels of surveillance?

2.4   Determinants of (welfare) surveillance

The research question of this thesis suggests that multiple factors might influence the level of (welfare) surveillance in different countries. The illustration below clarifies this logic. The culture of a country might influence its surveillance policies: surveillance might have developed itself historically, influenced by a nation its culture (see for instance, Murakami Wood, 2009). Or could an explanation for the level of surveillance of a country be its economical development: the more developed a country is, the bigger the options and need for surveillance? Or, is it the type of government that is the most relevant factor in explaining surveillance: a right-wing government with a focus on security issues might feel more obliged to increase surveillance than a left-wing government with less interest in security issues? All this are merely common-sense questions and expectations. However, since there is not one single type of 'surveillance' – it is merely a container composing many different kinds of behavior – introducing any one of these explanations for levels of surveillance would be misleading. Put differently: just 'surveillance' or 'level of surveillance' itself would be a mistaken dependent variable: it is necessary to specify the type of surveillance that is to be explained. In the case of welfare surveillance, one of the factors causing the level of welfare surveillance, might be the welfare state regime type (this expectation is inspired by, among others, Henman & Marston, 2008, and Henman & Adler, 2003). Still: it must be noted that above factors do not necessarily have to be the primal causal factors in explaining a level of any kind of surveillance. To find out if there is a

connection between level of welfare surveillance and welfare state regime type, in the case-study of this thesis a preliminary attempt at measuring this expected relationship is performed.

Figure 2: What might cause a level of (welfare) surveillance?
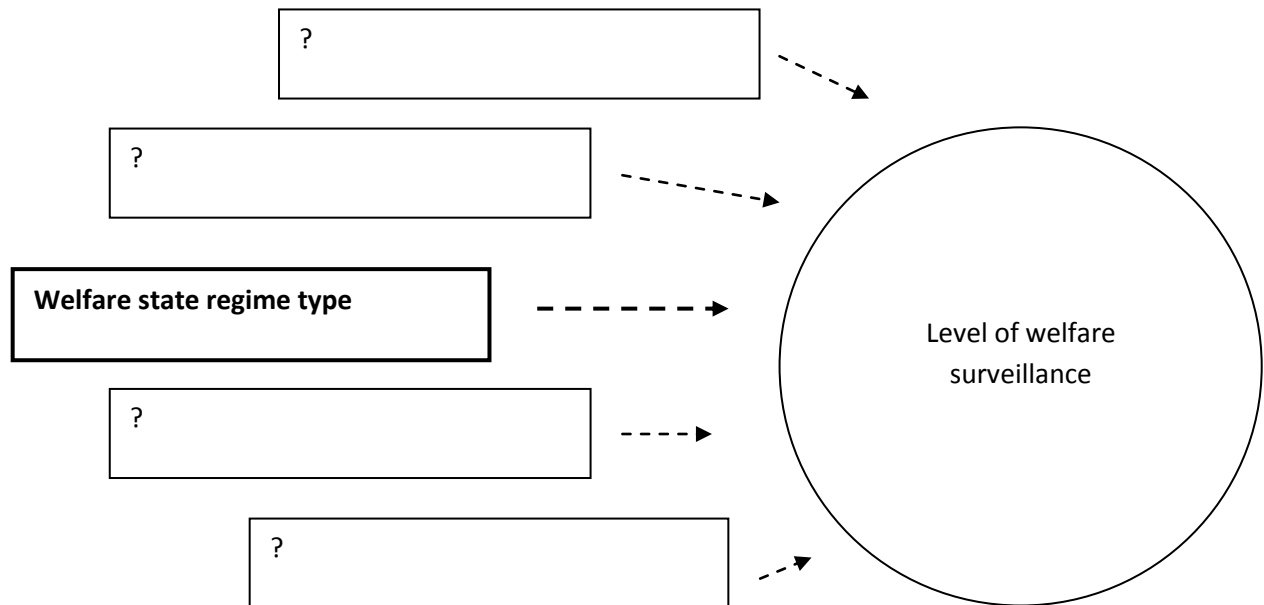
Briggs (2006) describes the welfare state as "… a state in which organized power is deliberately used (through politics and administration) in an effort to modify the play of market forces in at least three directions – first, by guaranteeing individuals and families a minimum income irrespective of the market value of their work or their property; second, by narrowing the extent of insecurity by enabling individuals and families to meet certain 'social contingencies' (for example, sickness, old age and unemployment) which lead otherwise to individual and family crises; and third, by ensuring that all citizens without distinction of status or class are offered the best standards available in relation to a certain agreed range of social services" (Briggs, 2006: 16). This is a general view on what the welfare state is.

In his 1990 'Three Worlds of Welfare Capitalism', Gøsta Esping Andersen introduces his typology of welfare state regimes. He distinguishes liberal from social-democratic and corporatist welfare state regimes (Esping-Andersen, 1990: 26-28). The liberal welfare state regime comprehends "means-tested assistance, modest universal transfers [and] modest social-insurance plans" (ibid: 26). At the same time, "Benefits cater mainly to a clientele of low-income, usually working-class, state dependents" (ibid: 26) and "Entitlement rules are [...] strict and often associated with stigma; benefits are typically modest" (ibid: 26). Next to this, an important role in welfare is seen for the

market, by the state (ibid: 26-27). This results in a welfare state regime that "minimizes decommodification-effects, effectively contains the realm of social rights, and erects an order of stratification that is a blend of a relative equality of poverty among state-welfare recipients, market-differentiated welfare among the majorities, and a class-political dualism between the two. The archetypical examples of this model are the United States, Canada and Australia" (ibid: 27).

A second type of welfare state regimes is labeled conservative or 'corporatist' welfare states. Within these states, "the liberal obsession with market efficiency and commodification was never preeminent and, as such, the granting of social rights was hardly ever a seriously contested issue" (ibid: 27). In these states, there was some sort of "preservation of status differentials" (ibid: 27) and there was a "corporatism [that] was subsumed under a state edifice perfectly ready to displace the market as a provider of welfare; hence, private insurance and occupational fringe benefits play a truly marginal role" (ibid: 27). However, at the same time there is no large capacity of the state to act in a redistributive way (ibid: 27). Examples of countries fitting to this category of welfare state regimes are Austria, France, Germany and Italy (ibid: 27).

A third and final category is the social-democratic welfare state regime type. These are the countries where "the principles of universalism and decommodification of social rights were extended also to the new middle classes" (ibid: 27). In these countries "the social-democrats pursued a welfare state that would promote an equality of the highest standards, not an equality of minimal needs as was pursued elsewhere" (ibid: 27). For this reason you might call this welfare state regime the most extensive or generous: "This implied, first, that services and benefits be upgraded to levels commensurate with even the most discriminating tastes of the new middle classes; and, second, that equality be furnished by guaranteeing workers full participation in the quality of rights enjoyed by the better-off" (ibid: 27). The social-democratic regime type "crowds out the market, and consequently constructs an essentially universal solidarity in favor of the welfare state. All benefit; all are dependent; and all will presumably feel obliged to pay" (ibid: 28).

A difference between, for instance, the corporatist regime type and the social-democratic regime type is who the primary source of caring is. In the former case caring and looking after each other, making sure all fare well, is a job of the family, where in the latter this task is some sort of collective responsibility of the entire society. In the social-democratic regime type, people should not be entirely dependent on their family, but should be as individually independent as possible. The social-democratic regime type is the only of the three that commits itself to the goal of full employment (ibid: 28).

Through the years, there have been several comments on Esping-Andersen's typology of welfare regimes. In this paragraph the most important critiques to this typology will be dealt with shortly, while acknowledging that despite the critique, the typology still is seen as an important one, which is

broadly accepted throughout the world of social scientists. The influence of the typology is major, and "it has had a defining influence upon the whole field of comparative welfare state research in the twenty years since its publication" (Arts & Gelissen, 2010: 569).

Three comments to Esping-Andersen's three worlds of welfare capitalism are of utmost importance. These are "the misspecification of the Mediterranean welfare states; second, labeling the Antipodean welfare states as belonging to the 'liberal' welfare state regime; and finally, the neglect of the gender-dimension in social policy" (Arts & Gelissen, 2006: 177). Although it would be illuminating to discuss these comments to Esping-Andersen's typology, that is neither the task of this thesis nor a tool to find an answer to the in this thesis posed research question[9]. However, what should be made sure is that usage of the typology in future social scientific research is 'allowed' – that you should be taken seriously as a scientist when using the typology. Although Arts and Gelissen are critical of some of the elements of the typology, they state that "from our review of empirical studies we conclude […] that his typology is promising enough for work to continue on welfare state models" (Arts and Gelissen, 2010: 581).

Having laid down the groundwork – a general theoretical story on surveillance – in the following chapter we will turn to discussing current work on welfare surveillance, to get another step closer to the object of study of this thesis.

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[9] Abrahamson (1999) speaks of the academic industry called the 'Welfare Modelling Business', caused by publication of Three Worlds of Welfare Capitalism (1990). An entire re-iteration of the debate on Esping-Andersen's typology would require a substantial amount of pages and would be too long for this thesis.

3.   Current work on welfare surveillance

In this paragraph current work on welfare surveillance is introduced. Welfare surveillance is a specific form of surveillance, directed at people, who are experiencing the influence of the state on their daily lives. It is surveillance in line with the functioning of the welfare state and can be both physical as non-physical (i.e. digital, electronic). Since ICTs "provide the means through which new social policies can be developed, evaluated and administered" (Henman, 2006: 215) and this changes the political rationality of the welfare state, with a sharper focus on targeting and social risks (Henman, 2006: 215, Henman in Henman, 2006: 215), welfare surveillance can be placed within the development of the changing welfare state. Supposedly welfare surveillance could be in line with neoliberalism, since neoliberalism "involves enhanced state intervention to roll forward new forms of governance (including state intervention) that are purportedly more suited to a market-driven […] globalizing economy" (Jessop, 2002: 454). To clarify what welfare surveillance is about, a brief focus on the lowest level possible is useful: that of the individual experiencing welfare surveillance. Moffatt (1999) shows such a largely individualistic account of welfare surveillance in his 'Surveillance and Government of the Welfare Recipient', by showing the "mechanisms of power in the social assistance office" (1999: 219-220). He shows that "the office operates as a mechanism for disciplinary power" (ibid: 220). Moffatt considers "how the combination of techniques, data collection, and knowledge creation particular to the social assistance office governs the worker and the client" (ibid: 220). The stories of welfare workers show how there is a "power associated with observation" (ibid: 223) and show how there is a power relationship between the worker and the client (ibid: 223-230). However, there is more to welfare surveillance than just an individual power relationship. Although the welfare surveillance literature is limited, in the following section the current debate on welfare surveillance will be presented. As will stand out, the debate on (welfare) surveillance is full of value comments, dispositions or convictions. There is an emphasis on the normative positions of authors writing on surveillance. It is Lyon who tries to show not all about surveillance is negative by stating that "… it should not be imagined that the influence, management or control is necessarily malign or unsocial, despite the frequently negative connotations of the word 'surveillance'"(Lyon, 2007: 15). Although this might be a more or less impartial position, it still is a normative stand, no matter how relatively neutral it may be. The following section on welfare surveillance will elaborate on welfare surveillance theory and at the same time show how normative positions are dominant. It will make clear how useful a more empirical definition of welfare surveillance can be for the research field in general, but that it might also figure as support for the players in the normative debate at the same time.

3.1   *From cybercriticalist to realist*
A view on the contemporary debate on welfare surveillance shows that this debate has a strong

normative character[10]. Fitzpatrick (2000) for instance takes a cybercriticalist stand. He believes that there is an anti-political, pro-market environment that drives the use of Information and Communication Technologies (ICTs). The struggle against the negative consequences of these ICTs is Fitzpatricks' cybercriticalism (Fitzpatrick, 2000: 377). He states that the dangers of ICTs in "reinforcing existing power imbalances and injustices" are ignored (ibid: 391). For instance, "the integration of data streams may increase stigma (and lower take-up) if people suspect that they will be more easily monitored by the state (ibid: 392). His cybercriticalism is about "reciprocal interactions of online and offline environments" and "the socially damaging results of those interactions due to the virtual reproduction of real inequalities" (ibid: 392-393). He believes there is the task to discover how to reform welfare systems in a way that "cyberpolicies work towards the objective of social justice" (ibid: 393) and he uses T.H. Marshalls work to elaborate on this. He extends Marshalls view on rights with an alternative category named virtual rights: "rights possessed by massless citizens which overlap with, but are nevertheless distinct from, their civil, political and social rights" (ibid: 393). It is embedded in a post-productivist context (ibid: 394). We are all massless citizens: each of us has a virtual self. We all have a place in the informational webnet of the state-market nexus (ibid: 394). Sometimes the virtual self is only a reflection, but the data-shadow is increasingly treated as superior. That is why "the aim of cybercriticalism is to work out how social policies can be used to ensure that it is individuals who possess their data-selves and not the other way around" (ibid: 394). The virtual rights are supposed to set up an informatic empowerment of the individual (ibid: 395). They "are concerned (a) with the complex offline-online interfaces which affect all citizens in an information society, and (b) with addressing online and offline inequalities" (ibid: 395). ICTs can worsen already existing injustices; "there is a widespread belief that claimants should have their freedoms invaded as a return for the assistance generously provided by the taxpayer" (ibid: 397). "ICTs are likely to consolidate the drift towards [...] individualization of rights and collectivization of duties: a self-service welfare system [...] and a subtly authoritarian form of governance" (ibid: 398). In sum, Fitzpatrick believes there should be some sort of balance between online and offline environments. Cyberpolicies accompany socio-economic policies (ibid: 398-399). He ends on a normative stand, saying "we need to reform offline social institutions in such a way that ICTs are really aimed at the empowerment of the least advantaged" (ibid: 399).

Opposite to Fitzpatricks' viewpoint is Dornan & Hudson's (2003) vision. They respond to

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[10] The normative aspect in surveillance studies is also noticed by Haggerty (2006: 35). He declares: "The approach of many surveillance scholars involves a form of hermeneutics of suspicion whereby new developments are read negatively as involving inevitable and often cunningly devious expansions and intensifications of surveillance in the service of social control" (ibid: 35) and "Such studies are important, but in terms of developing an appreciation for the operation of the totality of contemporary surveillance, they are also severely limited" (ibid: 35).

Fitzpatrick's cybercriticalism, in particular his addition of virtual rights. They suggest a recasting of this cybercriticalism (Dornan & Hudson, 2003: 472). They state that after reading Fitzpatrick "one is left with the impression that, given the fact that radical socio-economic change of the sort he desires seems unlikely, ICTs are largely a threat to welfare and well-being: something to be guarded against unless [...] they can be disconnected from the powerful multinational corporations (MNCs) that develop and, often, manage them" (ibid: 472). According to Dornan & Hudson, we should be looking for a middle ground: somewhere in between too negative and too positive accounts of the use of ICTs in the workings of the welfare state (ibid: 472). We should not be "caught between an almost utopian belief in the power of ICTs to improve both our economy and polity […] and [...] a dystopian perspective [...], urging resistance and heavy regulation until far-reaching socio-economic change can be instigated" (ibid: 472). After presenting their case-studies, Dornan & Hudson reach the conclusion that "rather than calling for the creation of a new and wide-ranging set of virtual rights we point merely to the need for a greater understanding of the possible positive uses to which ICTs may be put" (ibid: 479). This could mean "embracing increasing surveillance of everyday life – partly because it seems inevitable that greater information will be collected on all manner of our activities, but also because it may help the welfare state to deliver its services more effectively" (ibid: 479). This realist view leads to the judgment that "proponents of the welfare state need to accept that it is time to fight fire with fire and embrace all that is best about the modern technology" (ibid: 479).

Cited both in Fitzpatrick (2000) and Dornan & Hudson (2003) is Loaders (1998) 'Welfare direct: Informatics and the emergence of self-service welfare?'. He does not believe that technology necessarily determines our future. He suggests "ICTs are both developed within a social, economic and political context and in turn create the opportunity for both the intended and unintended transformation of that context" (Loader, 1998: 221) and "the development of ICTs and their effects upon social welfare relations are mediated by issues of power, class, gender, race, culture, economy and ideology" (ibid: 221). He suggests that "[postmodernism] may at least be responsible for foregrounding the importance of informatics as a significant force affecting policy outcomes" (ibid: 230) and "the study of social policy must include the analysis of the restructuring of social relations and subjects which are mediated by the new ICTs" (ibid: 230-231). "Since computer-mediated information systems cannot be regarded as 'value-neutral', they may be seen as an important site for studying the inter-relationship between the state, the economy and civil society, and its consequences for the social relations of welfare" (ibid: 224). It is of no surprise that both Fitzpatrick and Dornan & Hudson are able to cite this work. Loader seems to hold the most neutral position by posing that several different outcomes are possible.

Others are better placeable in the Fitzpatrick' camp. In Gillioms' (2001) words, the "world of welfare surveillance is state-centered, bureaucratic and rationalist" (Gilliom, 2001: 38). He examines

the American welfare state, with its "emphasis on assessing the capacity of people to fend for themselves and on deterring those who can – through means-tests, stigmatization, man-in-the-house rules, labor tests, residency requirements or the scrutiny of friendly visitors – it must be even more surveillance intensive than it might otherwise be" (ibid: 27). He takes a strong stand when he states that "the welfare poor are subject to forms and degrees of scrutiny matched only by the likes of patients, prisoners and soldiers" (ibid: 28). In the current world of welfare "there is little room for secrets and even less room for arguments over basic values and knowledge claims" (ibid: 39). There is "an increasing reach and force for centrally determined norms, standards, and values" and an "extension of the institutional power to enforce these norms", with a "reduction in the capacity and power for self-definition in our lives" (ibid: 39). Gilliom bases all this on interviews with American Ohio women on welfare. He realizes himself its hard generalizing from this, so he states that the asking of subsequent questions is of importance. There is a "need to focus on context, power and conflict – to study the powers of surveillance as particular episodes of political domination and struggle and not as successive chapters in the legal history of the right to privacy" (ibid: 119).

Another type of analytical approach to examining the role of technology in the world of welfare is Henman & Adler's (2003). They use a governmentality approach in the spirit of Foucault and they want "to identify the contribution of information technologies to welfare administration and governance and thus to the nature of the welfare state" (Henman & Adler, 2003: 140). They see technological devices not just "as tools by which governmental objectives are made practicable and achievable", but their "understanding of the role of technology in governing practices is more complex" (ibid: 140-141). Practical objects have a productional capacity (ibid: 140-141). Henman & Adler's "findings suggest that computer technologies are more likely to be used to control rather than to empower staff and claimants" (ibid: 159). They conclude that "technology is not simply a tool with which to implement welfare state policies, but is a productive partner alongside discourses and practices in constituting and transforming governmental relations" (ibid: 159).

The final and most recent article in this section is Henman & Marston's (2008). They "seek to progress a more sociological account of surveillance, one that highlights the social context of surveillance and the unequal distribution of surveillance practices and burdens" (Henman & Marston, 2008: 189). They "draw on Richard Titmuss's classical conception of the social division of welfare to highlight the relational dimensions of surveillance and the often invisible inequalities that contemporary forms of welfare surveillance generate" (ibid: 189). Their empirical analysis of the Australian case "demonstrates that surveillance practices [...] operate and coagulate more heavily on the more disadvantaged members of society, while 'high fliers' can often bypass the more intrusive surveillance systems" (ibid: 201). Although they pay some attention to the positive consequences of welfare surveillance with reference to Dornan & Hudson (2003), their main argument is that welfare

surveillance is about division, exclusion and inequality (ibid: 202-203). Having presented the core of different types of research and literature on welfare surveillance, in the next paragraph these works will be critically examined, where the focus will be on how the welfare surveillance literature can contribute to political science debates on the welfare state.

3.2   What has and can be done

A main reason for picking and comparing Fitzpatricks and Dornan & Hudson's works, was to show the importance of the normative part of the debate on welfare surveillance. Second, it is clear that there is more to the debate on welfare surveillance than just normative work. In the previous paragraph different approaches to studying welfare surveillance were presented. Since there is little political science work on welfare surveillance it is important to compare all these current different normative and non-normative points of view, as the right starting point for figuring out the role of political science (research) in the field of welfare surveillance. This will be the main focus of this critical discussion section: to show how all chosen authors' work is able to contribute to the establishment of welfare surveillance research within the domain of political science.

For starters, both Fitzpatrick (2000) and Henman & Marston (2008), by explicitly using or trying to expand the work of founding fathers of research on the welfare state like T.H. Marshall and Richard Titmuss, show the connection between welfare state research and technological innovations. Fitzpatrick should receive credit for trying to expand the major work of T.H. Marshall. However, there is room for support of Dornan & Hudson's' critique. This does not imply that virtual rights are nonsense, but a more realistic view on counter-attacking the negative results of increasing technological dependence by stepping into this world of technology might be more sustainable in the long run.

However, the main issue of this section remains: in what way could welfare surveillance research establish itself within the domain of political science? What are the right questions for a political scientist to ask him- or herself when examining welfare surveillance? What types of puzzles should be solved? How can the welfare surveillance literature contribute to political science debates on the welfare state? All authors in this section contribute to answering these questions. For instance, Henman & Marston (2008) show the largest potential with regard to the last question. By linking research on welfare surveillance directly to the major work of Esping-Andersen, *the* welfare state researcher, the subject of welfare surveillance has entered the world of comparative political science research. As noticed in the introduction of this thesis, it would be worthwhile not just to examine welfare surveillance in the social-democratic and corporatist welfare regime as suggested by Henman & Marston (2008: 201), but to perform a broader study, comparing within and between the multiple worlds of welfare capitalism.

Comparative empirical research could also be done after welfare surveillance in relation to questions of immigration, race and/or gender. Does the increasing use of ICTs in welfare policy do something to gender differences? Is there gender equity or equality in the virtual (cyberspace) world of welfare, or in the virtual rights Fitzpatrick speaks of? Are immigrants treated in different ways by different governments, (mainly) because of different usage of ICTs in execution of policy? Another way of placing welfare surveillance within political science research on the welfare state, would be to examine what an increasing use of ICTs in the world of welfare states means for future retrenchment of the welfare state. Is it a means; does its appliance help governments figure out where to cut back spending? Could it be an important feature in "the shift in goals from expansion to cutbacks" (Pierson, 1996: 146) and be part of the "new political dynamics" (ibid: 146) that are created? With all these possible paths to follow, an important aspect in figuring out the role and place of welfare surveillance within political science research is postmodernity. As Ellison states, "postmodern thinking can help to illuminate our perceptions of the difficult, ambiguous nature of identity and difference in contemporary societies" (Ellison, 1999: 67).

Using a theoretical, Foucauldian, governmental approach in combination with an empirical conclusion on control and empowerment, Henman & Adler actually show how technology is not just a tool (2003: 140-141). In his turn, Loader is able to show the importance of computer information systems in its relationship with the state, the economy and civil society (1998: 224). This also opens up future ways of research. Political science puzzles about how welfare surveillance occurs in the relationship between the state and the market – national government and multinational companies – would be worthwhile. This way, welfare surveillance would also relate itself to the third branch of political science research: International Relations.

However, although skepticism about some of the normative work on welfare surveillance might be in place (because stepping out of the normative continuum could contribute to a *better* understanding of welfare surveillance), taking a normative stand on when, how and why governments should use welfare surveillance is a path that could still be followed by political philosophers. They could examine the connection between the development of scientific knowledge and technology and social order and normative politics (Harbers, 2006: 206). Welfare surveillance might be one of the 'borderquestions' Latour speaks of. These are matters that are not reducible to a normative-political nor to a technical-scientific matter. Other examples of this kind are nuclear disasters or the greenhouse effect. The normative and the technical-scientific are not distinguishable here (ibid: 206-207). It would be worthwhile for more political philosophers to develop their knowledge on technical innovations of our modern world in order to relate this to normative politics that they are already familiar with.

Proceeding the followed path of this thesis, there is full recognition of the fundamental points

about comparative politics Munck (2007) is speaking of, one stating "that the study of politics is inextricably linked with normative concerns and that, in the absence of an explicit consideration of the values involved in politics, the stakes and rationale of research will be obscured" (Munck, 2007: 59). As has been clear so far, the in this thesis posed question is not about the normative debate on (welfare) surveillance and this section has intentionally been lengthy on the description of the normative debate to show of what major influence this debate actually has been so far. The next section will shortly summarize which gap in the literature will be filled by answering the research question of this thesis.

3.3   What is missing: about the gap this thesis fills up

A view on the literature and field of research of surveillance shows overviews of surveillance research (Lyon, 2007), theoretical studies of surveillance (Lyon, 2006b), a great number of studies after specific forms of surveillance such as CCTV surveillance (Norris & Armstrong, 1999) or workplace surveillance (Bryant, 1995) as well as normative accounts of surveillance (Marx, 1998). What is missing in the debate on surveillance on the one hand and the welfare state on the other, is a broad, comparative, empirical account of how surveillance is taking place in terms of welfare and the welfare state. Some authors have touched upon the topic, some case-studies are performed (Gilliom, 2001; Henman & Adler, 2003; Henman & Marston, 2008) and a range of authors have moved themselves into the normative debate on welfare surveillance (Dornan & Hudson, 2003; Fitzpatrick, 2000; Norris & Armstrong, 1999). However, it remains unclear what welfare surveillance actually consists of. Most authors focus on welfare in terms of rules and policy around the unemployed or other types of benefit receivers, where the spectrum of welfare surveillance can be broader than just that. That is why in this thesis welfare surveillance consists of the four pillars of the welfare state as presented by Kemeny: housing, social security, health and education (2001: 53). This broader notion of welfare surveillance[11] creates room to understand the operations of surveillance in the context of the entire welfare state.

The connection between surveillance and the welfare state (housing, social security, health and education) 'as a whole' is a logical one, and can be encountered from roughly two perspectives. From the perspective of the welfare state, surveillance is of relevance in light of the development of the welfare state, with reference to the industrialism thesis and modernism thesis which generally say

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[11]   An additional positive feature of the four dimensions is that they are divided among themselves in terms of their level of administration: surveillance in social assistance cash benefits and surveillance in health care are perceived of at the national level, while surveillance in housing and education are taking place at the local level of each country. In some research fields, such as cultural geography, assessing different scales is a normalized and regular exercise, used to let all different actors and actions make sense (Balmer & Wyatt, 2007: 620). What results here is a modest multi-level interpretation of welfare surveillance, which contributes to its understanding: we should be aware of the fact that welfare surveillance can occur on many different societal levels.

that improvements in terms of the economy, industry and politics make that societies are in processes of constant progression (Pierson, 1998: 14-20). Surveillance, or a society confronted with surveillance, can be the next feature in line in terms of this development. The feature of surveillance and all its accompanying elements and empirical appearances are potential means for states to achieve their ever-developing goals. State-use of new technologies to gather information are examples of surveillance suited to make it possible for the state to achieve new goals, or to better perform at already existing goals. The (expansion of) the use of surveillance tools is in line with the constant progression of the welfare state. At the same time surveillance is a phenomenon that is interesting to study in the context of changes in societies and welfare states. All sorts of changes to social order are taking place, in a context of uncertainty and risk (Pierson, 1998: 196). Ofcourse, "Life has always been risky and our futures uncertain, but increasingly we can see that these uncertainties are the product not of nature but of (quite often intentional) human intervention in the natural world" (Pierson, 1998: 196). Surveillance should be thought of in this context. That is why, from welfare state perspective, it makes sense to study surveillance in the appearances that are related to the domains and performance of welfare states[12].

In the second perspective, from surveillance its point of view, the study of the welfare state is relevant because of the risk-and-control thinking[13] that is related to the moments when surveillance tools are put to use (Rose, 2000: 332-333). Empirically speaking, we see signs of surveillance in the four earlier mentioned dimensions, all belonging to the concept of the welfare state. Following this, it makes sense to study these features of surveillance in a comprehensive way, by focusing on this welfare state as the broader heading above these features of surveillance. By formally linking surveillance and the welfare state together, its study becomes less fragmented and more comprehensive. This does not imply that former studies of welfare surveillance are of less importance; however, when put in the context of the entire welfare state it might be possible for us to better understand or explain it.

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[12] An additional good reason to scientifically study surveillance and the welfare state is the fact that growing surveillance in domains related to welfare and the welfare state touches upon issues of citizenship: one of the foundations of the old welfare-state model (Lyon, 2010: 43). With growing use of and focus on surveillance tools, it is possible that "… decisions about the prospects for individuals in questionable categories are further abstracted from the struggles and stories of everyday life, of which vulnerable people are likely to be most acutely aware" (Lyon, 2010: 43).

[13] To illustrate this point, see Rose (2000) who says "A plethora of quasi-autonomous agencies work upon the territories of control that have taken shape after the welfare state, within the 'savage spaces' of exclusion, in the 'anti-communities' on the margins, or with those abjected from civility by virtue of their lack of competence or capacity for responsible ethical self-management. Within this new territory of exclusion, a whole array of control agencies – police, social workers, doctors, psychiatrists, mental health professionals – seek to link up in circuits of surveillance and communication in a perpetually failing endeavour to minimize the riskiness of the most risky. They form a multiplicity of points for the collection, inscription, accumulation and distribution of information relevant to the management of risk"(Rose, 2000: 333).

Having presented the gap this thesis fills up and how the link between the welfare state and surveillance is relevant today, in the next paragraph the concept of welfare surveillance is introduced.

4.   Welfare surveillance: the concept

In this paragraph the welfare surveillance concept is presented. The concept is embedded in its context, which is debated on in the theoretical part of this thesis. It referred to the neoliberal (see for example Larner, 2000) and governmentality (see, among others, Henman & Adler, 2003) thinking in which (welfare) surveillance can be placed. Practices of welfare surveillance (empirical examples of the concept – parts of the concept that we see in the empirical world) are embedded in this context. Neoliberalism refers to a minimalist state (Larner, 2000): means of welfare surveillance can be used to achieve this minimalist state. That is the link between neoliberalism and surveillance. The governmentality perspective or context operates in a comparable way: this perspective is about the micro-powers of the state; about the apparatuses a state can use to achieve its goals. Measures in the sphere of welfare surveillance can be examples of governmental 'tools' a state is using in achieving its goals. *Concept* refers to what welfare surveillance *is*, the actual construct. All parts of the welfare surveillance concept stem from surveillance literature, welfare surveillance literature, welfare state literature and other empirical sources. The components presented here do not necessarily have to be all components welfare surveillance consists of. It is imaginable other empirical features can be categorized under one of the categories of welfare surveillance.

4.1   The concept

At this point in time, the status of the research field of welfare surveillance is one that is in need of theoretical clearance. The clearing up starts in this paragraph: the concept of welfare surveillance will be introduced and constructed, by using clear-cut guidelines. First, below table shows the current status quo in surveillance literature: it sums up the work that has been done so far, of what I believe should be depicted under one and the same umbrella of a (re)new(ed) concept of welfare surveillance. The figure depicts elements of welfare surveillance that are deducted out of the literature. The first column shows the category of welfare; the second the category of welfare surveillance (the building blocks), the third the type of surveillance (the building bricks), the fourth the author, the fifth potential data sources when measuring the type of surveillance and the sixth and final column shows the level of measurement: either national or local. As said before, the concept is amendable; if room is left open to do this, this can be in benefit of the concept.

Category of welfare	Category of welfare surveillance	Type of surveillance	Author	Potential data sources	Measuring level
Social	**Surveillance in social assistance**	Checks/ reviews / reporting	- Henman & Marston, 2008 - Henman, 2004	Unemployment benefit payers	National
		(Intergovernmental) data-matching or dataveillance	- Henman & Marston, 2008 - Dornan & Hudson, 2003 - Whitaker, 1999	Unemployment benefit payers	National
		Biometric identifiers	- Moffatt, 1999 - Ogura, 2006 - Little, 2001 - Zureik & Hindle, 2004	Unemployment benefit payers	National
Social	**Surveillance in housing**	Checks / reviews / reporting	- Henman & Marston, 2008	Public housing agencies	Local
		CCTV surveillance	- Henman & Marston, 2008	Public housing agencies	Local
Social	**Surveillance in health care**	Electronic patient records	- Graham & Wood, 2003 - Van der Ploeg, 2002	Legislation / national governments' documents	National
		Smart card technology	- Henman, 2010	Legislation / national governments' documents	National
Social	**Surveillance in education**	CCTV in schools	- Hope, 2009 - Hope, 2010	Policy documents / schoolboard reports	Local
		Biometrics in schools	- Hope, 2010	Policy documents / schoolboard reports	Local

Table 1: Variable overview

The concept of welfare surveillance should be further developed, because it is – if it even is recognized as a concept already – only an empirical concept so far: a concept based on observations (Mair, 2008: 179). It is as Mair states, "we should begin our research by addressing the 'what-is'

question; only later, if at all, we do address the 'how much' question" (Mair, 2008: 179). Concept formation should precede comparing (ibid: 179). By this logic, we first define what welfare surveillance is, and later on, we study several cases to answer the 'how-much' question. It might also be put differently: we first want to know what this thing called welfare surveillance is, before we get to explaining if and why there are differences in welfare surveillance in different countries. We first want to understand, before we explain. To understand, the creation of a concept is useful[14]. It can be a framework to refer to, whether you are performing normative or empirical research. That is why the guidelines in creating the concept of welfare surveillance, are Goertz and Mazur's ten guidelines for concepts (2008: 14-43). They "present a set of coherent guidelines for dealing with concepts" (Goertz & Mazur, 2008: 14) to make it possible to discuss concepts systematically (ibid). Where "Most political science concepts are big, complex, and multidimensional in nature" (ibid: 16), this is also the case with welfare surveillance. And since "Core to concept design are the nature of and relationships between the internal parts of concepts" (ibid: 16), that is why the concept of welfare surveillance is constructed here as consisting of the four pillars of the welfare state. It is the matter that "One needs to justify theoretically much of the internal content and organization of concepts" (ibid: 16), which is why full attention is devoted to how the field of welfare surveillance research has developed itself so far, to build properly on the work that has been done before. Finally, Goertz & Mazur "stress that one needs to conduct extensive theoretical analysis of the structure of the concept and how it relates to the larger research project before dealing with quantitative indicators, operationalization, data collection, and other similar activities" (ibid: 16). With all this in mind, the following pages are devoted to each guideline individually, to try and answer the questions about the concept of welfare surveillance, that the guidelines raise.

The **context guideline** raises the question: "What is the theoretical, historical, cultural and geographic background context for the concept?" (Goertz & Mazur, 2008: 17) and mainly asks what has been done before on the subject of study and how new views are different from the existing field of research (ibid: 17-18). The authors claim that "The new or modified concept will always stand in contrast to standard or common ones" (ibid: 17) and "The Context Guideline is fundamental because a new or revised concept is always in contrast with the existing literature. Its value or interest will not be just in its inherent content but also in the contrast it makes, or does not make, against a background of research and theory" (ibid: 18). The introduction of the concept of welfare surveillance is in correspondence with this guideline, because the revision that is made is that the focus is not only on welfare (or benefit) receivers anymore, but welfare surveillance becomes more comprehensive. The new concept is not completely opposite of existing research and theory – which

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[14] As Goertz & Mazur write: "Concepts are ultimately important because without them we would have empty theories" (2008: 14).

does not have to be so to be a valuable addition and improvement to the research field – but definitely is a break with current tradition in how welfare surveillance is studied. The normative view of how welfare recipients are treated by agencies is exchanged for a more empirical view on how the welfare state operates, as a whole.

Next, the **traveling guideline** asks: "Does the concept travel well to other temporal or cultural areas?" (ibid: 19). What is important here is that "The Traveling Guideline focuses on the sensitivity to cross-temporal, cross-cultural, and cross-national specificities" (ibid: 20). This guideline should trigger thinking "about how well the concept will apply to other cultures, countries and historical periods" (ibid: 19). What is found in the one country does not have to be same as what is found in another: a phenomenon, when looked for in different countries, can look differently in these countries (ibid: 19). What might happen then is "*expansion* of the concept (emphasis in original)" (ibid: 19) which is not the same as reducing dimensions of the concept, but in fact is about increasing dimensions: concepts are made able to travel because of an increasement in dimensions of it (ibid: 19). This is opposite of decreasing the dimensions of a concept: that would be attributing a concept a smaller amount of dimensions, to make it travel (ibid: 19). Expanding the concept, by adding dimensions to it is what is done with the creation of the renewed concept of welfare surveillance. Following this guideline, welfare surveillance does not mainly focus on social assistance (to the poor) anymore, but is taking into account three more pillars of the welfare state. The concept is broadened up, and – when eventually operationalized – travels across countries and cultures: at least in developed countries it is made possible to study and, accompanied by an operationalization, be measured.

The next guideline is the **causal relationships guideline**, which wonders: "How do causal relationships work within and between concepts?" (ibid: 20). This guideline is important because of the goal of this thesis: trying to see if the type of welfare state regime is of influence on the level of welfare surveillance in a country. As previously shown, since this is a relatively new field of research, a sum of factors might be of influence on the level of welfare surveillance in a country. The welfare state regime type can be an independent variable of influence on the dependent variable of the level of welfare surveillance. By including new information in the dependent variable, it can make other independent variables causing effects on the dependent variable, of higher importance (ibid: 20-21). A changing concept as a dependent variable should make us aware of changes in what influences this dependent variable (ibid: 20-21).

When this guideline is translated to this thesis, we should ask ourselves: if the concept of welfare surveillance includes A, B and C, then the theory we want to create should make an attempt to explain the presence of A, B and C. More factors (independent variables) might be needed to do this (ibid: 20-21). Where 'welfare surveillance' before consisted only of all measures needed for social

assistance to the poor, the number of factors needed to explain this welfare surveillance is expected to be smaller, than when working with a broader and bigger concept of welfare surveillance. With a larger concept, other, perhaps more, independent variables might start playing a role in explaining levels of welfare surveillance. That is what this guideline makes us aware of. For that reason it is important to note that (1) the main focus of this thesis is the theoretical development of the concept of welfare surveillance and (2) the additional focus is investigating the potential correlation or connection between a country its welfare state regime type and its level of welfare surveillance. Not all potential independent variables causing levels of welfare surveillance are measured – the only thing that will be investigated empirically is if the countries that belong to the different welfare state regime types are grouping together in their levels of welfare surveillance: if it is reasonable to expect a connection between independent and dependent variables. What should be noted is that only one of the four pillars of the concept is investigated empirically. What will be recommended at the end of the thesis is the study of the full concept of welfare surveillance, to be able to create more solid conclusions on the link between welfare state regime type and level of welfare surveillance.

The next guideline in line is the **naming guideline**: "What is the accepted name of the concept? Why and how does it differ from others in its semantic field?" (ibid: 22). The answer to the question this guideline raises is simple: most research under the rubric of welfare surveillance (Henman & Marston, 2008 is just one example) or surveillance in social security has no other name than 'welfare surveillance'. However, Henman & Marston (2008), when studying welfare surveillance, also investigate housing, which already signals that welfare is broader than only social assistance in terms of benefits. One might argue that the label 'welfare state surveillance' might suit the concept better. However, since the concept developed here clearly builds upon previous works that are labeled welfare surveillance, the introduction of new terminology like 'welfare state surveillance' would not do justice to all previous research that is done after this feature. It might signal a break with previous tradition, where there is no intention of forcing a definitive break on content or subject matter. The concept of welfare surveillance is purposely named welfare surveillance, because it is building on earlier work that has the same name. It is too close to previous work to justify wandering away from the label.

The following guideline is called the **negation guideline** (ibid: 25). It raises the question: "What is the negation, absence, or opposite of the basic concept?" (ibid: 25). This guideline makes us wonder what the opposite of our concept is (ibid: 25). When speaking of concepts, Goertz & Mazur believe that "The positive pole is typically the phenomenon to be explained and the central empirical and theoretical focus of the analysis. Therefore, it is crucial to ask specifically about the negative pole and its relationship to the positive" (ibid: 26). Studying or thinking of the negative pole of a concept is a tricky business, since the positive can have many different opposites, negatives (ibid: 25-27). In this

case, welfare surveillance is the positive pole of the concept. The negative pole would not be non-welfare surveillance: this would mean other types of surveillance than welfare surveillance. Better would be to speak of welfare non-surveillance. Perhaps the ideal opposite of welfare surveillance would be a state that has no interest in data on its inhabitants, for whatever purpose. What would be the opposite of a state that is devoted to welfare surveillance, is a state that makes no use of techniques of surveillance in achieving its goals. In fact: the lack of purpose might be a reason for the non-surveillant behavior of this state. This shows that we are theorizing, because in reality every state has policy goals to pursue and needs data on whatever 'thing' to be able to know what policy to make. It also shows that the negative pole of welfare surveillance is only a theoretical construct, limited by reality. The negation is a theoretical possibility of which its existence in real life is hard to imagine. If we go one step further and leave aside reality even more explicit and one would imagine a spectrum with both poles at the opposites – running from 'positive welfare surveillance' to 'negative welfare surveillance', the first would mean a state that is collecting data, with or without a purpose, where the latter would be a state handing out benefits while stating 'please do not tell us anything about yourself: in fact, here are the documents on you we already have, and we don't want them anymore, so here they are[15]'. This is what this full opposite of welfare surveillance would look like, theoretically: it would run from 'full welfare surveillance' to 'full welfare non-surveillance', from 100 to -100. However, if this would be translated to real-life settings, with 'full welfare non-surveillance', welfare might not even exist. So, even when theorizing welfare surveillance, it makes more sense to keep in touch with reality. Although the theoretically constructed opposite would be as described above, in real life the above dimension would be cut in half and run from 'full welfare surveillance' to 'no welfare surveillance': from 100 to 0, where 0 represents a state that is not using any surveillance techniques in performing their welfare duties.

The next guideline, the **zones guideline**, which asks the question: "Is there a gray zone? Is it an ideal-type concept?" (ibid: 27) builds upon what is said about the negation guideline. The question is "whether a concept is dichotomous or not" (ibid: 27). The authors believe "it is better to ask about the existence or not of important "zones" in conceptualization. One key zone is the gray zone: if a concept is dichotomous, it has no gray zone. Another zone is the positive or negative pole: are there cases at these poles, or are we dealing with an ideal type?" (ibid: 28). This is in line with what is said above. Translated to the terms used here, welfare surveillance would not be dichotomous. For sure, the concept of welfare surveillance has a gray zone. Also, it is unlikely to find cases at the positive and negative poles, which indicates we would be dealing with an ideal type. However, it is, as Goertz & Mazur state, that "Continuous concepts incorporate a gray zone and often suggest that important

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[15] Following 'oh, and by the way: here is all there is to know about ourselves'.

phenomena occur in that area" (ibid: 28) and "we suggest that one should start with a continuous view of concepts. To use the metaphor of colors, one should always keep in mind the possibility that things may not be only black or white but can also be gray" (ibid: 28).

At this stage it is important to look at three of the final four guidelines at once: the **dimensions guideline**, the **necessity guideline** and the **interdependence guideline**. All three are related to each other. The dimensions guideline raises the question: "What are the dimensions or defining characteristics of the concept?" (ibid: 32) and "The key point for this guideline is that one needs to develop and defend a list of such defining characteristics" (ibid: 32). The unpacking of a concept leads to discussing the parts that the concept consists of: these parts themselves can be viewed as concepts as well (ibid: 32-33). It is important to be aware of the fact that "the dimensions of concepts are actually key theoretical components" (ibid: 33). Goertz & Mazur "suggest that all major social science concepts have multiple theoretical dimensions. Because they are complex constructions, we need to unpack each part and justify its role in the concept structure. This means providing a rationale for the importance of each dimension. Why choose these features as opposed to others? Concepts are often built up inductively from cases. Most objects have a huge number of characteristics. One must defend the traits selected as important for some theoretical or empirical reason. So listing the dimensions in a definition is never sufficient: one must justify these dimensions on theoretical and empirical grounds" (ibid: 33).

What to view as welfare surveillance and what not? One criterion is that a feature should establish a type or level of tracking with an imaginable policy-goal (data-matching in order to achieve policy-directive X, for instance), which means not all developments in e-government (the presence and use of internet in public organizations, or the presence of call-centers, for instance) are genuine parts of welfare surveillance. Since there is no consensus or status quo in the scientific debate on what welfare surveillance does or does not contain, an important note on what to incorporate is necessary. If we make the distinction between surveillance in general and welfare surveillance in particular (as a subpart of general surveillance) we should also treat its instruments that way. All welfare surveillance instruments are surveillance instruments, but not all surveillance instruments (elements of anti-crime surveillance, for instance) are welfare surveillance instruments.

The first decision in the road to the concept of welfare surveillance is to discuss what parts it consists of. This results in a focus on four types of welfare surveillance, partly after Henman & Marston's (2008) case-study: surveillance in cash benefits, surveillance in housing, surveillance in health care and surveillance in education. These four categories, social assistance, housing, health care and education are undisputable and undoubtedly subparts of welfare which justifies their measurement. For example, Kemeny (2001) states that "Housing has been one of the four major pillars of the welfare state" (Kemeny, 2001: 53) and "The other three pillars of the welfare state have

been social security, health and education" (ibid: 53). A comparable statement is made by Anttonen & Sipilä who say that "Housing, education, health care, employment services, and personal social services are all integral parts of the welfare state" (Anttonen & Sipilä, 1996: 89). In this thesis we will encounter the four pillars of the concept of welfare surveillance as social assistance, housing, healthcare and education. Since welfare surveillance is about surveillance by the welfare state, it makes sense to incorporate the four dimensions that the welfare state consists of. Goertz & Mazur (2008) state that "Three common rationales used to defend the choice of dimensions are (1) functional, (2) causal, and (3) empirical coverage" (Goertz & Mazur, 2008: 34). Especially the third rationale is promising to discuss. Since Goertz & Mazur (2008) make clear "that one needs to provide some empirical or theoretical rationale for the dimension's importance" (ibid: 34) and although the theoretical justification is already discussed above, so it is not necessary to discuss a possible empirical rationale behind the dimensions of the concept of welfare surveillance, it nevertheless is useful to do so. Because "new dimensions tap the identified empirical phenomena not covered under the standard" (ibid: 34), and this is exactly the case when the current treatment and study of welfare surveillance is broadened up to the concept we are developing here. Up until now, most welfare surveillance research discussed welfare in terms of the social assistance benefits and spoke about the procedures receivers were confronted with. In other words: the standard up until now was studying social assistance benefits; by adding the dimensions of (surveillance in) education and health[16] to this standard, the studies of surveillance in education and health can be added to the concept. To use a metaphor: the umbrella of welfare surveillance now not only covers social assistance and housing, but also education and health. The new dimensions broaden up the standard concept.

However, the next question, accompanying the **necessity guideline** is: "Are any dimensions necessary?" (ibid: 34). There are two answers to this question. "In the classical view of concepts (as exemplified by Sartori's work) all dimensions are necessary" (Goertz & Mazur, 2008: 34-35) is the first. "The most common alternative to a necessary structure to construct concepts uses the "family resemblance" strategy" (Goertz & Mazur, 2008: 35), is the second answer. The way the concept of welfare surveillance can be constructed is in line with this second idea, originally coming from Wittgenstein, "who proposed that concepts can have no essential, necessary, characteristics, but that nevertheless there is a family resemblance that allows one to group together many objects under one rubric" (Goertz, 2006: 29). The approach to constructing the concept of welfare surveillance is comparable to this strategy. To sum up, the approach to developing the concept is in line with Goertz (2006) who states that "To develop a concept is more than providing a definition: it is deciding what is important about an entity. The arguments about why attribute X is important

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[16] Henman & Marston (2008), by studying housing, in a way already added this dimension to the concept of welfare surveillance.

form part of the ontological theory of the object" (2006: 27). The concept of welfare surveillance consists of four dimensions that all have their own indicators or variables – that can be measured. If one would be empirically looking for signs of welfare surveillance, finding proof in only one of the four pillars is enough for something to be welfare surveillant. There does not have to be surveillant behavior in all four pillars to be able to call the behavior welfare surveillant. However, when comparing countries, one should in advance decide what the different scores to the variables represent. If the one country scores 99% on two dimensions of welfare surveillance and 20% in the other two dimensions, and another country scores 40% in all dimensions, which country is more welfare surveillant? This thinking corresponds with Goertz & Mazur (2008) who state that "The Necessity Guideline emphasizes that one needs to think about the relative importance of the various dimensions" (Goertz & Mazur, 2008: 38). Since in the case-study of this thesis only one pillar is examined, there is no need to take a decision on the relative importance at this point. However, for future researchers using this concept of welfare surveillance, it is a must to think about this. Whether you give equal, unequal or hybrid weight to dimensions is a significant question (Goertz & Mazur, 2008: 38). When doing this, one should also address the issues raised in the **interdependence guideline**, that asks: "What is the interdependence between dimensions?" (Goertz & Mazur, 2008: 38).

The final guideline concerns the **operationalization** of the concept: "How is the concept operationalized?" (Goertz & Mazur, 2008: 40). This guideline "argues that one must give specific attention to how to connect abstract concepts with empirical data, behavior, and practices" (ibid: 40). The authors believe that the right way to go is "to focus operationalization on the dimensions and not on the overall concept" (ibid: 41) and "attaching indicators to dimensions will in fact be the natural thing to do" (ibid: 41). In the case of the concept of welfare surveillance, the concept is operationalized by discussing how surveillance can take place in the dimensions. This results in a concept that is constructed through several building blocks (the dimensions) and bricks (the indicators).

4.2   Building blocks

Where the guidelines made us think about the overall concept and the dimensions of it, in this paragraph I will lay out the dimensions, explaining in more detail what the dimensions consist of. The way the concept of welfare surveillance is constructed is twofold: top-down (theoretically) and bottom-up (empirically). The top-down approach represents the welfare state label: the dimensions of the concept of welfare surveillance all four stem from the social science literature on the welfare state. The bottom-up approach refers to actual, practical surveillance measures. Since surveillance mainly is a practice, empirical examples of surveillance measures taking place in the four dimensions

will contribute to the creation of the building bricks, the indicators, as part of the dimensions, which in turn are part of the concept. Partially following Henman & Marston (2008), welfare surveillance can be split up in several parts. In accordance with the definition of the welfare state, these are surveillance in cash benefits, surveillance in housing, surveillance in healthcare and surveillance in education: the building blocks of the welfare state. In the following paragraphs these dimensions are elaborated on.

4.2.1 Surveillance in (social assistance) cash benefits

Under the heading of surveillance in cash benefits, Henman & Marston (2008) show several ways in which this surveillance is taking place. They state that "… in most nation states, application for social assistance benefits […] is a highly rigorous and intrusive process that requires the claimant to produce independent evidence of who they are […], of their claim status […] and of their 'means' " (Henman & Marston, 2008: 194). However, that is not all: if you have passed the process of application and you will receive the benefit, surveillance starts in at least three ways, by intergovernmental data-matching, frequent reviews and regular reporting (Cahill 1994 & Henman 2004 in Henman & Marston, 2008: 194). These are building bricks of the building block of surveillance in social assistance. Another is the use of biometric identifiers.

Henman states that "Recipients of unemployment benefits and employment services face a complex regime of surveillance practices and disciplinary measures in order to maintain eligibility for benefit" (Henman, 2004: 182) and he labels four elements of this process, all centered around the idea of keeping an eye on the benefit receiver. In his Australian case-study, Henman speaks of several ways in which jobless are observed in how they are dealing with their jobless status and how they are trying to get back into the labor market. They have to (1) sign a Return to Work Agreement, (2) report on their job search activities, (3) keep a diary of how they have been contacting employers, (4) show up at interviews where they are expected to with, for instance, employment service agencies, (5) apply to at least ten jobs every two weeks, and (6) attend training courses when the employment placement provider whishes you to (ibid: 182-183). A way of measurement would be to find out which of the six elements a case shows.

Next, data-matching and dataveillance are widely discussed issues in the (welfare) surveillance literature (Clarke, 1988; Coleman & McCahill, 2011; Dornan & Hudson, 2003; Lyon, 2007; Mitrou, 2010; Whitaker, 1999). However, data-matching and dataveillance are two distinct phenomena, although they are intertwined. Dataveillance is about personal data developed into profiles that somewhat resemble actual persons (Lyon, 2007: 16) and it is "the systematic use of personal data systems in the investigation or monitoring of the actions or communications of one or more persons" (Clarke, 1988: 499) where data-matching or data-sharing is about the electronical connectedness of

different databases (Whitaker, 1999).

Whitaker (1999) describes the digital coordination of databases, which is possible through the universal language of the digital. He states that "One of the crucial elements in the transformation of data into a commodity is the practice of data-matching or data-linkage, whereby separately collected and separately organized pieces of data are matched or linked to produce new and valuable information" (Whitaker, 1999: 125-126). The prominence of this technique is underlined by Dornan & Hudson when they state that "There has been a huge expansion in the use of ICTs to tackle fraud over the last decade. Anti-fraud work has become highly sophisticated, much of it based around the use of data-matching techniques" (Dornan & Hudson, 2003: 473). Data-matching or dataveillance is one of the non-physical elements of welfare surveillance and falls within "The shift from a conception of technology as a neutral tool for the implementation of public policy, to an understanding that technology contributes to the nature, substance and practice of public policy" (Henman, 2006: 212) and shows "the centrality of information and communication technologies (ICTs) to contemporary governmental operations" (ibid: 212).

Though, how to measure data-matching or dataveillance? It is reasonable to expect governments to make (in an increasing amount) use of databases, in times when the use of technology is increasing, but discovering when, where and how this took place is practically impossible, not only because government agencies will not give insight in how, where and when they visit and use their databases or how they use databases of third parties in execution of their policy and achieving their goals, but also because of a lack of technical knowledge on discovering if data-matching took place, if the databases would be accessible and available.

For these reasons, the indicator of data-matching or dataveillance can be operationalized by taking a legal perspective and focusing on the introduction or lacking presence of laws on data-matching. For instance in Britain, "successive governments have shown a willingness to break down the legal barriers to data-matching" (Dornan & Hudson, 2003: 473). By discovering the presence of legal barriers to data-matching or dataveillance in each case this indicator can be operationalized.

Next, the use of biometrics or biometric identifiers in surveillance is broadly discussed in literature on surveillance (Hayes, 2010; Los, 2010; Lyon, 2010; Van der Ploeg, 2003). In a more specific matter, it is clear there is a role in welfare (policy) for biometrics or biometric identifiers (Moffatt, 1999; Ogura, 2006; Little, 2001; Zureik & Hindle, 2004). For instance, Moffatt (1999) states that "The economy of power within the social assistance office creates the possibility for technology and serves the needs of new technology. There is a push toward the use of a biometric identifier within the social assistance office. The biometric identifier acts directly on the body to measure some aspect of the individual that is unique. The person's body is subjected to a voice scan, a finger print, a finger scan, a palm scan or a retina scan. The purpose of the biometric identifier is to check and verify a

person's identity" (Moffatt, 1999: 241).

Biometrics are used for the processing of welfare recipients (Zureik & Hindle, 2004: 116). When speaking of surveillance based on ICT and electronic government, Ogura states that "The dissemination of ICT for identification and certification spread from welfare to policing" (Ogura, 2006: 275) and he speaks of biometrics or biological identification technology as a tool of e-government (ibid: 275-276) which could be the broader heading of what Little (2001) speaks of when discussing biometric fingerscanning that is used to deter fraud (Little, 2001: 26). There is a focus on the deterring of fraud and the use of biometrics to achieve this goal; biometric technology can be a tool of surveillance for the welfare state (Gilliom, 2001; Lyon, 2003; Zureik & Hindle, 2004: 128).

4.2.2   Surveillance in housing

Surveillance in housing is the second heading under which Henman & Marston (2008) studied welfare surveillance in Australia. It is worth noting that surveillance is of relevance especially in an urban context (Coleman, 2005; Murakami Wood, Lyon & Abe, 2007) which makes housing a relevant category of (welfare) surveillance. However, what should be underlined is that surveillance in housing is perceived of at the local level; at the level of cities. In terms of welfare surveillance, Henman & Marston state that "Public housing tenants in Australia […] must first undergo a rigorous application process to prove their eligibility and then once in public housing they are subjected to regular dwelling inspections as per their tenancy agreements, regular income reporting to determine rent levels, CCTV surveillance on medium and high density public housing estates, and occupancy checks to verify the number of people residing in the dwelling" (Henman & Marston, 2008: 198). In many studies, books and articles on surveillance, CCTV surveillance occurs as a factor or variable of major importance (Ball, 2002; Lyon, 2002; Murakami Wood, 2009; Norris & Armstrong, 1999). Together with the elements Henman & Marston are summing up, these can be the building bricks of the building stone that surveillance in housing is. To measure and to be able to compare across cases, policy documents, application processes and guidelines of public housing agencies can be examined, together with interviews with directors of these agencies.

4.2.3   Surveillance in healthcare

Both of the building bricks of the surveillance in health care building block are perceived of at the national level. These building bricks are electronic patient records (EPRs) and smart card technology. The establishment and use of electronic patient records in health care (Graham & Wood, 2003; Van der Ploeg, 2002) is a way in which surveillance is developing. In fact, Greenhalgh, Potts, Wong, Bark & Swinglehurst (2009) are speaking of a group of scholars who are speaking of the fact that "computerized records jeopardize the human side of medicine and nursing and that distributed

record systems bring unanticipated hazards, including (but not limited to) the insidious growth of the surveillance society" (2009: 730). More specific, Van der Ploeg (2002) describes the development in health care systems as "moving towards online-accessible EPRs into which all data on medical history, medication, test-results from a broad variety of diagnostic (often already computer based) techniques, and therapies belonging to a particular individual's medical biography are accumulated and can be accessed by relevant care givers" (Van der Ploeg, 2002: 62). At the same time, Graham and Wood (2003) state that EPRs "gradually accumulate a mass of personal information, most of which has no direct relevance to any particular medical condition" (Graham & Wood, 2003: 240). The importance of this variable to welfare surveillance is clear when reading that "Once state EPRs are commodified, so prospects for democratic control over personal information decrease and the discriminatory potential multiplies (ibid: 241). The use of electronic patient records on the federal level can be examined by investigating whether there are laws passed that approve of the introduction of electronic patient records, or other proof thereof, after which the use of these records is established or is expected to in the near future.

There also are empirical examples of cards that can be used to access government services. In Australia, for instance, the government wished to introduce a card that "would operate as an identity card for access to a range of government and health services" (Henman, 2010: 52). The government wished to introduce "a single smart card […] which would hold details of the various concessions and services that a holder is entitled to receive as well as other personal details" (ibid: 52). Although the introduction of the card was cancelled (ibid: 52), smart card technology is a well-suited variable in line with the understanding of welfare surveillance in this thesis. A way in which the use of smart card technology can be measured is by investigating whether laws are passed that approve of the introduction of smart card technology in health care, or search for other proof of the use of smart cards in health care.

What is important to note is that in the literature many different definitions, theoretical and empirical, exist on electronic patient records. When operationalizing and measuring one should state clear what exactly is measured, because this can influence the conclusions on might reach. For instance, there is a difference between single electronic patient records in the office of the practitioner, or 'national' electronic patient records (most of the time, but not always named national health records) that are accessible to more than just one practitioner. To be explicit on these differences is to be as pure as possible in measurement.

4.2.4   Surveillance in education

There are plenty of signs of an increasing surveillance in education. There are multiple examples of studies after CCTV in schools (Hope, 2009) and at the same time, there is use of biometrics in schools

as a means of surveillance (Hope, 2010: 322). In a recent article in The Guardian (June 9th, 2011) a reporter discusses examples of physical surveillance like police officers at schools, the use of metal detectors and drug tests, but also CCTV in the classroom and the use of biometrics: the fingerprinting of school-going children (Website The Guardian, 2011). Likewise, in the scientific literature there are more than enough signs pointing in the direction of educational surveillance or surveillance in schools. There are studies focusing on surveillance in terms of safety and security (Hope, 2009; Kelly, 2000; Kingery & Coggeshall, 2001; Lewis, 2003), in terms of control and resistance to it (Hope, 2010) and surveillance as in the increased use of technological equipment in the daily proceedings at school (Epling, Thimmons & Wharrad, 2003: 414-415). If one would want to operationalize 'surveillance in education' one could think of measuring CCTV in schools and the use of biometrics. After all, this type of variables are discussed in earlier mentioned categories of surveillance, by which it makes sense to incorporate them in this category as well. Without doubt, both variables can be used to increase security or safety, and after measurement it might be possible to derive some conclusions on how security and safety are enhanced by the two. However, the focus of this thesis is not on the security side of surveillance, as mentioned earlier.

Although both variables[17] are useful in studying security, the results of the measurement should be in connection with the concept of welfare surveillance: educational surveillance as a means in policing (to achieve educational goals, to incorporate surveillance techniques as a means in execution of educational policy): it should be underlined that both CCTV as biometric technology, although they might be security enhancing, do not primarily have to be used in order to increase security: both variables can serve to monitor behaviour of children (for whatever goal).

Summarizing, both variables can be measured with different frames of reference in mind, where both frames are relevant in terms of studying surveillance. By measuring CCTV in schools and the use of biometrics 'surveillance in education' can be captured. Other components might be harder to measure. A good reason for leaving aside variables like the use of digital learning environments and the access teachers might have to data on students using these environments, or the checking of what internet sites were visited by students, what might also be labeled surveillant (see Epling, Thimmons & Wharrad, 2003) is their measurability: it might be too technically complicated to examine if, how and how much teachers enter, view and use the student data they can access, or how and how often internet-checks are performed, to determine a level of 'surveillance-ness'. The

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[17] If the interest would lie with examining surveillance in schools in terms of safety measures, a larger amount of variables might be extracted out of the work of Lewis (2003). However, conceiving 'surveillance in education' in a different, more security-focused manner than the other three categories of welfare surveillance as pictured in this thesis would do injustice to the broader underlying connection between the four elements of welfare surveillance. Yet, performing a comparative case study after security surveillance techniques in schools is worthwhile to consider in the future.

most promising way in which this might be measured is by performing interviews with teachers and school-boards. Also, it might be possible to measure CCTV and biometrics use in schools by examining policy documents of local governments, to find out if there are any formal guidelines on the subject.

4.3   Dimensions and indicators (building blocks and bricks)

Below figure illustrates how the four dimensions are constructed and shows that future bricks can be added to the dimensions, if wished for.

Figure 3: Welfare state building blocks and surveillance bricks
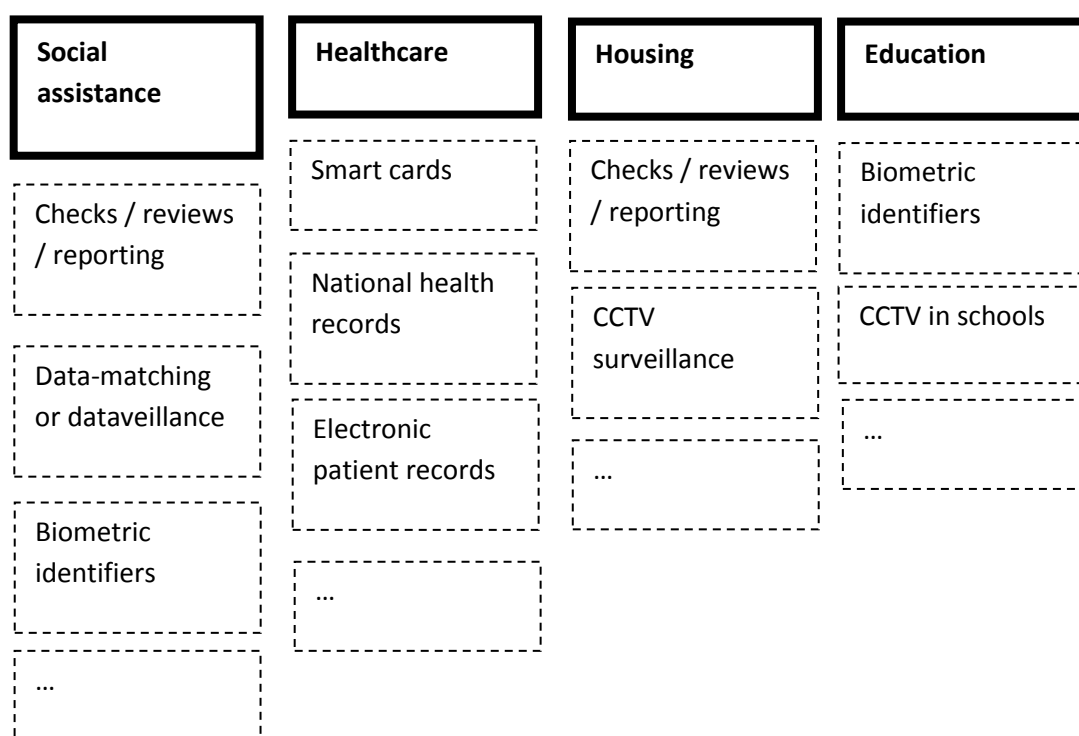
Each of these blocks is built up out of multiple building bricks, deducted from the literature. This implies that the work of various authors on welfare surveillance is combined into one broader account of welfare surveillance. All subparts of welfare surveillance are labeled as part of 'social welfare', which "is understood as the range of social services and benefits that are provided by the state, including education, health, housing, social security pensions and child allowances" (Henman & Marston, 2008: 189). This implies that there will be no measurement of welfare surveillance in the other types of welfare: fiscal and occupational (Titmuss in Henman & Marston, 2008: 189-190). The reason for focusing on social welfare is the prominence of surveillance in this category.

4.4   Welfare surveillance: a definition

At this point it is useful to arrive at a definition of welfare surveillance. However, what must be noted first is that the concept of welfare surveillance constructed through consulting the guidelines of Goertz & Mazur (2008) is only fairly static, the number of indicators ('building bricks') can be expanded if there are well elaborated reasons to do this. In other words: the concept can be operationalized in many different ways, for instance depending on the fact whether you are performing qualitative or quantitative research. A final note, before arriving at a definition, is the fact that welfare surveillance can be both digital as physical. Although not entirely the same, because the distinction developed out of security and surveillance research, a parallel could be made with the distinction between inductive en deductive surveillance (Brodeur & Leman-Langlois, 2006: 191-192), where inductive surveillance indicates the watching of individuals from up-close and it "moves from the particular subject under observation to his or her inclusion in a category of like individuals or to a general conclusion" (ibid: 191), which would be comparable to physical welfare surveillance, and deductive surveillance, which works the other way around; there is a greater reliance on computerized monitoring creating a large amount of information (ibid: 191-192), which would be comparable to non-physical welfare surveillance. This deductive surveillance, or "watching from a distance" (ibid: 191) is a "growing trend of surveillance" (ibid: 191). Having said all this, the concept of welfare surveillance, means: either physical or digital attention to the behavior of the inhabitants of a space, at any level, with any purpose, in the sphere of social assistance, housing, education and healthcare.

4.5   Summing up

Welfare surveillance should be understood in the broader context of the entire welfare state; not just welfare in terms of social assistance, or assistance to the poor. In such an approach, the understanding of procedures of surveillance is more in depth, and it creates the chance to place a specific type of surveillance in the context of the welfare state, increasing the understanding of the welfare state regimes at the one hand, and practices of surveillance at the other. The framework created in this thesis is useful for situating social science research after surveillance in the context of the welfare state. To illustrate how such research can be performed, what follows next is a case-study of surveillance in health care, one of the pillars of the welfare state – and one of the dimensions of the concept. Since testing the entire concept is too big a task for this thesis, only one dimension of the four introduced is studied empirically. A comparison is made between countries of all three welfare regimes of Esping-Andersens typology: liberal, social-democratic and corporatist countries. It is an example of how it is possible to find out if the level and nature of surveillance in countries with different welfare regimes, differs. Following this reasoning, the question leading us in

the following and final paragraph is: are there differences in surveillance in healthcare (as a dimension of the concept of welfare surveillance) across countries of different welfare state regimes? If so, how can these differences be explained?

The main task of this thesis was to create the concept of welfare surveillance, to broaden it up and help the research field make a step forward. However, this practice of concept creation is given more use, if the concept in fact is used in an empirical study. Ideal would be to measure all indicators of all dimensions, for different cases with different types of welfare state regime. Unfortunately, that would be a too big a task for this thesis – it would take years to finish a study like that. That is why only one dimension will be studied: the health dimension. Since we are still exploring the potential relationship between welfare state regime type and level of welfare surveillance, all countries in Esping-Andersen's typology that are typical for the welfare state regime type they fall in, are studied, focusing on the indicators of the health dimension. Picking a liberal, social-democratic and corporatist case to find scores and compare these would not be representative and would be a wrong way of exploring this potential relationship.

5.   Case-study: healthcare as pillar of welfare surveillance

This small empirical case-study is an example of how to handle the (re)new(ed) concept of welfare surveillance, as presented in this thesis. This empirical study makes sense because it is the first test for the theoretical concept constructed. It studies healthcare surveillance as a subpart of the concept of welfare surveillance, which in its turn is part of surveillance in general. To find an answer to the above presented question, eleven countries of Esping-Andersen's Three Worlds of Welfare Capitalism (1990) will be studied. Esping-Andersen distinguishes three welfare state regimes: liberal, corporatist and social-democratic (Esping-Andersen, 1990). We will study three of the components of surveillance in health care: the use of the electronic patient file and (as a result of that) possible health information exchange, plus the existence of a national electronic health record, possibly with presence of a smart card. For each country it is studied how far these developments are. By grouping the countries by welfare state regime type and exploring the status of healthcare surveillance in these countries, the potential relationship between welfare state regime type and level and type of welfare surveillance is investigated. Once again, it is not said that welfare state regime type causes a level of welfare surveillance; what is investigated is how the countries score on several indicators of the health-dimension of the concept of welfare surveillance to find out if on their 'score' on this dimension of welfare surveillance, they group together by welfare state regime type.

To be able to stay close to our question all cases that are typical for each welfare state regime type are investigated. 'Unclear' cases are left out. Also, Esping-Andersen shows "that welfare states cluster, but we must recognize that there is no single pure case" (Esping-Andersen, 1990: 28). Nevertheless, Esping-Andersen lists three countries as examples of the liberal welfare state regime type: Australia, Canada, and the United States (Esping-Andersen, 1990: 27). He labels four countries as "predominantly social-democratic" (Esping-Andersen, 1990: 28), which are the Scandinavian countries (ibid: 28). Finally, four countries are what Esping-Andersen calls corporatist: Austria, France, Germany and Italy (ibid: 27). This total of eleven countries are our objects under study[18]. In the next paragraphs each of these countries is studied to find out how well developed welfare surveillance is. For each country a thick description is given in which at least the presence of electronic patient files with caregivers (from hospital care to primary care), health information exchange among practitioners, for instance, and presence of a national electronic health record, possibly in combination with smart cards, are discussed. Every welfare state regime its study ends with a table in which countries are compared to each other, by attaching a plus or a minus symbol to each indicator, for each country. A **+** indicates high development, a **-** indicates little development. A

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[18] Another approach would have been to investigate only three cases, one for each welfare state regime type. However, to find out if countries group together it is more convincing to study all cases that are typical for its welfare state regime type. Since it is an explorative study this is the most promising path to pursue.

+- stands for medium development, where a **+(-)** stands for good development, but not as well developed as with a full +, but higher development than a +-.

5.1   Expectations

Although this is an explorative study of the potential relationship between welfare state regime type and levels of welfare surveillance in different countries, there still are expectations on what to find when studying the cases. Adler & Henman (2005) are "suggesting that the characteristics of welfare state regimes may shape the aims of computerization" (Adler & Henman, 2005: 318) and they "recognize that computer technologies can be used to expedite policy goals, as opposed to administrative objectives" (Adler & Henman, 2005: 318). With regard to the liberal welfare state regime type, they state that those cases "are associated with 'targeting' and 'means-testing' and seek to minimize the role of the state and limit the cost of social security" (ibid: 318) and "it might be reasonable to expect that computers would be used as a means of cutting expenditure (by reducing staff numbers and increasing administrative efficiency), detecting fraud and reducing overpayments, promoting information flows between public and private sectors, and checking compliance with job search requirements" (ibid: 318). Based on this, for the liberal welfare state regime type cases studied in this thesis, the expectation is that welfare surveillance in fact is developed up to a high level, since much information is needed to be able to cut back spending, detect fraud, and achieve other policy goals related to the liberal welfare state regime type. The expectation is that welfare surveillance is well-developed in the liberal cases.

Although the social-democratic welfare state has a very different character when compared to the liberal welfare state regime type, we expect similar high development of welfare surveillance measures as well in this type. "The social democratic welfare states found in Scandinavia are noted for policies that seek to maximize social citizenship, and it might be reasonable to expect that computerization would be used to enhance this aim", state Adler & Henman (2005: 318). "Computers could be used to ensure that claimants are treated with the same respect as other citizens, and to provide claimants and others with more extensive knowledge of their rights and obligations. Computers could enable individuals to access information held on them by social security agencies and check its accuracy, and, using data matching, they could be used to identify individuals who are not receiving their full entitlement to benefit" (ibid: 318). Based on this, in this thesis the expectation is that the social-democratic cases will show high scores on their development in terms of welfare surveillance. To be able to be generous, when wishing to be fully informed, full or as much as possible information is necessary.

The expectations for the cases of the corporatist welfare state regime type are ambiguous. There is no clear expectation on what to find in these cases, although Adler & Henman (2005) do speak of

"very high information requirements" (ibid: 318) when it comes to social security. However, the expected pattern is less clear than with the other welfare state regime type. That is why the corporatist welfare state regime type cases are the largest question mark in this thesis, which might make them well-suited to play an important role in reaching definitive conclusions on the relationship between welfare state regime type and levels of welfare surveillance. Having presented the expectations on what to find empirically, what follows next is the case study of eleven countries on their levels of welfare surveillance, in the healthcare dimension of the concept of welfare surveillance.

5.2   The liberal welfare state regime type

In this paragraph, the three liberal welfare state regime type cases of Australia, Canada and the United States of America are studied. The focus lies with the use of electronic patient files, health information exchange and national health records. However, when relevant, other notable developments in the countries will be described as well.

5.2.1   Australia

In Australia, the use of the computer in health care is common. For example in 2006, a study shows that with regard to general practitioners "Most practices had the computer software and hardware to perform administrative and clinical functions" (McInnes, Saltman & Kidd, 2006: 89) and "The most commonly used electronic health record functions were ordering laboratory tests, updating patient allergy information, and generating patient health summaries" (McInnes, Saltman & Kidd, 2006: 89). What is more, "Australian general practice has achieved near-universal computerisation in less than 10 years" (ibid: 91). It seems to be the case that the presence of patient data on doctors' computers is abundant. Next to this, with regard to health information exchange, Australia is a country that is working hard to create ways to be able to exchange health information (Sprivulis, Walker, Johnston, Pan, Adler-Milstein, Middleton & Bates, 2007: 531-532) and is investigating its future in E-Health (Deloitte, 2008). Regarding the issue of national health records, the Australian government is a busy actor. In the press statement of 11 May 2010, from Australia's Minister of Health and Ageing, titled 'Personally controlled Electronic Health Records for all Australians' (Nicola Roxon MP, 2010) it becomes clear that this is an important project of the government. From above date on, "Australians will be able to check their medical history online through the introduction of personally controlled electronic health records" (Nicola Roxon MP, 2010: 1) and "The national E-health records system will be a key building block of the National Health and Hospitals Network" (Nicola Roxon MP, 2010: 1). There will be "a secure system of personally controlled electronic health records that will provide: summaries of patients' health information – including medications and immunizations and medical

test results; secure access for patients and health care providers to their E-health records via the internet regardless of their physical location; rigorous governance and oversight to maintain privacy; and health care providers with the national standards, planning and core national infrastructure required to use the national E-health records system" (ibid: 1). Next to all this, "Patients will control what is stored on their medical records and will decide which medical professionals can view or add to their files, meaning privacy will be strengthened. A personally controlled electronic health record will have two key elements: a health summary view including conditions, medications, allergies, and vaccinations; and an indexed summary of specific healthcare events" (ibid: 2). The Australian government is devoted to the project, as "A national e-Health records system was identified as a national priority by the National Health and Hospitals Reform Commission and the draft National Primary Health Care Strategy" (ibid: 2-3) and "The Government's reform plans in primary, acute, aged and community care also require a modern e-Health infrastructure. It is a key foundation stone in building a health system for the 21st century" (ibid: 3). Where the need for improvements in e-Health are clearly presented by the government, it is worth notifying that "A personally controlled electronic health record will not be mandatory to receive health care" (ibid: 3). This is a sign that makes the welfare surveillance by the Australian government less coercive.

5.2.2 Canada

In sharp contrast with the liberal case of Australia, Canada is a country that is less developed when it comes to electronic health records. EHR use in primary care in Canada is low (Jha, Doolan, Grandt, Scott & Bates, 2008: 850). However, the country is very active in developing and implementing Canada Health Infoway, which "is an independent not-for-profit corporation created by Canada's First Ministers in 2001 to foster and accelerate the development and adoption of electronic health record (EHR) systems with compatible standards and communications technologies" (Website Infoway, 2012). When investigating Canada, what currently stands out is its comprehensive approach to the development of E-Health. Canada Health Infoway really is a "national infrastructure" (Rozenblum, Jang, Zimlichman, Salzberg, M. Tamblyn, Buckeridge, Forster, Bates & R. Tamblyn, 2011: E281). Health information should be exchanged from "coast to coast" (Rozenblum et al., 2011: E281). Nevertheless, Canada still is no frontrunner when it comes to electronic medical records. In 2009, "only 36% of Canadian physicians were using electronic medical records, as compared with more than 90% of physicians in Australia, the United Kingdom, New Zealand and the Netherlands" (ibid: E281). In Canadian hospitals, the use of EHR systems is below 10% (Castro, 2009: 11), while only 23% of primary care physicians use EHR systems (Castro, 2009: 10). Canada is an example of a country with large ambitions, but with no overall 'success' yet. At this point in time, "Canada has implemented a national strategy for interoperable electronic health records by establishing a model

for successful interprovincial collaboration on core aspects of a national framework. Looking forward, Canada needs to establish an e-health policy to guide the implementation of health information technologies to address the major strategic priorities of health care reform" (Rozenblum et al.: E287). Also, "To increase adoption of electronic health records, strong clinical and administrative leadership will be needed, as will a cadre of clinicians trained in medical informatics to bridge the gap between information technology and health care" (Rozenblum et al.: E287). In the case of Canada, it perfectly shows how all three building bricks seem to glue together: without broad established use of electronic patient files it is hard to exchange health information; with a smaller amount of clinicians using digital technologies, there is less information to exchange. And, with less digital data on Canadian patients, the establishment of a national health record is more difficult and challenging.

5.2.3   United States of America

In line with the Canadian case, the USA is no frontrunner either, when it comes to the use of (IT-) technology in healthcare. It is found that "Current levels of adoption of electronic health records (EHRs) in the United States are low" (Bates, 2005: 1180). Jha, Doolan, Grandt, Scott & Bates (2008) discovered that "While the adoption and use of EHR systems in the hospital setting was in its early stages in every nation, most nations were far ahead of the United States in adoption of EHR in the ambulatory care setting. While fewer than 1 in 4 ambulatory care physicians in the U.S. use an EHR and fewer than 1 in 10 such physicians prescribe electronically, nearly all general practitioners in the UK, Netherlands, Australia and New Zealand do both" (2008: 852). Another study by Castro (2009) shows that only 28% of primary care physicians in the USA use EHR systems (Castro, 2009: 10). This stands in sharp contrast with, for instance Denmark (95%) and Finland (99%), but also with Australia (79%) and the UK (89%) (Castro, 2009: 10). When looking at EHRs in hospitals, the USA lags behind as well: it is used in only 8% of the hospitals, where again the Scandinavian countries, Finland (100%), Sweden (88%) and Denmark (35%) score way higher. The other liberal cases in this thesis show similar scores to the USA: Australia (less than 10%) and Canada (less than 10%) have not implemented major use of EHRs in hospitals as well (Castro, 2009: 11). What stands out in the case of the USA is the fact that the financial barrier for physicians to start using electronic systems for data use and registration is high (see, for instance: HIMMS, 2008: 113). It is a fact that "the U.S. has taken an indirect approach to the development of a national EHR system. Legislation is focused on facilitating the development of EHR systems within the private sector but federal funding sources have been limited and the government has not enforced its own legislation" (HIMMS, 2008: 114). What is more, the USA is as well struggling with health information exchange, since "At the local level, the capitalist-driven healthcare market combined with a lack of federal funding for EHRs and few federal mandates for its adoption have allowed an explosion of clinical electronic ambulatory

records systems. The large number of disparate systems in the ambulatory sector has hampered interoperability and exchange of data. Although other countries suffer from the same problems with standards and interoperability, there are fewer vendors involved" (HIMMS, 2008: 115). In other words, health information exchange in the USA is underdeveloped as well. The road to a fully integrated 'all-in-one' health record seems to be long; in fact, the USA is a case that has limited development in the health pillar of welfare surveillance, especially when compared to other developed countries.

5.2.4   Liberal welfare state regime type: a conclusion

Summing up, the three liberal cases of Australia, Canada and the USA show different developments when it comes to the health pillar of welfare surveillance. In Australia, the use of the computer by doctors is abundant, leading to the use of electronic patient files with all types of data, health information exchange is developing, as well is the national health record. However, since accepting the national health record is not compulsory for each individual, this makes the Australian government less 'intrusive' or 'coercive'. In the case of Canada, it appears that all building bricks glue together in an almost necessary way: without broad use of digital patient files, information exchange and the creation of a national health record are harder to achieve. The case of the United States of America is not that different from its northern American neighbor: the use of (IT-)technology in this country lags behind compared to other developed countries. However, a difference with Canada is that the USA has less of a 'totality approach' to expand this use, compared to the Canadians. What should be noted in this first conclusion on the liberal welfare state regime type, is that there is no single type of electronic health record for each country. Every country, perhaps even every province, county or state, has a different approach and understanding when it comes to the collection and use of digital patient data. There is no single type of EHR and no single understanding of it either (see Jha, Doolan, Grandt, Scott & Bates, 2008: 849). For that reason, the best comparison is one where each case is treated and presented the way is done so far: a short narrative of the status of digital patient data use in healthcare. However, what in fact has been studied comparatively in the three cases so far – and what will be studied in the cases that follow – is a country its status when it comes to electronic patient files, health information exchange and national health records. In every case its investigation, attention has been devoted to these three elements. What stands out is that in the one country these three features are more connected to each other, than in the other. Below table shows a simplified picture of the narratives above. A plus sign indicates a 'mainly present', while a minus signals 'little presence' of one of the three features. The plus and minus symbols are also presented to show the differences between the cases; to indicate the relative position of the cases. It serves the goal of being able to 'eyeball' the cases. Viewing the table, we see that the use of

electronic patient files is well developed in Australia, and underdeveloped in Canada and the USA. Health information exchange is well developed in Australia, underdeveloped in the USA, and Canada falls in between. Regarding the national health record, of these liberal cases, Australia is the frontrunner, followed by Canada and finally, the USA.

	Electronic patient files	Health information exchange	National health record
Australia	+	+	+(-)
Canada	-	+-	+-
United States of America	-	-	-

Table 2: Results for the liberal cases

5.3   The social-democratic welfare state regime type

In this paragraph, the four social-democratic welfare state regime type cases of Denmark, Finland, Norway and Sweden are studied. The focus lies with the use of electronic patient files, health information exchange and national health records. However, when relevant, other notable developments in the countries will be described as well. The Nordic countries are developing rapidly in terms of healthcare technology. What comes out of The Information Technology & Innovation Foundation's study by Castro (2009) is that "Our analysis of available literature and data indicate that three countries—Denmark, Finland, and Sweden—are definitively ahead of the United States and most other countries in moving forward with their health IT systems. These three Nordic countries have nearly universal usage of electronic health records (EHRs) among primary care providers, high rates of adoption of EHRs in hospitals, widespread use of health IT applications, including the ability to order tests and prescribe medicine electronically, advanced telehealth programs, and portals that provide online access to health information. All three countries have embraced IT as the foundation for reforming their health care systems and have successfully implemented changes that reach every patient" (Castro, 2009: 1). This comment depicts an overall picture of the Nordic countries as having embraced new technologies in health care. We will now turn to a more detailed study of the Scandinavian countries.

5.3.1   Denmark

It is said that "Denmark can be regarded as the European frontrunner concerning the availability of ICT infrastructure as well as when it comes to the use of eHealth among General Practitioners" (European Commission, 2008: 66). Also, although in general in the EU27 the transfer of electronic patient data is "moderate to low" (ibid: 8), an example of this with Denmark showing the highest score is ePrescribing: 97% in Denmark (ibid: 8). This ePrescribing is only common in two other

countries: the also Scandinavian Sweden, and the Netherlands (ibid: 8). Although not one of the indicators presented earlier, it is worth notifying: Denmark seems to be a country where electronic developments in healthcare are dominant. Focusing on the building bricks described earlier, the first feature to examine are electronic patient files. In this case, the European Commission report speaks of "computer use for storage of individual patient data" (European Commission, 2008: 24). Below table shows the scores for the EU27 countries, plus Iceland and Norway. The last column is additional to the Commission report: it shows the type of welfare state regime, for the cases selected for this thesis:

Rank	Country	Score	Welfare state regime type (only with selected cases)
1	Hungary	100.0	-
2	Finland	99.6	Social-democratic
3	Iceland	99.0	-
4	Norway	98.0	Social-democratic
4	Estonia	98.0	-
6	The Netherlands	97.3	-
7	Denmark	96.9	Social-democratic
8	Sweden	96.3	Social-democratic
9	United Kingdom	95.0	-
10	Bulgaria	93.7	-
11	Germany	92.5	Corporatist
12	Slovakia	90.0	-
13	Slovenia	86.4	-
14	Italy	84.5	Corporatist
15	Belgium	83.5	-
16	Austria	80.3	Corporatist
17	France	74.2	Corporatist
18	Portugal	73.6	-
19	Luxembourg	70.1	-
20	Spain	68.3	-
21	Czech Republic	67.1	-
22	Ireland	63.7	-
23	Cyprus	56.9	-
24	Poland	54.1	-
25	Malta	50.0	-
26	Greece	49.2	-

27	Romania	46.7	-
28	Lithuania	38.4	-
29	Latvia	26.0	-

Table 3: Electronic recording and storage of individual administrative patient data. Adapted from European Commission, 2008: 24-25.

The country of Denmark ranks 7th overall of all 29 countries studied and shows a score of 96.9, which indicates a high development of the use of electronic patient data. In Denmark, "Records in primary care is well established. Almost all general practitioners (GPs) offices are computerised" (European Communities, 2007: 30). In general, when it comes to the electronic health record, for all the countries that are studied in the HIMMS report it shows that "All countries suffer from a lack of healthcare IT standards creating interoperability barriers for healthcare IT adoption at local and national levels" (HIMMS, 2008: 8). However, "France, Sweden, the Netherlands and other countries are attempting to standardize EHRs either through their own national standards or by using a variation of the Health Level Seven (HL7) standard so that interoperability can also occur between their countries" (HIMMS, 2008: 8) and, more importantly "Denmark, Norway and Sweden already collaborate in the exchange of electronic health information" (HIMMS, 2008: 8). In terms of an electronic health record, Denmark and Norway are countries "that focused early on building national networks" (HIMMS, 2008: 54). Regarding patient data, "The Ministry of Health launched its first strategy for the development of Electronic Patient Records (EPRs) in 1996, when through a number of decentralised, regional pilots the need for standards and common terminology was identified. The National Strategy for Information Technology in Hospitals followed in 1999 with the main objective of establishing EPRs as the core of IT systems in hospitals" (European Communities, 2007: 29). With regard to health technology and data at the national level, Denmark is ahead as well. "The public National Health Portal, Sundhed.dk, was launched in December 2003. It provides a single access point to Danish healthcare services for both citizens and professionals. Using their digital signature, citizens can avail of a variety of services such as: book GP appointments, order medications and renew prescriptions, review their medication data and communicate with healthcare authorities. In addition, the portal offers, e.g., directory services, general and disease-specific health information, access to national guidelines, basic information regarding hospitalisations. In the context of providing care and by using their special security certificates, healthcare professionals can access patient data and laboratory results, and utilise various other resources (e.g. guidelines and clinical pathways)" (European Communities, 2007: 30). Finally, in terms of the exchange of data, Denmark shows high scores as well. The number of Electronic Data Interchange documents exceeds the amount of 3 million, monthly, "which represents 80% of all communications in the primary healthcare sector"

(European Communities, 2007: 30). Overall, the social-democratic case of Denmark is one that scores high on all three indicators of the health pillar of welfare surveillance.

5.3.2 Finland

Finland also is a country with high development regarding electronic innovations in healthcare information. Studying electronic patient data, in the table 'Electronic recording and storage of individual administrative patient data' (see above) Finland ranks 2nd overall of all 29 countries studied, and shows a 98.6 score; which is one of the highest of all. Next to this, in the report 'Benchmarking ICT use among General Practitioners", by the European Commission, we read that "From the data collected for this study, Denmark, the Netherlands, Finland, Sweden and the UK emerge as the European frontrunners in eHealth use by General Practitioners" (European Commission, 2008: 6) and "Administrative patient data are stored electronically in 80% of the EU27 GP practices" (European Commission, 2008: 7), while "The highest use rates can be found in Denmark (97%), Estonia (98%), Hungary (100%), the Netherlands (97%), Finland (100%), Sweden (96%), the United Kingdom (95%), Iceland (99%) and Norway (98%)" (ibid: 7).

Furthermore, what stands out in Finland, is the fact that "The development and implementation of eHealth solutions in Finland is heavily influenced by the strongly decentralised Finnish health care system – the 430 municipalities are each responsible for providing and developing health services for their residents" (European Communities, 2007: 34). In Finland, the citizen is central in policy around healthcare and technology (European Communities, 2007: 34). It is the case that "Citizens and patients were envisioned as informed and participative agents in the healthcare delivery process. To realise this vision the use of ICT was seen as essential; and partnership between service providers and industry was encouraged. In addition, a new contract-based model, paving the way towards regional level service provision, was introduced between municipalities and private service providers. The strategy was updated in 1998, placing specific emphasis on several issues, including: the adoption of digital patient and client records in all levels of healthcare and social services, combined with nationwide interoperability between distributed legacy systems; support of high level security and privacy protection, allowing citizens access to their patient records via the Internet, as well as maintenance of a personal digital health and welfare record; and improved management of service chains" (European Communities, 2007: 34). With regard to national health records, Finland is in full movement as well. "In 2002, as part of the National Program for Securing the Future of Health Care, the government decided that "a national electronic patient record" should be introduced by the end of 2007. The strategy for the national Electronic Health Record (HER) was published in January 2004. In addition, the national project to develop the use of ICT in social services started in 2003. In 2005, a plan to build a national EHR archive was added to the national policies under the umbrella of Prime

Minister Matti Vanhanen´s information society program" (European Communities, 2007: 34).

Concerning the exchange of health information, the European Communities report (2007) speaks of several types of information flows: there is electronic communication between insurance agencies, pharmacies, service providers and a research centre (although not necessarily communication of all with all), on the national level. There are also several examples of information flows on the regional level (European Communities, 2007: 35). As to the future of digital developments in Finnish healthcare, there is a lot in prospect. For instance, "At the heart of the national Finnish ICT infrastructure for social and health care will be a national digital archive for patient documents" (European Communities, 2007: 36) and "In addition, there will be one logical connectivity centre for eHealth communication" (European Communities, 2007: 36). Finally, "Exchanging data between organisations will be conducted on a national basis and not regionally" (European Communities, 2007: 36). Summing up, Finland, just as the social-democratic case of Denmark, seems to be another case with high scores on all three indicators of the health pillar of welfare surveillance. The use of electronic patient files, health information exchange and national health records are already in place or are directed on the straight road towards the goal of fully functioning devices. However, the fact that some data exchange still only takes place at the regional level, indicates that the Finnish government still has the potential to increase its surveillance measures, diverting data-flows and digital information to the national level.

5.3.3 Norway

Studying the first of three main indicators, the electronic patient files, the country of Norway ranks 4th of 29, in the table 'Electronic recording and storage of individual administrative patient data' (see above), with a 98.0 score. This is a high score, which indicates that the use of this patient data is common in Norway. This is confirmed by the European Communities study, that shows, with regard to electronic patient records that "A national EPR standard was released in 2001, mainly covering issues related to architecture, archiving and security. With few exceptions, all General Practitioners and private specialists have fully operational EPR systems and have built up practical experience over many years. All hospitals have, or are introducing, EPR systems, with current coverage at 97%" (European Communities, 2007: 88). Finally, another study after the use of electronic patient record systems as well shows wide adoption by general practitioners in Norway (Christensen, Faxvaag, Lœrum & Grimsmo, 2009: 813).

With regard to the exchange of electronic information, Norway is a developed country as well: "After a decade of experience in structured exchange of information via electronic messaging, data messages now cover a variety of applications, such as referrals and discharge letters, requests for results from medical services such as laboratory and radiology departmental reports to central

authorities, and transfer of EPR information" (European Communities, 2007: 89). When it comes to the infrastructure of e-Health, "Norway has a dedicated healthcare network which interconnects the five regional health networks. Norsk Helsenett AS (Norwegian Health Net Ltd), which is owned by the regional health authorities, runs the network to ensure stability, up-time and confidentiality. It also provides a number of basic services like eMail, web, catalogues and registries of personnel. The network can be used for several services such as telemedicine and Electronic Data Interchange" (European Communities, 2007: 88).

Lastly, regarding the electronic health record, "Norway is conducting research that is expected to lead to a national EHR program. The Research Council of Norway awarded Norwegian University of Science and Technology (NTNU) a contract to establish The Norwegian Electronic Health Record Research Centre (NSEP)" (HIMMS, 2008: 7). This research centre "has in its strategy plan 2010-2015 prioritized the following five focus areas: electronic interaction among health care professionals and across institutions, secondary use of health information, patient-centred sytems, clinical process support and access control and information security" (Website NTNU/NSEP, 2012). This indicates that the project is in development.

5.3.4   Sweden

The country of Sweden ranks 8th of 29 countries in the table 'Electronic recording and storage of individual administrative patient data' (see above), with a 96.3 score. This is a high score and an indicator of high development of electronic patient records. What the European Communities report makes clear is the fact that in Sweden many developments in eHealth are on its way, but the current overview leads to the depiction of Sweden as a kind of patchwork country. There are several regional initiatives, some attempts at arriving at national policies and there is the availability of a network between caregivers that can be used to exchange information (European Communities, 2007: 71-72), but it is unclear what the status of this information exchange exactly is. However, what the national strategy of the Swedes does make clear is that there are several objectives with regard to eHealth. These are the following: "bring laws and regulations into line with extended use of ICT; create a common information structure; create a common technical infrastructure; facilitate interoperable, supportive ICT systems; facilitate access to information across organisational boundaries; make information and services easily accessible to citizens" (European Communities, 2007: 71). This indicates that Sweden is working towards the conditions to create better interoperability and more commonalities to create a better health information infrastructure. However, for now it remains unclear up to what level health information in Sweden in fact is exchanged; what is known so far is that conditions to facilitate exchange are enhanced. Nevertheless, what in fact is clear is that in the matter of the national electronic health record, Sweden is one of the frontrunners worldwide.

Halfway the year 2009, "Sweden rolled out the first stage of the Swedish National Patient Summary initiative" (Website Healthcare IT News, 2012) and "The nationwide EHR is billed as one of the first of its kind in the world" (ibid). This indicates that the Swedes are enhancing the use of electronic operability in health care, but they have not arrived at full deployment yet.

5.3.5   Social-democratic welfare state regime type: a conclusion

Below table gives an overview of the narratives presented above. As it turns out, all social-democratic cases score high on use of electronic patient files. Regarding health information exchange, Denmark and Norway show the highest development, where the Swedish case remains relatively unclear, although developments are on its way. Finland shows further development in information exchange than Sweden, but is less developed than Denmark and Norway. The investigation of national health records shows that Denmark is most developed of the Scandinavian countries, followed by Finland and Sweden; Norway is still in an earlier phase than the other three Nordic countries. In sum, regarding all three indicators, Denmark ranks at the top of the Nordic countries, followed by Finland and Norway; Sweden ranks fourth. However, compared to the liberal cases studied earlier, the Nordic countries show more potential and development; the only liberal case that can be compared to the Nordic countries in terms of the developments studied here, is Australia.

	Electronic patient files	*Health information exchange*	*National health record*
Denmark	+	+	+
Finland	+	+(-)	+(-)
Norway	+	+	+-
Sweden	+	+-	+(-)

Table 4: results for the social-democratic cases

5.4   The corporatist welfare state regime type

In this paragraph, the four corporatist welfare state regime type cases of Austria, France, Germany and Italy are studied. The focus lies with the use of electronic patient files, health information exchange and national health records. However, when relevant, other notable developments in the countries will be described as well.

5.4.1   Austria

Austria ranks 16th of 29 countries studied, as the score of 80.3 in the table 'Electronic recording and storage of individual administrative patient data' (see above) shows. Although that places Austria in the bottom half of the countries studied, 80.3 still is a moderate to high score. Not as high as in the

Scandinavian countries, but the number still represents a vast majority. It can be said the electronic recording and storage of data is well developed in Austria.

Austria is a case that shows strong development. What stands out is the fact that Austrian eHealth has a distinct character. First, "Promoting the use of information technologies in healthcare is one of the defined priorities in the Austrian Health Reform Act 2005" (European Communities, 2007: 19) and "As the Austrian health system is organised federally, common goals need to be agreed between the different levels of responsibility. The main coordination body responsible for promoting the use of information technologies and for planning, financing and guidance mechanisms is the Ministry of Health" (European Communities, 2007: 19). At the same time, "Austria has also set up an overall information society programme which includes eHealth as an important application field" (European Communities, 2007: 19). In other words, while politically a large amount of agreement is needed to be able to roll out plans and policy regarding eHealth, in fact this is what is done in practice. What might be a factor influencing all this, is the fact that "There is a strong commitment to harmonise applications mechanisms common to eHealth and eGovernment, e.g. the Austrian focus on identity management" (European Communities, 2007: 19).

With regard to the two other indicators it seems to be the case that in Austria several developments in eHealth group together. Regarding the exchange of health information, it is hard to reach a definitive verdict. At the one hand, "The Austrian Citizen Card, launched by the federal government in November 2000, is now deployed nationally and was recently acknowledged as one of the leading eIdentity implementations in Europe" (European Communities, 2007: 19) and it is reasonable to expect that if a smart card is used, a lot of digital health information is readable on the card, both by patients as practitioners. However, it does not say anything about health information exchange between practitioners themselves, directly. If a citizen is carrying a card stored with health information, readable by many practitioners, this exchange of health information takes place more or less indirectly. In fact, technological developments in Austrian healthcare seem to be strongly citizen-oriented; there seems to be a focus to attach health data to the person in question while giving citizens these tools in hands. For instance, next to the e-card, "The most significant medium-term eHealth project is the implementation of a National Electronic Health Record" (European Communities, 2007: 20). In the 'Future Activities' section of the European Communities report on Austria, we read that "The implementation of the National eHealth strategy will require activities on organisational, legal and technical level" (European Communities, 2007: 20) and "It also requires steps to strengthen awareness among the Austrian population" (ibid: 20). Some of the challenges that Austria is facing are basic to a good functioning system: issues of interoperability, matters of privacy, terminology, rights and responsibilities (ibid: 20) are just a few of them. It seems to be the case that Austria is trying hard to deploy many different tools, but still has a long road ahead before

all these tools are operable and fully functioning.

Nevertheless, it is a fact that electronic health records are helpful in the exchange of medical information. "More and more data are collected for individual patients as novel measurement techniques are developed. These data have to be exchanged between the various physicians and facilities involved to allow efficient cooperation. Clinical information management has therefore become a key technology in modern healthcare" (Dorda, Duftschmid, Gerhold, Gall & Gambal, 2005: 119) and "The issue of consolidating all the information available on individual patients in a single electronic health record (EHR) has been extensively discussed within the medical informatics community over the past decade. Records of this type would enable physicians and nursing staff to access the complete medical history of a patient in a well-structured format" (Dorda, Duftschmid, Gerhold, Gall & Gambal, 2005: 119). In other words, the development to the national health record in Austria does say something about health information exchange, comparable to how it is described above: it takes place more indirectly, with the patient (and its file) enrolled in the interaction.

Summing up, in Austria the electronic storage of patient data is common, the use of an e-card in health care is wide, and a national health record is in development. Although other countries might lie ahead, in Austria many conditions for a full deployment of healthcare surveillance techniques are present, and in development.

5.4.2   France

In the matter of electronic patient files France ranks 17th of 29 countries studied, as the score of 74.2 in the table 'Electronic recording and storage of individual administrative patient data' (see above) shows. Of all corporatist cases studied in this thesis, France scores lowest. Of all European cases studied, France is looking up to many countries with higher scores. However, it is debatable whether a score of almost three out of four could be called low. However, in France developments in e-health are on its way as well. In 2008, the French Healthcare Minister's strategy shows she views electronic developments in healthcare as the path to pursue. One of her key points is "modernizing hospital information technology systems" (Bachelot-Narquin, 2009: 8) and spend one-and-a-half billion Euros on healthcare information technology (ibid: 8). Another of her points of action is about the personal health record. She declares that "The patient will be able to control the data while allowing information sharing and facilitating coordination among healthcare professionals" (ibid: 8) and "A basis PHR offering a simple view of healthcare information will progressively be made available across the country" (ibid: 8). Also, "at the governance level, the creation of two bodies dedicated to these technologies, plus reinforced strategic management of national healthcare information systems, will enable these objectives to be implemented and monitored. Development of e-health is

a symbol of progress and hope for both patients and healthcare professionals" (ibid: 8). However, what is striking when studying France: it seems to be the case that at this moment in time, a lot is said about ICT improvements in health care, but compared to other countries, the French seem to lag behind. Where other countries, like some of the Scandinavian nations, show an integrated national program towards eHealth, digital patient data, health records and more, France seems to experience a lack of a national framework. For instance, on the personal health record, we read that "The centre-piece of the French healthcare IT programme is its national web-based EHR programme, the dossier médical personnel (DMP), to be delivered through six regional consortia" (EHI, n.d.). There are several reasons for the government to want establishment of the file: "As well as delivering patient care and patient safety benefits the French government has estimated that the DMP will cut fraud and save the state Euros 2-3bn per year" (EHI, n.d.). However, in France there also is severe debate about these types of improvements in health care: "The DMP has been the subject of controversy in France" (EHI, n.d.), and in general it is clear what doctors can and cannot access: "Clinicians cannot access a patient's overall medical record. Each health professional is only authorized to view areas strictly relevant to their professional interests" (EHI, n.d.). However, the DMP is what should be a national feature linking already existing medical data sources together (European Communities, 2007: 39). In terms of health information exchange, one particular French law is of major importance. This is "The Medical Privacy Act (4 February 2002) which details the ownership rights of the patient to his or her data, whereby transmission of personal information is authorised only between health professionals treating the same patient, and only with patient's prior consent" (European Communities, 2007: 38). Summing up, the country of France shows a moderate to high score on the presence of electronic patient data, while the level of exchange of health information and the maturity of national health records can both still be improved.

5.4.3 Germany

When examining electronic patient files, Germany ranks 11th of 29 countries studied, as the score of 92.5 in the table 'Electronic recording and storage of individual administrative patient data' (see above) shows. Of all corporatist cases studied in this thesis, Germany scores highest on this building brick, and the absolute number can as well be labeled high. Germany is a country that is rapidly progressing in terms of use of electronics in health care. In the case of this continental European country, we read that "The electronic patient folder that includes information on longitudinal, person-related medical history is designed to be stored in one of a few centralized servers. The personal health card will serve to identify, authenticate and possibly authorize access to that patient's data" (HIMMS, 2008: 19). Germany is an example of a country that has a national policy on electronic developments related to health. "The overall IT project (telematics) in Germany is known

as the "electronic health card" or "elektronische Gesundheitskarte"; however, it generally refers to all applications in e-health. The card is the only thing visible to the patient; therefore, it has received the most scrutiny under public discussion. Other important IT-applications will be more or less centralized. These applications will include insurance coverage, e-prescriptions, emergency data sets, medicine interaction cross-check and electronic referral letters" (HIMMS, 2008: 18). The project is established several years ago and has a national character: "Following an order from the German Ministry of Health (BMG), the Gematik mbH – a limited liability company – was founded and is controlled by the major stakeholders in German healthcare" (HIMMS, 2008: 18) and "Since 2005, Gematik has governed the national health telematics project that is designing, requesting RFPs (requests for proposals) and certifying the EPA ("electronic patient folder") that is planned to be stored on a few central servers with records referenced by the future German health card ("eGK")" (HIMMS, 2008: 18). About the health card we read that "Ownership of the personal health cards is shared between patients and healthcare providers. The health cards store certificates and keys for decryption, providing a signature for personalization and a unique variant for encryption. The card also stores some objects, like insurance coverage statements, emergency data sets and content or references for e-prescribing. The devices used to read the cards will also contain "personalized" information that will enable them to perform their own cryptographic identity" (HIMMS, 2008: 20). This leads to thinking of privacy: "Patient privacy dominates other aspects of the EHR ("EPA") in Germany. Insured persons must first give their basic consent to start their personal EPA. They then have the option to hide, or block, any single entry in the EPA, making its usefulness for medical purposes questionable." (HIMMS, 2008: 20). Also, "the health card is used merely to facilitate existing administrative procedures through the use of technology" (HIMMS, 2008: 21). When investigating laws and rules, "Since 2005, several German healthcare laws were changed to enable cross-sector care and handling patient data in electronic form" (HIMMS, 2008: 20). This leads to the conclusion that Germany is on its way to the establishment of a national health record, including a smart-card. "A national German e-health card rollout will begin in 2009. The first application will be card-based insurance coverage checks (offline) followed by online insurance checks against the insurance's data center. Subsequent steps will include e-prescription and emergency data sets" (HIMMS, 2008: 22).

In the case of electronic patient files and possible health information exchange, "Germany […] had high rates of EHR use among ambulatory care providers" (Jha, Doolan, Grandt, Scott & Bates, 2008: 850). However, EHR use in hospitals in Germany seems to be less developed, although there is no defining data on this yet (ibid: 850). On top of this, Jho, Doolan et al. (2008) write that "In Germany, our experts suggested that less than 1% of hospitals have electronic clinical notes and less than 0.5% of hospitals use electronic prescribing" (ibid: 850). When it comes to health information exchange, in

Germany there are some pilot programs running (ibid: 851), but "The most promising approach to HIE in Germany is the electronic health insurance card. Although the card currently holds administrative data only, the next generation of technology will allow access to electronically stored patient medical information. It will initially include only emergency data set and medication history but all key elements of a patient's EHR should be available" (ibid: 851). This view corresponds with what we found on Germany earlier. Next to this, German Secretary of State for Health Klaus Schröder writes that "The electronic health card will soon be playing a major part in integrating disparate patient data. The use of basic medical data, perhaps to test interactions between medications, or in emergency situations, should be seen as a starting point in building up a commonly useable electronic patient file" (Schröder, 2009: 10). The Secretary takes issues of data protection seriously, since he writes, "Protecting insured parties' sensitive health data from unauthorised access is of challenging significance within the electronic health card project. There is detailed legislation in place for this in Germany, according to which access is permitted and possible only for persons who belong to the professions defined by the legislation, and who have been expressly authorised, including by electronic means, by the patient" (Schroder, 2009: 10). On top of this, "The high level of protection of data against misuse includes technical measures. In real terms, this means that information saved by the health card can be read only if the patient and the doctor agree, and activate their electronic health cards or healthcare profession identification (two keys principle). The data, as soon as it leaves the medical practice or the hospital with the doctor's and the patient's approval, is individually encrypted" (Schröder, 2009: 10) and "no one is able to read data without the insured party's cooperation" (Schröder, 2009: 10). Summing up, Germany seems to be on its way to further develop its electronic devices used in health care administration. To potential to an increasing welfare surveillance is present.

5.4.4 Italy

The country of Italy ranks 14th of 29, in the table 'Electronic recording and storage of individual administrative patient data' (see above), with a 84.5 score. Although this places the country halfway the table, it still is a high score and this allows for labeling Italy as a country with high development with regard to this indicator. Just as in the Austrian case, in Italy health information exchange and the national health record are intensely correlated. Italy is a country that is still developing in terms of eHealth and, compared to earlier European countries studied in this thesis, is not as far as others. In the 2007 European Communities report, the case study of Italy represents an air of 'still in the making'. In the case of Italy, the report is speaking of the future creation of "an information system defining a minimum dataset for analytical data to be used for governance needs for health authorities" (European Communities, 2007: 48). Although this might sound little ambitious compared

to, for instance, the Nordic countries, Italy's progress should not be underestimated. In the year 2006, an eHealth strategy was published which is "a first high level guideline addressing the design of the national architecture for eHealth" (European Communities, 2007: 49) and it consists of specific requirements concerning, among others, privacy and implementation (European Communities, 2007: 49). Although all this indicates that off all corporatist cases studied here, Italy is the least developed, there are some future activities planned that show that Italy is, at its own pace, creating a more and more twenty first century type of health care. One pilot proving this is one in which a network for eHealth services among general practitioners is established (European Communities, 2007: 49). Although Italy might not be at the level of surveillance measures in health care as other corporatist cases, the country is not standing still either. However, to sum up the status of Italy, what stands out is that the discrepancy between the electronic recording and storage of patient data and the actual cross-practitioners, cross-country, nationwide use of this data (in any way) seems to be less developed than in other cases.

5.4.5   Corporatist welfare state regime type: a conclusion

Below table gives an overview of the narratives presented above. As it turns out, all corporatist cases show high use of electronic patient files: the electronic storage and use of administrative data is common in all cases, with Germany showing the highest score. In terms of health information exchange, Italy is lagging behind, mainly because a lot of the infrastructure still has to be build. The other countries show comparable scores to each other. The development of the national health record is furthest in Germany, with Austria as a runner-up. France and Italy are less developed with regard to this indicator.

Country	Electronic patient files	Health information exchange	National health record
Austria	+(-)	+-	+-
France	+(-)	+-	+-
Germany	+(-)	+-	+(-)
Italy	+(-)	-	+-

Table 5: results for the corporatist cases

6.   Conclusion

The purpose of this conclusion is applying the empirical results into a theoretical conclusion. To do this, first the empirical results will be discussed and second its theoretical consequences. The empirical results answer the question 'how does welfare surveillance (in the dimensions of health care) develop itself in countries of different welfare state regimes'? and the theoretical discussion will elaborate on the link between surveillance and welfare state regime types. In other words: does the clustering as found make sense, theoretically? In what way does the clustering in welfare surveillance reflect the clustering of welfare states? The conclusion of this thesis will serve to answer the several questions discussed earlier, as well as move beyond these questions by discussing more theoretically the reasons for the clustering of the cases. This closing paragraph is constructed, partly in line with Mair (2008), as first answering what welfare surveillance is, how much welfare surveillance is found in the cases, and finally discusses the logic behind what is found. In other words, what is discussed respectively are the 'what, how much, and why questions' regarding the feature of welfare surveillance and the link between welfare surveillance and welfare state regimes.

Referring to an earlier paragraph (4.4) of this thesis, welfare surveillance means either physical or digital attention to the behavior of the inhabitants of a space, at any level, with any purpose, in the sphere of social assistance, housing, education and healthcare. This definition is purposefully wide or broad, to be able to let the concept be as comprehensive as possible. 'Attention' corresponds with the introduction of the building bricks of the concept: this broad term leaves room open to introduce new surveillance tools not discussed in this thesis as part of the concept of welfare surveillance as well. 'Physical or digital' reflects the fact that welfare surveillance, although increasingly electronic, might as well still take place in 'real-life', i.e. physical. Because of the fact that what is discussed little in this thesis are the purposes of surveillance, the words 'with any purpose' are comprehended in the definition. Welfare surveillance might take place with a preemptive purpose, but is not necessarily so. 'At any level' refers to the fact that surveillance can occur on local, national, international or any other scale. Finally, the spheres that are mentioned in the definition of welfare surveillance are the four pillars of the welfare state, as is discussed widely in previous parts of this thesis.

When we turn to answering the next research question what should be discussed is how much welfare surveillance is found in the cases studied, when compared to each other. Although each case should be viewed in its own framework, below table is a summary of the earlier tables presented in each paragraph. It gives an overview of which cases are more developed than others, in terms of their (potential for) welfare surveillance in the healthcare dimension of the concept.

Country (rank)	Welfare state regime type	Electronic patient files	Health information exchange	National health record
Australia (2)	Liberal	+	+	+(-)
Canada (10)	Liberal	-	+-	+-
United States of America (11)	Liberal	-	-	-
Denmark (1)	Social-democratic	+	+	+
Finland (4)	Social-democratic	+	+(-)	+(-)
Norway (2)	Social-democratic	+	+	+(-)
Sweden (5)	Social-democratic	+	+-	+(-)
Austria (7)	Corporatist	+(-)	+-	+-
France (7)	Corporatist	+(-)	+-	+-
Germany (5)	Corporatist	+	+-	+(-)
Italy (9)	Corporatist	+(-)	-	+-

Table 6: comparison of cases on all indicators

A general conclusion on the use of electronic patient files is that in countries that fall under the rubric of the social-democratic welfare state regime type, this is further developed than in countries that are labeled as having a corporatist or liberal welfare state regime. Regarding health information exchange, the differences between the cases become less prominent, but still the social-democratic cases show the highest scores. The building brick of national health records seems to be the less developed in all cases, compared to the other bricks, for most of the cases. Again, the social-democratic cases show the highest scores. On the overall concept, the social-democratic cases seem to be the most developed in terms of welfare surveillance, as discussed as the concept of this thesis. If the sum of the plusses and minuses is translated to an overall ranking of the cases, this is what the ranking would look like:

Rank	Country	Welfare state regime type
1 (highest level)	Denmark	Social-democratic
2	Australia	Liberal
	Norway	Social-democratic
4	Finland	Social-democratic
5	Germany	Corporatist
	Sweden	Social-democratic
7	Austria	Corporatist
	France	Corporatist
9	Italy	Corporatist
10	Canada	Liberal
11 (lowest level)	United States of America	Liberal

Table 7: ranking the cases

This ranking supports the conclusion that, respectively, social-democratic cases score highest on level of welfare surveillance, followed by corporatist cases and finally, liberal cases. This conclusion is in line with the expectations presented at the start of this thesis: the social-democratic cases show high development of welfare surveillance. However, another expectation has little substantiation. The liberal welfare state regime type cases of Canada and the USA rank at the bottom of the table, while the expectation was that welfare surveillance was highly developed because of the strict character of this welfare state regime type. However, there is one liberal case, Australia, with a high score. It is of no surprise that this country is one of the countries that is debated on whether it fits the liberal group well enough to be part of it. Australia (and New Zealand, together being the Antipodean countries) is a case which welfare state regime type grouping is much debated on in the welfare state literature (see, for discussion, Arts & Gelissen, 2006: 182-184). If Australia is singled out as a case to be debated on later, this leads to the conclusion that the cases do somehow group together by welfare state regime type. The liberal cases show low scores, the social-democratic cases show high scores, and the corporatist cases fall in between. Where the expectation on the social-democratic cases turned out as thought, and the expectation on the liberal cases did not turn out as thought of, the corporatist cases in a way represent the expectations, although it adds little to our understanding

of them. There was no clear-cut expectation on the grouping of the corporatist cases, in their levels of welfare surveillance. As it turns out, they group together, pushed in between the cases of the other welfare state regime types. Germany shows to be a high flier, where Italy is the corporatist case with the lowest level of welfare surveillance in the healthcare dimension. However, what should be noted, before reaching to more theoretical conclusions, is the fact that no technological details in the practices of EPR, EHR or other building bricks are investigated in this thesis. Only a general picture is painted on how well developed the use of technology is, and how large welfare surveillance (potential) in healthcare is, of a country. There is the good possibility that technological differences or nuances will create different groupings of countries. If one would be comparing the exact character of the national health records, the technical possibilities of the computer systems, groupings might turn out to be different. This is one of the future directions, that will be debated in the final paragraph as well, that will add something to the study of welfare surveillance. However, to be able to perform a study like that, the researcher performing the study should have more of a technical (or in the case of the healthcare pillar, medical) background, to be able to make sense of the different technological systems.

Having answered the how much question, the next question to be answered in this conclusion is how the found differences are to be explained. What this study has shown is the fact that the figure in which welfare state regime type is presented as an independent variable causing levels of welfare surveillance (p.14) seems to be tracked down by reality, or perhaps even is a wrong interpretation of how surveillance takes place. However, there is no certainty. The results of this study support the argumentation that welfare state regime type in fact does not have to be an independent variable with a direct causal effect on levels of welfare surveillance. Nevertheless, the countries do group together by welfare state regime type. The welfare state regime type seems to be a context that can be able to determine welfare surveillance levels in different countries. However, the direct causes of levels of welfare surveillance might lie within the welfare state regime type and can be, for instance the economic development (and with that, the development of the welfare state) of a country. The direct influences (the independent variables) on levels of welfare surveillance might lie within welfare state regimes. Future study should show what these factors are. What should not be forgotten is that it is only shown that the countries group together by welfare state regime type, but it is not said that other factors are no independent variables: for instance the culture of a country can be of significance in explaining surveillance, or the type of government (or the current government!). These can be independent variables having an effect on levels of welfare surveillance, but future study should show whether this in fact is the case. What for now is the definitive conclusion on the relationship between welfare state regime type and levels of welfare surveillance is that there seems to be a sort of multi-causal path. In the broadest sense, there is a connection between welfare state

regime type and welfare surveillance. However, the first nuance is that in this study only the healthcare dimension is studied. What for now is another result of this thesis is that we should be aware of the different levels to study. The welfare state regime type (liberal, corporatist, social-democratic) can be an influence on levels of welfare surveillance, although not necessarily directly causal. Other factors within the welfare state regime type (characters A or B, for instance, see figure 3) might be of direct influence on the levels of welfare surveillance in the dimensions of the concept. However, this as well should be studied before definitive conclusions can be reached. The only conclusion that can be arrived to at this point is that in the healthcare dimension of welfare surveillance, countries group together by welfare state regime type. The figure below only represents a suspicion, that can be used to study welfare surveillance in the future.

Figure 3: multi-causality?
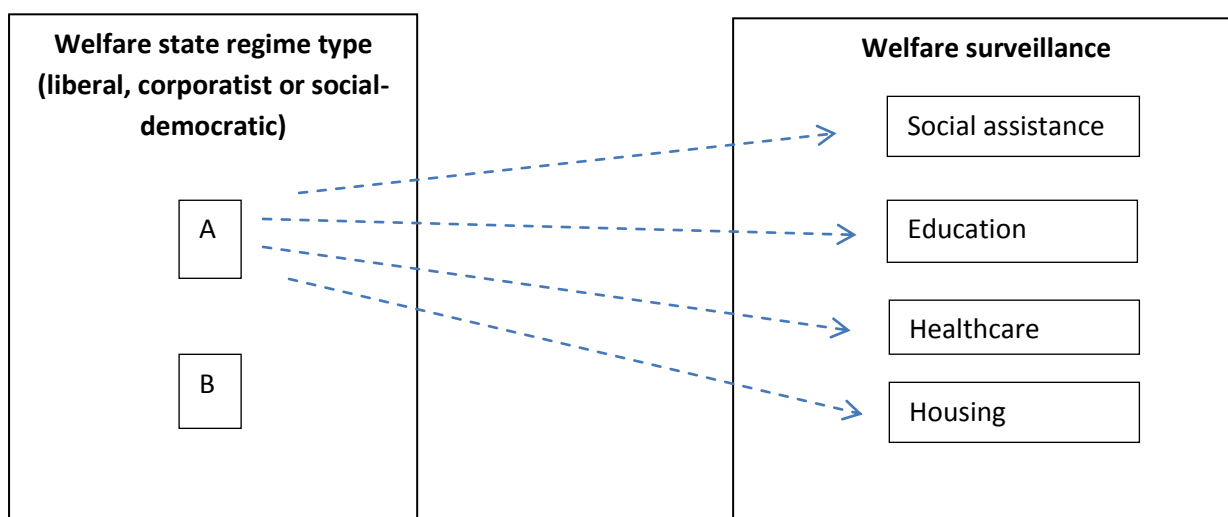
A final question to be answered is of theoretical nature: does the found clustering make sense, when compared to the welfare state regime type theory? Put differently: what is the relevance of the groupings of the countries on their level of welfare surveillance in combination with their groupings by welfare state regime type? A first answer is that the finding that countries, on their level of welfare surveillance in the healthcare dimension, somehow group together by welfare state regime type, adds something to our understanding of welfare state regime type theory; just as the finding that the population of countries in the one welfare state regime type is healthier than the other (see Chung & Muntaner, 2007) adds to our understanding of the relevance of welfare state regime types and the status of health in different countries. There must be something inside these countries, related to its welfare regimes, that explains the correlation with the feature studied (in the case of

this thesis surveillance; in the case of the example, health). This is a first step in understanding the topic under investigation; the feature to be explained. In the case of surveillance it becomes worthwhile to study characteristics of the countries, inside the welfare state regime type, that might be able to explain the found levels of welfare surveillance and the correspondence with welfare state regime types.

   Other theoretical conclusions make us turn to the welfare state literature. We found that countries somehow group together by welfare state regime type. Does this add something to this strand of social science literature? What does the clustering of countries on level of welfare surveillance mean to the welfare state regime type theory literature? The answer to this question is that the finding that countries group together on their welfare surveillance-ness is only a starting point for future research. Since "It is in general difficult to narrow down the range of indicators or dimensions (group of indicators) used in a comparative study, to maximize clarity at the macro perspective" (Aspalter, 2011: 746), it is unclear what our conclusions mean for welfare state regime type theory. The comparison of the countries in this thesis has taken place more in the real-typical line of thought, as described by Aspalter (2011), who states that "The method of comparing real types delivers a very detailed picture, and is more sensitive to short-term, local and program-level changes. Conversely, the method of comparing ideal types focuses on the greater picture, employing a broader international and a more long-term perspective. Ideal types serve as 'measure sticks' to compare one system's development over a longer period of time, and to compare one particular system with a larger number of countries at any given time" (Aspalter, 2011: 736). It is not possible to comment on Esping-Andersens (ideal) typology, using the empirical results of this thesis, for exactly this reason. We have not been debating or comparing different ideal types; we have been studying the empirical reality to compare it to the (ideal-typical) theory, in order to better understand surveillance. To increase our knowledge of the role of the welfare state (regime types), future research should be developed.

7.   Future directions

No definitive conclusions on levels of welfare surveillance in the countries studied can be reached, yet. This thesis has been an explorative study of the potential connection between welfare state regime type and levels of welfare surveillance. There are several future paths to pursue if one would want to study this relationship further. First, future researchers might decide to find their empirical evidence with the people actually working in the dimensions, in the building bricks of the concept. In the case of healthcare surveillance a social scientists might decide to perform interviews with people working in health care, and working with data while doing their jobs. This can be called the supply-side of healthcare welfare surveillance. If one would look at the demand-side of this type of surveillance, a next possibility is performing interviews with people experiencing the use of the building bricks, national health records for instance. A combination of these interviews will show both sides of the medallion and will indicate what and how much influence healthcare surveillance actually has. Without a doubt, this type of research can also be performed in the other dimensions of the welfare surveillance concept: social assistance, education and housing. Where it should be noted that interviews with people receiving benefits, social assistance, is already common. Another future direction would be to study the healthcare sector itself. Questions to be answered here can be: are there any defining characteristics in the healthcare (or, when studying the other dimensions, social assistance, education or housing) sector that might be of influence on the found levels of welfare surveillance? In what way do the healthcare sectors of the cases studied differ, and how does this influences the findings? In other words: taking more of a micro-perspective on the actual practice can lead us to different or supplementary conclusions. What would be worthwhile in this perspective would be to perform a more solid study of the specific elements of IT in healthcare in the different countries. A more technological comparison, where systems and their abilities are studied to also be able to present a conclusion on how the cases can develop in the nearby future would be of high value.

Summing up, there are several ways of future study of welfare state regimes and welfare surveillance. It is imaginable that a comparable study as this one is possible, studying the other dimensions of the concept of welfare surveillance, individually and in its context. More detailed studies after educational surveillance for instance, would add to our knowledge on the concept of welfare surveillance as well. What is useful for future researchers is to think about in which research tradition they place their research. A good guide for this, in the case of healthcare surveillance is Greenhalgh et al. (2009). However, one does not have to be aware of the fact in what research tradition one is situated to be able to perform research that adds to what already is known on a subject. Studying the meta-perspective can also be done by others, who do not perform the main empirical work that has to be done first, before more meta-theoretical perspectives turn out to be

useful. Nevertheless, it is important that the steps taken in this thesis are not neglected in future study of surveillance: it is useful to separate empirical from normative work. This thesis has focused itself on theory development, and showed an example of an empirical study, while aware of the normative debate on the subject matter. It is this type of research that lends itself to be debated on by others, normatively, if wished for. Future scholars of welfare surveillance, whether in an empirical or a normative tradition, hopefully embrace the distinctions made in this thesis: both the methodological as in matters of content. If embraced, this thesis can serve as a solid guideline in the future study of the four dimensions of welfare surveillance.

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